Anna Bugaeva (Ed.) **Handbook of the Ainu Language**

Handbooks of Japanese Language and Linguistics

Edited by Masayoshi Shibatani and Taro Kageyama

Volume 12

Handbook of the Ainu Language

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ISBN 978-1-5015-1088-5 e-ISBN (PDF) 978-1-5015-0285-9 e-ISBN (EPUB) 978-1-5015-0287-3 ISSN 2199-2851

Library of Congress Control Number: 2022938221

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at http://dnb.dnb.de.

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Cover image: "Ainu robe, back view" © bpk / The Metropolitan Museum of Art

Typesetting: Integra Software Services Pvt. Ltd. Printing and binding: CPI books GmbH, Leck

www.degruyter.com

Preface

The project of compiling a series of comprehensive handbooks covering major fields of Japanese linguistics started in 2011, when Masayoshi Shibatani received a commission to edit such volumes as series editor from De Gruyter Mouton. As the planning progressed, with the volume titles selected and the volume editors assigned, the enormity of the task demanded the addition of a series co-editor. Taro Kageyama, Director-General of the National Institute for Japanese Language and Linguistics, was invited to join the project as a series co-editor. His participation in the project opened the way to make it a joint venture between NINJAL and De Gruyter Mouton. We are pleased to present the *Handbooks of Japanese Language and Linguistics (HJLL)* as the first materialization of the agreement of academic cooperation concluded between NINJAL and De Gruyter Mouton.

The HJLL Series is composed of twelve volumes, primarily focusing on Japanese but including volumes on the Ryukyuan and Ainu languages, which are also spoken in Japan, as well as some chapters on Japanese Sign Language in the applied linguistics volume.

- Handbook of Japanese Historical Linguistics
- Handbook of Japanese Phonetics and Phonology
- Handbook of Japanese Lexicon and Word Formation
- Handbook of Japanese Syntax
- Handbook of Japanese Semantics and Pragmatics
- Handbook of Japanese Contrastive Linguistics
- Handbook of Japanese Dialects
- Handbook of Japanese Sociolinguistics
- Handbook of Japanese Psycholinguistics
- Handbook of Japanese Applied Linguistics
- Handbook of the Ryukyuan Languages
- Handbook of the Ainu Language

Surpassing all currently available reference works on Japanese in both scope and depth, the *HJLL* series provides a comprehensive survey of nearly the entire field of Japanese linguistics. Each volume includes a balanced selection of articles contributed by established linguists from Japan as well as from outside Japan and is critically edited by volume editors who are leading researchers in their individual fields. Each article reviews milestone achievements in the field, provides an overview of the state of the art, and points to future directions of research. The twelve titles are thus expected individually and collectively to contribute not only to the enhancement of studies on Japanese on the global level but also to the opening up of new perspectives for general linguistic research from both empirical and theoretical standpoints.

The *HJLL* project has been made possible by the active and substantial participation of numerous people including the volume editors and authors of individual

chapters. We would like to acknowledge with gratitude the generous support, both financial and logistic, given to this project by NINJAL. We are also grateful to John Haig (retired professor of Japanese linguistics, the University of Hawai'i at Mānoa), serving as copy-editor for the series. In the future, more publications are expected to ensue from the NINJAL-Mouton academic cooperation.

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Masayoshi Shibatani and Taro Kageyama

Introduction to the *Handbooks of Japanese*Language and Linguistics

Comprising twelve substantial volumes, the *Handbooks of Japanese Language and Linguistics* (HJLL) series provides a comprehensive survey of practically all the major research areas of Japanese linguistics on an unprecedented scale, together with surveys of the endangered languages spoken in Japan, Ryukyuan and Ainu. What follows are introductions to the individual handbooks, to the general conventions adopted in this series, and an overview of the minimum essentials of contemporary Standard Japanese. Fuller descriptions of the languages of Japan, Japanese grammar, and the history of the Japanese language are available in such general references as Martin (1975), Shibatani (1990), and Frellesvig (2010).

1 Geography, population, and languages of Japan

Japan is situated in the most populous region of the world — Asia, where roughly one half of the world population of seven billion speak a variety of languages, many of which rank in the top tier among languages of the world in terms of number of native speakers. Japanese is spoken by more than 128 million people (as of 2013), who live mostly in Japan but also in Japanese emigrant communities around the world, most notably Hawaii, Brazil, and Peru. In terms of the number of native speakers, Japanese ranks ninth among the world's languages. Due partly to its rich and long literary history, Japanese is one of the most intensely studied languages in the world and has received scrutiny both within the domestic grammatical tradition and in traditions outside Japan such as the Chinese philological tradition, European structural linguistics, and the tradition of generative grammar originating in America. The *Handbooks of Japanese Language and Linguistics* intend to capture the achievements garnered over the years through analyses of a wide variety of phenomena in a variety of theoretical frameworks.

As seen in Map 1, where Japan is shown graphically superimposed on Continental Europe, the Japanese archipelago has a vast latitudinal extension of approximately 3,000 kilometers ranging from the northernmost island, roughly corresponding in latitude to Stockholm, Sweden, to the southernmost island, roughly corresponding in latitude to Sevilla, Spain.

Contrary to popular assumption, Japanese is not the only language native to Japan. The northernmost and southernmost areas of the Japanese archipelago are inhabited by people whose native languages are arguably distinct from Japanese. The southernmost sea area of Okinawa Prefecture is dotted with numerous small islands where Ryukyuan languages are spoken. Until recent years, Japanese scholars tended



Map 1: Japan as overlaid on Europe.

Source: Shinji Sanada. 2007. Hōgen wa kimochi o tsutaeru [Dialects convey your heart].

Tokyo: Iwanami. p. 68.

to treat Ryukyuan language groups as dialects of Japanese based on fairly transparent correspondences in sounds and grammatical categories between those language groups and mainland Japanese, although the two are mutually unintelligible. Another reason that Ryukyuan languages have been treated as Japanese dialects is that the Ryukyuan islands and Japan form a single nation. In terms of nationhood, however, Ryukyu was an independent kingdom until the beginning of the seventeenth century, when it was forcibly annexed to the feudal domain of Satsuma in southern Kyushu.

A more recent trend is to treat Ryukyuan as forming a branch of its own with the status of a sister language to Japanese, following earlier proposals by Chamberlain (1895) and Miller (1971). Many scholars specializing in Ryukyuan today even confer language status to different language groups within Ryukyuan, such as the Amami language, Okinawan language, Miyako language, etc., which are grammatically distinct to the extent of making them mutually unintelligible. The prevailing view now has Japanese and Ryukyuan forming the Japonic family as daughter languages of Proto-Japonic. HJLL follows this recent trend of recognizing Ryukyuan as a sister language to Japanese and devotes one full volume to it. The *Handbook of the Ryukyuan Languages* provides the most up-to-date information pertaining to Ryukyuan language structures and use, and the ways in which these languages relate to Ryukyuan society and history. Like all the other handbooks in the series, each chapter deline-

ates the boundaries and research history of the field it addresses, presents the most important and representative information on the state of research in that field, and spells out future research desiderata. This volume also includes a comprehensive bibliography of Ryukyuan linguistics.

The situation with Ainu, another language indigenous to Japan, is much less clear in terms of its genealogical relationship to Japanese. Various suggestions have been made relating Ainu to Paleo-Asiatic, Ural-Altaic, and Malayo-Polynesian or to such individual languages as Gilyak and Eskimo, besides the obvious candidate of Japanese as a sister language. The general consensus, however, points to the view that Ainu is related to Japanese only indirectly, if at all, via the Altaic family with its Japanese-Korean sub-branch (see Miller 1971; Shibatani 1990: 5–7 for an overview). Because Ainu has had northern Japan as its homeland and because HJLL is also concerned with various aspects of Japanese linguistics scholarship in general, we have decided to include a volume devoted to Ainu in this series. The Handbook of the **Ainu Language** outlines the history and current state of the Ainu language, offers a comprehensive survey of Ainu linguistics, describes major Ainu dialects in Hokkaido and Sakhalin, and devotes a full section to studies dealing with typological characteristics of the Ainu language such as polysynthesis and incorporation, person marking, plural verb forms, and aspect and evidentials.

2 History

Japan's rich and long literary history dates back to the early seventh century, when the Japanese learned to use Chinese characters in writing Japanese. Because of the availability of abundant philological materials, the history of the Japanese language has been one of the most intensely pursued fields in Japanese linguistics. While several different divisions of Japanese language history have been proposed, Frellesvig (2010) proposes the following four linguistic periods, each embracing the main political epochs in Japanese history.

1.	Old Japanese	700-800	(Nara period, 712–794)
2.	Early Middle Japanese	800-1200	(Heian period, 794–1185)
3.	Late Middle Japanese	1200-1600	(Kamakura period, 1185–1333;
			Muromachi period, 1333–1573)
4.	Modern Japanese	1600-	(Edo, 1603–1868; Meiji, 1868–1912;
			Taishô, 1912–1926; Shôwa, 1926–1989;
			Heisei, 1989–2019; Reiwa 2019–)

This division reflects a major boundary between Pre-modern and Modern Japanese brought about by some radical changes in linguistic structure during the Late Middle Japanese period. Modern Japanese is often further subdivided into Early Modern (Edo. 1603–1868), Modern (Meiji, 1868–1912; Taishô, 1912–1926), and Present-day Japanese (Shôwa, 1926–1989; Heisei, 1989–2019; Reiwa 2019–).

The *Handbook of Japanese Historical Linguistics* will present the latest research on better studied topics, such as segmental phonology, accent, morphology, and certain salient syntactic phenomena such as focus constructions. It will also introduce areas of study that have traditionally been underrepresented, ranging from syntax and Sino-Japanese (kanbun) materials to historical pragmatics, and demonstrate how these contribute to a fuller understanding of the overall history of Japanese, as well as outlining larger-scale tendencies and directions of change that have taken place within the language over its attested history. Major issues in the reconstruction of prehistoric Japanese and in the individual historical periods from Old Japanese to Modern Japanese are discussed, including writing and the materials available for historical study, influences of Sino-Japanese on Japanese, the histories of different vocabulary strata, the history of honorifics and polite language, generative diachronic syntax, and the development of case marking.

3 Geographic and social variations

Because of the wide geographical spread of the Japanese archipelago from north to south, characterized by high mountain ranges, deep valleys, and wide rivers as well as numerous islands, Japanese has developed a multitude of dialects, many of which differ from each other in a way more or less like current descendants of the Romance language family. Like historical studies, the research tradition of dialect studies has a unique place in Japanese linguistics and has attracted a large number of students and amateur collectors of dialect forms as well as professional linguists. The *Handbook* of Japanese Dialects surveys the historical backdrop to theoretical frameworks of contemporary studies in Japanese geolinguistics and includes analyses of prominent research topics in cross-dialectal perspective, such as accentual systems, honorifics, verbs of giving, and nominalizations. The volume also devotes major attention to sketching the grammars of dialects from the northern island of Hokkaido to the southern island of Kyushu, allowing a panoramic view of differences and similarities among representative dialects throughout Japan.

Besides having a physical setting that has fostered geographic variation, the society of Japan has exhibited differing types of social structure over the years, starting from the time of the nobility and court life of the Old and Early Middle Japanese periods, through the caste structure of the feudalistic Late Middle and Early Modern Japanese periods, to the modern democratic society of the Modern and Present-day Japanese periods. These different social structures have spawned a variety of social dialects, including power- and gender-based varieties of Japanese. The **Handbook of** **Japanese Sociolinguistics** examines a wide array of sociolinguistic topics ranging from the history of Japanese sociolinguistics, including foreign influences and internal innovations, to the central topics of variation due to social stratification, gender differences, and discourse genre. Specific topics include honorifics and women's speech, critical discourse analysis, the pragmatics of political discourse, contact-induced change, emerging new dialects, Japanese language varieties outside Japan, and language policy.

4 Lexicon and phonology

The literary history of Japan began with early contacts with China. Chinese apparently began to enrich the Japanese lexicon even in pre-historic periods, when such deeply assimilated words as uma 'horse' and ume 'plum' are believed to have entered the language. Starting in the middle of the sixth century, when Buddhism reached Japan, Chinese, at different periods and from different dialect regions, has continuously contributed to Japanese in an immeasurable way affecting all aspects of grammar, but most notably the lexicon and the phonological structure, which have sustained further and continuous influences from European languages from the late Edo period on. Through these foreign contacts, Japanese has developed a complex vocabulary system that is composed of four lexical strata, each with unique lexical, phonological, and grammatical properties: native Japanese, mimetic, Sino-Japanese, and foreign (especially English).

The Handbook of Japanese Lexicon and Word Formation presents a comprehensive survey of the Japanese lexicon, word formation processes, and other lexical characteristics seen in the four lexical strata of contemporary Japanese. The agglutinative character of the language, coupled with its intricate system of vocabulary strata, makes it possible for compounding, derivation, conversion, and inflection to be closely intertwined with syntactic structure, giving rise to theoretically intriguing interactions between word formation processes and syntax that are not easily found in inflectional, isolate, or polysynthetic types of languages. Theoretically oriented studies associated with these topics are complemented by ones oriented toward lexical semantics, which also bring to light theoretically challenging issues involving the morphology-syntax interface.

The four lexical strata characterizing the Japanese lexicon are also relevant to Japanese phonology, as each stratum has some characteristic sounds and sound combinations not seen in the other strata. The Handbook of Japanese Phonetics and **Phonology** describes and analyzes the basic phonetic and phonological structures of modern Japanese with a main focus on standard Tokyo Japanese, relegating the topics of dialect phonetics and phonology to the *Handbook of Japanese Dialects*. It includes several chapters dealing with phonological processes unique to the SinoJapanese and foreign strata as well as to the mimetic stratum. Other topics include word tone/accent, mora-timing, sequential voicing (rendaku), consonant geminates, vowel devoicing and diphthongs, and the appearance of new consonant phonemes. Also discussed are phonetic and phonological processes within and beyond the word such as rhythm, intonation, and the syntax-phonology interface, as well as issues bearing on other subfields of linguistics such as historical and corpus linguistics and research on the L2 acquisition of Japanese phonology.

5 Syntax and semantics

Chinese loans have also affected Japanese syntax, though it is unclear to what extent they have affected Japanese semantics beyond the level of lexical semantics. In particular, Chinese loans form two distinct lexical categories in Japanese – verbal nouns, forming a subcategory of the noun class, and adjectival nouns (keiyō dōshi), which are recognized by some as forming major independent lexical categories along with noun, verb, and adjective classes. The former denote verbal actions and, unlike regular nouns denoting objects and thing-like entities, can function as verbs by combining with the light verb suru, which is obviously related to the verb suru 'do'. The nominal-verbal Janus character of verbal nouns results in two widely observed syntactic patterns that are virtually synonymous in meaning; e.g., benkyoo-suru (studying-DO) 'to study' and benkyoo o suru (studying ACC do) 'do studying'. As described in the Handbook of Japanese Lexicon and Word Formation, the lexical category of adjectival noun has been a perennial problem in the analysis of Japanese parts of speech. Property-concept words that fall into this class, such as kirei 'pretty' and kenkoo 'health/healthy', do not inflect by themselves, unlike native Japanese adjectives, and, like nouns, require the inflecting copula da to perform the predication function, hence the label of adjectival noun for this class. However, many of these cannot head noun phrases – the hallmark of the nominal class – and some even yield nouns via -sa nominalization, which is not possible with regular nouns.

The Handbook of Japanese Lexicon and Word Formation and the Handbook of Japanese Syntax make up twin volumes because many chapters in the former deal with syntactic phenomena, as the brief discussion above on the two Sino-Japanese lexical categories clearly indicates. The syntax handbook covers a vast landscape of Japanese syntax from three theoretical perspectives: (1) traditional Japanese grammar, known as kokugogaku (lit. national-language study), (2) the functional approach, and (3) the generative grammar framework. Broad issues analyzed include sentence types and their interactions with grammatical verbal categories, grammatical relations (topic, subject, etc.), transitivity, nominalizations, grammaticalization, voice (passives and causatives), word order (subject, scrambling, numeral quantifiers, configurationality), case marking (ga/no conversion, morphology and syntax), modification (adjectives, relative clause), and structure and interpretation (modality, negation, prosody, ellipsis). These topics have been pursued vigorously over many years under different theoretical persuasions and have played important roles in the development of general linguistic theory. For example, the long and sustained study of the grammatical relations of subject and topic in Japanese has had a significant impact on the study of grammatical relations in European as well as Austronesian languages. In the study of word order, the analysis of Japanese numeral quantifiers has been used as one of the leading pieces of evidence for the existence of a movement rule in human language. With regard to case marking, the way subjects are case marked in Japanese has played a central role in the study of case marking in the Altaic language family. Recent studies of nominalizations have been central to the analysis of their modification and referential functions in a wide variety of languages from around the globe, with far-reaching implications for past studies of such phenomena as parts of speech, (numeral) classifiers, and relative clauses. And the study of how Japanese prosody plays a crucial role in interpretation has become the basis for some important recent developments in the study of wh-questions.

The *Handbook of Japanese Semantics and Pragmatics* presents a collection of studies on linguistic meaning in Japanese, either as conventionally encoded in linguistic form (the field of semantics) or as generated by the interaction of form with context (the field of pragmatics). The studies are organized around a model that has long currency in traditional Japanese grammar, whereby the linguistic clause consists of a multiply nested structure centered in a propositional core of objective meaning around which forms are deployed that express progressively more subjective meaning as one moves away from the core toward the periphery of the clause. Following this model, the topics treated in this volume range from aspects of meaning associated with the propositional core, including elements of meaning structured in lexical units (lexical semantics), all the way to aspects of meaning that are highly subjective, being most grounded in the context of the speaker. In between these two poles of the semantics-pragmatics continuum are elements of meaning that are defined at the level of propositions as a whole or between different propositions (propositional logic) and forms that situate propositions in time as events and those situating events in various modes of reality including non-actual worlds, e.g., those hoped for (desiderative meaning), denied (negation), hypothesized (conditional meaning), or viewed as ethically or epistemologically possible or necessary (epistemic and deontic modality). Located yet closer to the periphery of the Japanese clause are a rich array of devices for marking propositions according to the degree to which the speaker is committed to their veracity and for marking differing perceptual and cognitive modalities as well as for distinguishing information that is presupposed versus affirmed.

These studies in Japanese syntax and semantics are augmented by cross-linguistic studies that examine various topics in these fields from the perspectives of language universals and the comparative study of Japanese and other languages. The Handbook of Japanese Contrastive Linguistics sets as its primary goal uncovering

principled similarities and differences between Japanese and other languages around the globe and thereby shedding new light on the universal and language-particular properties of Japanese. Topics ranging from inalienable possession to numeral classifiers, from spatial deixis to motion typology, from nominalization to subordination, and other topics closely related to these are taken up within the framework of typological universals. Additionally, various aspects of Japanese such as resultative-progressive polysemy, entailment of event realization, internal-state predicates, topic constructions, and interrogative pronouns, are compared and contrasted with other specific languages, including Ainu, Koryak, Chinese, Korean, Newar, Thai, Burmese, Tagalog, Kapampangan, Lamaholot, Romanian, French, Spanish, German, English, Swahili, Sidaama, and Mayan languages.

Psycholinguistics and applied linguistics

HILL includes two volumes containing topics related to a wider application of Japanese linguistics and to those endeavors seeking grammar-external evidence for the psycho-neurological reality of the structure and organization of grammar. Incorporating recent research on the study of the cognitive processes and brain mechanisms underlying language use, language acquisition, and language disorders, the *Handbook of* **Japanese Psycholinguistics** presents the current state of scholarly understanding of the mechanisms of language acquisition and language processing. In particular, the volume seeks answers to the question of how Japanese is learned/acquired as a first or second language, and pursues the question of how Japanese sentences are comprehended and produced. The chapters in the acquisition section allow readers to acquaint themselves with issues pertaining to the question of how grammatical features (including pragmatic and discourse features) are acquired and how the language domain of the brain develops, with respect to both language particular and universal features. Specific topics dealt with include Japanese children's perceptual development, the conceptual and grammatical development of nouns, Japanese Specific Language Impairment, narrative development in the L1 cognitive system, and L2 Japanese acquisition and its relation to L1 acquisition. The language processing section focuses on both L1 and L2 Japanese processing, covering topics such as the role of prosodic information in production/comprehension, the processing of complex grammatical structures such as relative clauses, processing issues related to variable word order, and lexical and sentence processing in L2 by speakers of different native languages.

The Handbook of Japanese Applied Linguistics complements the Psycholinguistics volume by examining language acquisition from broader sociocultural perspectives, including language as a means of communication and as a social behavioral system, emphasizing pragmatic development as central to both L1 and L2 acquisition and to overall human development. Topics approached from these perspectives include the role of caregiver speech in early language development, literacy acquisition, and the acquisition of writing skills. Closely related to L1 and L2 acquisition and development are studies of bilingualism/multilingualism and the teaching and learning of foreign languages, including Japanese as a second language, where topics are discussed such as cross-lingual transfer from L1 to L2, learning errors, and proficiency assessment of second language acquisition. Chapters dealing with topics more squarely falling in the domain of applied linguistics cover issues in corpus/computational linguistics (including discussions of CHILDES for Japanese and the YK corpus, both widely used in research on Japanese as a second language), clinical linguistics (including discussions of language development in children with hearing impairment and other language disorders, Down syndrome, and autism), and translation and interpretation. Technically speaking, Japanese Sign Language is not a variety of Japanese, but in view of the importance of this language in Japanese society and because of the rapid progress in sign language research in Japan and abroad and for what it has to offer to the general theory of language, chapters dealing with Japanese Sign Language are also included in this volume.

7 Grammatical sketch of Standard Japanese

The following pages offer a brief overview of Japanese grammar as an aid to a quick grasp of the structure of Japanese that may prove useful in studying individual, thematically organized handbooks in this series. One of the difficult problems in describing non-European languages using familiar technical terms derived from the European grammatical tradition concerns mismatches between what the glosses may imply and what grammatical categories they are used to denote in the description. We will try to illustrate this problem below by way of a warning not to take all glosses at their face value. But first some remarks are in order about the conventions of transcription of Japanese, glossing of examples, and their translations used in this series.

7.1 Writing, alphabetic transcription, and pronunciation

Customarily, Japanese is written by using a mixture of Chinese characters (for content words), hiragana (for function words such as particles, suffixes, and inflectional endings), katakana (for foreign loans and mimetics), and sometimes the Roman alphabet. Because Japanese had no indigenous writing system, it developed two phonogram systems for representing the phonological unit of "mora," namely hiragana and *katakana*, by simplifying or abbreviating (parts of) Chinese characters. *Hiragana* and katakana syllabaries are shown in Table 1, together with the alphabetic transcriptions adopted in the HJLL series.

transcription	а	ka	sa	ta	na	ha	ma	ya	ra	wa	n
hiragana	あ	か	ð	た	な	は	ŧ	ゃ	6	わ	h
katakana	ア	カ	サ	タ	ナ	ハ	7	ヤ	ラ	ワ	ン
transcription	i	ki	si	ti	ni	hi	mi	_	ri	_	
hiragana	ι,	ŧ	L	ち	に	V	み	_	り	_	
katakana	イ	キ	シ	チ	=	Ŀ	3	_	リ	_	
transcription	и	ku	su	tu	nu	hu	mu	yu	ru	_	
hiragana	う	<	す	つ	ぬ	.ک	む	ゆ	る	_	
katakana	ウ	ク	ス	ツ	ヌ	フ	4	ユ	ル	_	
transcription	е	ke	se	te	ne	he	me	_	re	_	
hiragana	え	け	せ	て	ね	^	め	_	n	_	
katakana	エ	ケ	セ	テ	ネ	^	メ	_	レ	_	
transcription	0	ko	50	to	no	ho	то	yo	ro	0	
hiragana	お	Ž	そ	ح	の	ほ	ŧ	よ	ろ	を	
katakana	オ	コ	ソ	<u>-</u>		ホ	モ	3	口		

Table 1: Alphabetic transcriptions adopted in HJLL.

Because of phonological change, the columns indicated by strikethroughs have no letters in contemporary Japanese, although they were filled in with special letters in classical Japanese. If all the strikethroughs were filled, the chart would contain 50 letters for each hiragana and katakana, so the syllabary chart is traditionally called *Gojū-on zu* (chart of 50 sounds). To these should be added the letter h or r representing a moraic nasal [N], on the rightmost column.

The "50-sound chart," however, does not exhaust the hiragana and katakana letters actually employed in Japanese, because the basic consonant sounds (k, s, t, h)have variants. The sound represented by the letter *h* is historically related to the sound represented by p, and these voiceless obstruents (k, s, t, and p) have their respective voiced counterparts (g, z, d, and b). Table 2 shows letters for these consonants followed by five vowels.

Table 2: Letters for voiced obstruents and bilabial [p].

transcription	ga	za	da	ba	ра
hiragana	が	ぎ	だ	ば	ぱ
katakana	ガ	ザ	ダ	バ	パ
transcription	gi	zi	zi	bi	pi
hiragana	ぎ	じ	ぢ	び	ぴ
katakana	ギ	ジ	ヂ	ビ	ピ

Table 2 (continued)

transcription	gu	zu	du	bu	ри
hiragana	ぐ	ず	づ	:2.	.25°
katakana	グ	ズ	"J"	ブ	プ
transcription	ge	ze	de	be	ре
hiragana	げ	ぜ	で	ベ	~
katakana	ゲ	ゼ	デ	ベ	~
transcription	go	ZO	do	bo	ро
hiragana	ご	ぞ	ど	ぼ	ぽ
katakana	ゴ	ゾ	ド	ボ	ポ

It is important to note that Tables 1 and 2 show the conventional letters and alphabetical transcription adopted in the text of the HJLL series; they are not intended to represent the actual pronunciations of Japanese vowels and consonants. For example, among the vowels, the sound represented as "u" is pronounced as [w] with unrounded lips. Consonants may change articulation according to the vowels that follow. The following will require particular attention.

There are two Romanization systems widely used in Japan. One, known as the Hepburn system, is more widely used in public places throughout Japan such as train stations, street signs, as well as in some textbooks for learners of Japanese. This system is ostensibly easier for foreigners familiar with the English spelling system. Another, the Kunreishiki (the cabinet ordinance system), is phonemic in nature and is used by many professional linguists. The essential differences between the two Romanization systems center on palatalized and affricate consonants, as shown in Table 3 below with some representative syllables for which the two Romanization renditions differ:

Table 3: Two systems of Romanization.

Hiragana	IPA	Hepburn	Kunreishiki
L	[ij]	shi	si
しゃ	[ʃa]	sha	sya
しゅ	[ʃɯ]	shu	syu
しょ	[ʃo]	sho	syo
じandぢ	[ʤі]	ji	zi
じゃ	[ʤa]	ja	zya
じゅ	[ժշա]	ju	zyu
じょ	[ʤо]	jo	zyo
ち	[tʃi]	chi	ti
ちゃ	[tʃa]	cha	tya

Table 3 (continued)

ちゅ	[tʃɯ]	chu	tyu
ちょ	[t∫o]	cho	tyo
つ	[tsw]	tsu	tu
づ and ず	[dzw]	zu	zu
.کہ	[фш]	fu	hu

Except for the volumes on Ryukyuan, Ainu, and Japanese dialects, whose phonetics differ from Standard Japanese, HJLL adopts the Kunreishiki system for rendering cited Japanese words and sentences but uses the Hepburn system for rendering conventional forms such as proper nouns and technical linguistic terms in the text and in the translations of examples.

Japanese sentences cited in HJLL look as below, where the first line trans-literates a Japanese sentence in Kunreishiki Romanization, the second line contains interlinear glosses largely following the Leipzig abbreviation convention, and the third line is a free translation of the example sentence.

(1) Taroo wa Ziroo to Tookvoo e it-te kutusita o kat-ta. Taro TOP Iiro COM Tokyo ALL go-GER sock ACC buy-PST 'Taro went to Tokyo with Jiro and bought socks.'

The orthographic convention for rendering Japanese is to represent a sentence with an uninterrupted sequence of Sino-Japanese characters and katakana or hiragana syllabaries without a space for word segmentation, as in 太郎は次郎と東京へ行って 靴下を買った for (1). In line with the general rules of Romanization adopted in books and articles dealing with Japanese, however, HJLL transliterates example sentences by separating word units by spaces. The example in (1) thus has 10 words. Moreover, as in it-te (go-GERUND) and kat-ta (buy-PAST) in (1), word-internal morphemes are separated by a hyphen whenever necessary, although this practice is not adopted consistently in all of the HJLL volumes. Special attention should be paid to particles like wa (topic), to 'with' and e 'to, toward', which, in the HJLL representation, are separated from the preceding noun or noun phrase by a space (see 7.3). Remember that case and other kinds of particles, though spaced, form phrasal units with their preceding nouns.

7.2 Word order

As seen in (1), Japanese is a verb-final, dependent-marking agglutinative language. It is basically an SOV language which marks nominal dependent arguments by particles (wa, to, e, and o above) and whose predicative component consists of a verbal stem with a variety of suffixes, auxiliary verbs, and semi-independent predicate extenders pertaining to the speech act of predication (see section 7.6). While a verb is rigidly fixed in sentence final position, the order of subject and object arguments may vary depending on pragmatic factors such as emphasis, background information, and cohesion. Thus, sentence (2a) with the unmarked order below, in principle may vary in multiple ways as shown by some possibilities in (2b)-(2d).

- (2) a. Taroo ga Hanako ni Ziroo o svookai-si-ta. Taro NOM Hanako DAT Iiro ACC introducing-do-PST 'Taro introduced Jiro to Hanako.'
 - b. Taroo ga **Ziroo o** Hanako ni syookai-si-ta.
 - c. Hanako ni Taroo ga Ziroo o svookai-si-ta.
 - d. **Ziroo o** Taroo ga Hanako ni syookai-si-ta.

Adverbs, likewise, can be rather freely placed, though each type of adverbs has its own basic position.

- (3) a. Saiwainimo Hanako ga tai-te kure-te gohan o i-ta. luckily Hanako NOM rice ACC cook-GER GIVE-GER BE-PST 'Luckily Hanako had done the favor of cooking the rice (for us).'
 - b. Hanako ga **saiwainimo** gohan o tai-te kure-te i-ta.
 - c. Hanako ga gohan o **saiwainimo** tai-te kure-te i-ta.

Notice that while the verbal complex in the sentence above is not as tightly organized as a complex involving suffixes, a sentence adverb cannot be placed within the verbal complex, showing that the sequence of tai-te kure-te i-ta forms a tighter constituent which, however, permits insertion of the topic particle wa after each of the gerund-forms. (See section 7.4 below on the nature of gerund-forms in Japanese.)

As the normal position of sentence adverbs is sentence initial, manner and resultative adverbs have an iconically-motivated position, namely before and after the object noun phrase, respectively, as below, though again these adverbs may move around with varying degrees of naturalness:

- isoide (4) Hanako ga gohan o tai-te kure-ta. ACC cook-GER GIVE-PST Hanako NOM hurriedly rice 'Hanako hurried did the favor of cooking the rice (for us).'
- (5) Hanako ga yawarakaku tai-te kure-ta. gohan o Hanako NOM rice ACC softly cook-GER GIVE-PST 'Hanako did the favor of cooking the rice soft (for us).'

The fact that an object noun phrase can be easily separated from the verb, as in (2b.d), and that adverbs can freely intervene between an object and a verb, as in (5), has raised the question whether Japanese has a verb phrase consisting of a verb and an object noun phrase as a tightly integrated constituent parallel to the VP in English (cf. *cook hurriedly the rice – the asterisk marks ungrammatical forms).

7.3 NP structure

Noun phrases, when they occur as arguments or adjuncts, are marked by case particles or postpositions that are placed after their host nouns. Because case markers can be set off by a pause, a filler, or even longer parenthetic material, it is clear that they are unlike declensional affixes in inflectional languages like German or Russian. Their exact status, however, is controversial; some researchers regard them as clitics and others as (non-independent) words.

Elaboration of Japanese noun phrases is done by prenominal modifiers such as demonstratives, genitive noun phrases, or adjectives, as below, indicating that Japanese is a consistent head-final language at both nominal and clausal levels.

(6) a. kono Taroo no kaban this Taro GEN bag lit. 'this Taro's bag' b. Taroo no kaban kono Taro GEN this bag lit. 'Taro's this bag'

Japanese lacks determiners of the English type that "close off" NP expansion. The literal translations of the Japanese forms above are ungrammatical indicating that English determiners like demonstratives and genitive noun phrases do not allow further expansion of an NP structure. Also seen above is the possibility that prenominal modifiers can be reordered just like dependents at the sentence level. The order of prenominal modifiers, however, is regulated by the iconic principle of placing closer to the head noun those modifiers that have a greater contribution in specifying the nature and type of the referent. Thus, descriptive adjectives tend to be placed closer to a head noun than demonstratives and genitive modifiers of non-descriptive types. Interesting is the pattern of genitive modifiers, some of which are more descriptive and are placed closer to the head noun than others. Genitives of the same semantic type, on the other hand, can be freely reordered. Compare:

(7) a. Yamada-sensei kuroi kaban no Yamada-professor GEN black bag 'Professor Yamada's black bag'

- b. *kuroi Yamada-sensei no kaban(O.K. with the reading of 'a bag of Professor Yamada who is black')
- (8) a. *Yamada-sensei no gengogaku no koogi* Yamada-professor GEN linguistics GEN lecture 'Professor Yamada's linguistics lecture'
 - b. *gengogaku no Yamada-sensei no koogi (O.K. with the reading of 'a lecture by Professor Yamada of linguistics')
- (9) a. Yamada-sensei no kinoo no koogi Yamada-professor GEN yesterday GEN lecture lit. 'Professor Yamada's yesterday's lecture' 'Yesterday's lecture by Professor Yamada'
 - b. Kinoo no Yamada-sensei no koogi
- (10) a. *oomori no sio-azi no raamen* big.serving GEN salt-tasting GEN *ramen* lit. 'big-serving salt-tasting *ramen* noodles'
 - b. sio-azi no oomori no raamen
- (11) a. *atui sio-azi no raamen* hot salt-tasting GEN *ramen* 'hot salt-tasting *ramen* noodles'
 - b. sio-azi no atui ramen

Numeral classifiers (CLFs) pattern together with descriptive modifiers so that they tend to occur closer to a head noun than a possessive genitive phrase.

- (12) a. *Taroo no san-bon no enpitu*Taro GEN three-CLF GEN pencil

 'Taro's three pencils'
 - b. *san-bon no Taroo no enpitu

Numeral classifiers also head an NP, where they play a referential function and where they can be modified by a genitive phrase or an appositive modifier, as in (13a, b). They may also "float" away from the head noun and become adverbial, as in (13c).

(13) a. *Taroo wa gakusei no san-nin o mikake-ta*.

Taro TOP student GEN three-CLF ACC see.by.chance-PST 'Taro saw three of the students by chance.'

- b. Taroo wa gakusei **san-nin** 0 mikake-ta. TOP student three-CLF ACC see.bv.chance-PST Taro lit. 'Taro saw student-threes by chance.'
- c. Taroo wa gakusei o san-nin mikake-ta. Taro TOP student ACC three-CLF see.bv.chance-PST 'Taro saw students, three (of them), by chance.'

As in many other SOV languages, so-called relative clauses are also prenominal and are directly placed before their head nouns without the mediation of "relative pronouns" like English which or who or "complementizers" like that. Predicates in relative clauses are finite, taking a variety of tense and aspect. The subject may be replaced by a genitive modifier. Observe (14a).

- (14) a. Boku mo [Taroo ga/no kat-tal hon kat-ta. 0 ADVPART Taro NOM/GEN buv-PST book ACC buy-PST I 'I also bought the book which Taro bought.'
 - b. Boku mo [Taroo ga/no kat-tal kat-ta. no 0 I ADVPART Taro NOM/GEN buy-PST NM ACC buy-PST 'I also bought the one which Taro bought.'

The structure used as a modifier in the relative clause construction can also head a noun phrase, where it has a referential function denoting an entity concept evoked by the structure. In Standard Japanese such a structure is marked by the nominalization particle no, as in (14b).

7.4 Subject and Topic

Some of the sentences above have noun phrases marked by the nominative case particle ga and some by the topic marker wa for what appear to correspond to subject noun phrases in the English translations. This possibility of ga- and wa-marking is seen below.

(15) a. Yuki ga siro-i. snow NOM white-PRS 'The snow is white.' b. Yuki wa siro-i. snow TOP white-PRS

'Snow is white.'

As the difference in the English translations indicates, these two sentences are different in meaning. Describing the differences between topic and non-topic sentences has been a major challenge for Japanese grammarians and teachers of Japanese alike. The difference in the English translations above, however, is indicative of how these two sentences might differ in meaning. Sentence (15a) describes a state of affairs involving specific snow just witnessed, whereas (15b) is a generic statement about a property of snow unbounded by time. Thus, while (15a) would be uttered only when the witnessed snow is indeed white, (15b) would be construed true even though we know that there are snow piles that are quite dirty.

A similar difference is seen in verbal sentences as well.

(16) a. *Tori ga* tob-u. bird NOM fly-NONPST 'A bird is flying/is about to fly.' b. Tori wa tob-u. bird TOP fly-NONPST 'Birds flv.'

Non-topic sentences like (15a) and (16a) are often uttered with an exclamation accompanying a sudden discovery of a state of affairs unfolding right in front of one's eyes. The nonpast tense forms (-i for adjectives and -(r)u for verbs) here anchor the time of this discovery to the speech time. The nonpast tense forms in (15a) and (16b), on the other hand, mark a generic tense associated with a universal statement.

These explanations can perhaps be extended to time-bound topic sentences seen in (17b) below.

- (17) a. *Taroo ga* hasit-ta. Taro NOM run-PST 'Taro NOM ran.' b. Taroo wa hasit-ta.
 - Taro TOP run-PST 'Taro ran.'

That is, while (17a) describes an occurrence of a particular event at a time prior to the speech time, (17b) describes the nature of the topic referent – that Taro was engaged in the running activity – as a universal truth of the referent, but universal only with respect to a specifically bound time marked by the past tense suffix.

Topics need not be subjects, and indeed any major sentence constituent, including adverbs, may be marked as topic in Japanese, as shown below.

(18) a. *Sono* hon wa Taroo ga von-de i-ru. book TOP Taro NOM read-GER be-NONPST that 'As for that book, Taro is reading (it).'

- b. Kyoo wa tenki ga yo-i.today TOP weather NOM be. good-NONPST 'As for today, the weather is good.'
- c. Sonnani wa hayaku wa hasir-e na-i. that.way TOP quickly TOP run-POTEN NEG-NONPST 'That quickly, (I) cannot run.'

7.5 Complex sentences

Like other Altaic languages, compound sentences in Japanese do not involve a coordinate conjunction like English *and*. Instead, clauses are connected by the use of inflected verb forms, as in (19a) below, where the -i ending is glossed in the HJLL series as either INF (infinitive) or ADVL (adverbal) following the Japanese term *ren'yō-kei* for the form. While the -i ending in the formation of compound sentences is still used today, especially in writing, the more commonly used contemporary form involves a conjunctive particle -te following the -i infinitive form, as in (19b) below. In HJLL, this combination is glossed as GER (gerund), though the relevant Japanese forms do not have the major nominal use of English gerund-forms.

- (19) a. *Hana wa sak-i*, *tori wa uta-u*. flower TOP bloom-INF bird TOP sing-NONPST 'Flowers bloom and birds sing.'
 - b. *Hana wa sa-i.te*, *tori wa uta-u*. flower TOP bloom-GER bird TOP sing-NONPST 'Flowers bloom and birds sing.'

Both the -*i* and -*ite* forms play important roles in Japanese grammar. They are also used in clause-chaining constructions for serial events (20a), and in complex sentences (20b)-(20d), as well as in numerous compound verbs (and also in many compound nouns) such as *sak-i hokoru* (bloom-INF boast) 'be in full bloom', *sak-i tuzukeru* (bloom-INF continue) 'continue blooming', *sa.i-te iru* (bloom-GER be) 'is blooming', and *sa.i-te kureru* (bloom-GER GIVE) 'do the favor of blooming (for me/us)'.

- (20) a. Taroo wa [ok-i/ok.i-te], [kao o ara-i/arat-te],
 Taro TOP rise-INF/rise-GER face ACC wash-INF/wash-GER
 [gohan o tabe-ta].
 meal ACC eat.PST
 'Taro got up, washed his face, and ate a meal.'
 - b. Taroo wa [sakana o tur-i] ni it-ta.

 Taro TOP fish ACC catch-INF DAT go-PST 'Taro went to catch fish.'

- c. Taroo wa [aruk-i nagaral hon von-da. 0 Taro TOP walk-INF SIMUL book ACC read-PST 'Taro read a book while walking.'
- d. Taroo wa [Hanako ga ki-ta nol ni awa-na-katta. Taro TOP Hanako NOM come-PST NM DAT see-NEG-PST. 'Taro did not see (her), even though Hanako came.'

(20d) has the nominalized clause marked by the particle no followed by the dative ni, also seen in (20b) marking the purposive form. In modern Japanese the no-ni sequence has been reanalyzed as a concessive conjunction.

7.6 Context dependency

The context dependency of sentence structure in Japanese is much more clearly pronounced than in languages like English. Indeed, it is rare that Japanese sentences express all the arguments of a verb such as a subject (or topic) and an object noun phrase included in the sentences used above for illustrative purposes. A typical dialog would take the following form, where what is inferable from the speech context is not expressed.

(21) a. Speaker A: Tokorode. Murakami Haruki no saisin-saku by.the.way Murakami Haruki GEN newest-work von-da ka. read-PST Q 'By the way, have (you) read Haruki Murakami's latest work?' b. Speaker B: Un, moo von-da. uh-hu already read-PST 'Uh-hu, (I) have already read (it)'.

In (21a) A's utterance is missing a subject noun phrase referring to the addressee, and B's response in (21b) is missing both subject and object noun phrases. In some frameworks, sentences like these are analyzed as containing zero pronouns or as involving a process of "pro drop," which deletes assumed underlying pronouns. This kind of analysis, however, ignores the role of speech context completely and incorporates information contextually available into sentence structure. In an analysis that takes seriously the dialogic relationship between speech context and sentence structure, the expressions in (21) would be considered full sentences as they are.

7.7 Predicative verbal complexes and extenders

Coding or repeating contextually determinable verb phrases, as in (21b), is less offensive than expressing contextually inferable noun phrases, presumably because verb phrases have the predication function of assertion, and because they also code a wide range of other types of speech acts and of contextual information pertaining to the predication act. Declarative sentences with plain verbal endings like the one in (21b) are usable as "neutral" expressions in newspaper articles and literary works, where no specific reader is intended. In daily discourse, the plain verbal forms "explicitly" code the speaker's attitude toward the hearer; namely, that the speaker is treating the hearer as his equal or inferior in social standing, determined primarily by age, power, and familiarity. If the addressee were socially superior or if the occasion demanded formality, a polite, addressee honorific form with the suffix -masu would be used, as below.

(22) *Hai*, moo yom-i-masi-ta. already read-INF-POL-PST 'Yes, (I have) already read (it).'

Referent honorific forms are used when the speaker wishes to show deference toward the referent of arguments – subject honorific and object honorific (or humbling) forms, depending on the type of argument targeted. If (21b) were to be uttered in reference to a social superior, the following would be more appropriate:

(23) *Un*, (Yamada-sensei wa) moo yom-are-ta. uh-hu (Yamada-professor TOP) already read-SUB.HON-PST 'Uh-hu, (Professor Yamada has) already read (it).'

This can be combined with the polite ending -masu, as below, where the speaker's deference is shown to both the referent of the subject noun phrase and the addressee:

(24) Hai, (Yamada-sensei wa) тоо yom-are-masi-ta. (Yamada-professor TOP) already read-HON-POL-PST 'Yes, (Professor Yamada has) already read (it).'

As these examples show, Japanese typically employs agglutinative suffixes in the elaboration of verbal meanings associated with a predication act. The equivalents of English auxiliary verbs are either suffixes or formatives connected to verb stems and suffixed forms in varying degrees of tightness. These are hierarchically structured in a manner that expresses progressively more subjective and interpersonal meaning as one moves away from the verb-stem core toward the periphery. For example, in the following sentence a hyphen marks suffixal elements tightly bonded to the preceding form, an equal sign marks a more loosely connected formative, which permits insertion of certain elements such as the topic particle *wa*, and a space sets off those elements that are independent words following a finite predicate form, which may terminate the utterance.

(25) (Taroo wa) ik-ase-rare-taku=na-katta rasi-i mitai
(Taro TOP) go-CAUS-PASS-DESI=NEG-PST CONJEC-NONPST UNCERT
des-u wa.
COP.POL-NONPST SFP
'(Taro) appears to seem to not want to have been forced to go, I tell you.'

The final particle *wa* above encodes the information that the speaker is female. A male speaker would use *yo* or *da yo*, the latter a combination of the plain copula and *yo*, instead of *desu wa* above, or combinations such as *da ze* and *da zo* in rough speech.

Non-declarative Japanese sentences, on the other hand, frequently suppress auxiliary verbs, the copula, and the question particle, especially in casual speech, where intonation and tone of voice provide clues in guessing the intended speech act. Casual interrogatives take the form of (26a) with a nominalization marker bearing a rising intonation, marked by the question mark in the transcription, whereas fuller versions have the interrogative particle ka or a combination of the polite copula and ka, as in (26b).

(26) a. Moo kaer-u no?

already return-NONPST NM
'Going home already?'

b. Moo kaer-u no (des.u) ka.

already return-NONPST NM (COP.POL-NONPST) Q
'Going home already?'

Requests are made with the aid of an auxiliary-like "supporting" verb *kureru* 'GIVE (ME THE FAVOR OF . . .)', its polite form *kudasai*, or its intimate version *tyoodai*, as seen in (27a). Again, these forms are often suppressed in a highly intimate conversation and may result in a form like (27b).

- (27) a. Hayaku kaet-te kure/kudasai/tyoodai.
 soon return-GER GIVE.IMP/GIVE.POL-IMP/GIVE.INTI
 '(Please) come home soon (for me/us).'
 b. Hayaku kaet-te ne.
 - soon return-GER SFP '(Please) come home soon, won't you?'

The use of dependent forms (e.g., the gerund *-te* form above) as independent sentences is similar to that of subjunctive forms in European languages as independent sentences, as illustrated by the English sentence below.

(28) If you would give me five thirty-cent stamps.

Conditionals are used as independent suggestion sentences in Japanese as well. For example, (29a) has a fuller version like (29b) with the copula as a main-clause verb, which can also be suppressed, giving rise to the truncated form (29c).

(29) a. Hayaku kaet-tara?
quickly return-COND
lit. 'If return quickly.' 'Why don't you go home quickly?'

b. Hayaku kaet-tara ikaga des-u ka.
quickly return-COND how COP.POL-NONPST Q

lit. 'How would it be it if (you) went home quickly?'

c. Hayaku kaet-tara ikaga? quickly return-COND how 'Why don't (you) go home quickly?'

Understanding Japanese utterances requires full recourse to the elements of speech context, such as the nature of the speaker and the hearer and the social relationship between them, the information "in the air" that is readily accessible to the interlocutors, and the formality of the occasion. Indeed, the difficult part of the art of speaking Japanese is knowing how much to leave out from the utterance and how to infer what is left unsaid.

8 Conclusion

Many of the interesting topics in Japanese grammar introduced above are discussed in great detail in the Lexicon-Word Formation volume, the Syntax volume, and the present Semantics and Pragmatics volume of the HJLL series. The Historical Linguistics volume also traces developments of some of the forms and constructions introduced above. The Sociolinguistics volume gives fuller accounts of sentence variations motivated by context and discourse genre.

Languages

ConJ	contemporary Japanese
EMC	Early Middle Chinese
EMJ	Early Middle Japanese
EOJ	Eastern Old Japanese
J-Ch	Japano-Chinese
LMC	Late Middle Chinese
LMJ	Late Middle Japanese
JPN	Japanese
MC	Middle Chinese
MJ	Middle Japanese
MK	Middle Korean
ModJ	Modern Japanese
OC	Old Chinese
OJ	Old Japanese
pJ	proto-Japanese

proto-Korean

Sanskrit

Sino-Japanese

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рK

SJ

Skt

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Appendix: List of abbreviations for HJLL

first person 2 second person 3 third person

Α agent-like argument of canonical transitive verb

ABL ablative ACC accusative **ACOP** adjectival copula adjective ADJ AND adnominal ADV adverb(ial(izer))

adverbial

ADVL

ADVPART adverbial particle

AGR agreement AGT agent ALL allative

AN adjectival noun ANTIP antipassive

AP adverbial particle, adjective phrase

APPL applicative ART article ASP aspect ATTR attributive AUX auxiliary AUXV auxiliary verb C consonant CAUS causative CLF classifier COHORT cohortative COM comitative COMP complementizer COMPL completive CONC concessive CONCL conclusive COND conditional CONJEC conjectural CONJCT conjunctive CONT continuative COP copula CVB converb DAT dative

D demonstrative DECL declarative DEF definite DEM demonstrative DET determiner DESI desiderative DIST distal DISTR distributive DO direct object DU dual DUR durative **EMPH** emphatic ERG ergative **ETOP** emphatic topic **EVID** evidential

EXCL exclamatory, exclusive

EXPL expletive
FOC focus
FUT future
GEN genitive

GER gerund(ive)

H high (tone or pitch)

HON honorific HUM humble IMP imperative INCL inclusive IND indicative INDEF indefinite INF infinitive INS instrumental intentional INT INTERJEC interjection INTI intimate INTR intransitive 10 indirect object IRR irrealis **ITERA** iterative

k-irr k-irregular (ka-hen)
L low (tone or pitch)

LB lower bigrade (shimo nidan)
LM lower monograde (shimo ichidan)

LOC locative
MPST modal past
MVR mid vowel raising

N noun

n-irr n-irregular(na-hen) NCONJ negative conjectual

NEC necessitive NEG negative

NM nominalization marker
NMLZ nominalization/nominalizer

NMNL nominal
NOM nominative
NONPST nonpast
NP noun phrase
OBJ object
OBL oblique
OPT optative

P patient-like argument of canonical transitive verb, preposition, postposition

PART particle PASS passive PST past

PCONJ present conjectural

PERF perfective
PL plural
POL polite
POLCOP polite copula
POSS possessive
POTEN potential

XXXII — Masayoshi Shibatani and Taro Kageyama

PP prepositional/postpositional phrase

PRED predicative
PRF perfect
PRS present
PRES presumptive
PROG progressive
PROH prohibitive
PROV provisional

PROX proximal/proximate

PST past

PSTCONJ past conjectural PTCP participle PURP purposive

Q question/question particle/question marker

QD quadrigrade (yodan)

QUOT quotative

r - irr r - irregular (ra-hen)

REAL realis
RECP reciprocal
REFL reflexive
RES resultative
RESP respect

S single argument of canonical intransitive verb, sentence

SBJ subject
SBJV subjunctive

SFP sentence final particle

singular SG SIMUL simultaneous s - irr s-irregular (sa-hen) SPON spontaneous SPST simple past STAT stative TOP topic TR transitive

UB upper bigrade (kami-nidan

UNCERT uncertain

UM upper monograde (kami-ichidan)

V verb, vowel
VN verbal noun
VOC vocative
VOL volitional
VP verb phrase

Contents

Preface — V
Masayoshi Shibatani and Taro Kageyama Introduction to the Handbooks of Japanese Language and Linguistics — VII
Contributors — XXXVII
Anna Bugaeva Introduction —— 1
Part I: Overview of Ainu studies
Anna Bugaeva 1 Ainu: A head-marking language of the Pacific Rim — 23
Juha A. Janhunen 2 Ainu ethnic origins — 57
Tomomi Satō 3 Major old documents of Ainu and some problems in the historical study of Ainu — 79
Alfred F. Majewicz 4 Ainu language Western records — 99
José Andrés Alonso de la Fuente The Ainu language through time — 147
Alexander Vovin 6 Ainu elements in early Japonic —— 185
Hidetoshi Shiraishi and Itsuji Tangiku 7 Language contact in the north — 209
Hiroshi Nakagawa and Mika Fukazawa 8 Hokkaido Ainu dialects: Towards a classification of Ainu dialects —— 253
Itsuji Tangiku 9 Differences between Karafuto and Hokkaido Ainu dialects — 329

Shiho Endō

10 Ainu oral literature — 363

Okuda Osami

11 Meter in Ainu oral literature — 393

Tetsuhito Ōno

12 The history and current status of the Ainu language revival movement — 405

Part II: Typologically interesting characteristics of the Ainu language

Hidetoshi Shiraishi

13 Phonetics and phonology — 445

Hiroshi Nakagawa

14 Parts of speech – with a focus on the classification of nouns — 473

Anna Bugaeva and Miki Kobayashi

15 Verbal valency — 515

Tomomi Satō

16 Noun incorporation in Ainu — 549

Hiroshi Nakagawa

17 Verbal number — 573

Yasushige Takahashi

18 Aspect and evidentiality — 613

Yoshimi Yoshikawa

19 Existential aspectual forms in the Saru and Chitose dialects of Ainu — 629

Part III: Appendices: Sample texts

Anna Bugaeva

An uwepeker "Retar Katak, Kunne Katak" and kamuy yukar "Amamecikappo" narrated in the Hokkaido Ainu dialect of Chitose by Ito Oda —— 659 Elia Dal Corso

21 "Meko Oyasi" a Sakhalin Ainu *ucaskuma* narrated by Haru Fujiyama — 677

Subject Index — 695

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Shiho Endō graduated from the Department of Japanese Culture, Faculty of Letters, Chiba University. Completed the master's program at the Graduate School of Letters, Chiba University. Withdrew from the doctoral course of the Graduate School of Humanities and Social Sciences, Chiba University, where she focused on the characteristics of heroic epics in Ainu oral literature. She received her M.A. in literature in March 2007. She has been working as a researcher at the Ainu Culture Research Center, Hokkaido Museum since April 2015, where she is responsible for organizing museum materials on the Ainu language and literature.

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Miki Kobayashi graduated from the Department of Japanese Culture, Faculty of Letters, Chiba University. She completed the Graduate School of Letters, Chiba University (Master's Program) and the Graduate School of Humanities and Social Sciences, Chiba University (Doctoral Program). In March 2016, she received her doctorate in literature. During her doctoral studies, she worked as a part-time researcher at the National Institute for Japanese Language and Linguistics (NINJAL), where she was involved in the construction of A Glossed Audio Corpus of Ainu Folklore. After working as a part-time lecturer at Fuji Women's University and a specially appointed researcher at the Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies, she joined the Preparatory Office for the National Ainu Museum, where she has been involved in the preparations for the establishment of the National Ainu Museum as a Research and Curatorial Fellow, in October 2017. She is currently working as a Research and Curatorial Fellow at the Research and Curatorial Department of the National Museum of the Ainu People. As a museum employee, she is also involved in promoting initiatives such as Ainu-language explanatory text and Ainu-language displays in the museum. Her current research focuses on Ainu word formation.

Alfred F. Majewicz is Titular Professor (academic title conferred by the President of the Republic of Poland in 1993), long-time full professor at Adam Mickiewicz and Nicolaus Copernicus Universities in Poland and visiting professor at several Universities abroad, currently Professor Emeritus and Director of International Institute of Ethnolinguistic and Oriental Studies (academic library and archives, Stęszew, Poland). Organizer and supervisor of Oriental and Japanese studies at three Universities in Poland and of many fieldwork expeditions worldwide, author of over 400 academic publications in linguistics, cultural anthropology, and language planning and policies (over 60 of them on, or related to, the Ainu and their language, included). Worth mentioning are *The Collected Works of Bronisław Piłsudski* (De Gruyter Mouton, so far four volumes released: 1998 (1-2), 2004 (3), and 2011 (4), vol. 5 under preparation) and *Late Meiji Japan as Eye-witnessed by Bronisław Piłsudski* (Polish version 2020, published by Copernicus University in Toruń, English-language version under preparation).

Hiroshi Nakagawa is Emeritus professor, Chiba University, Nakagawa taught courses on Ainu language and Ainu oral literature for 36 years at Faculty of Letters, Chiba University. He started his field work on the Ainu language in 1976 and described a grammar and vocabulary and also collected many texts of, especially Saru, Chitose, Shizunai, and Samani dialects. Some texts of Saru dialect collected by him are presented in A Glossed Audio Corpus of Ainu Folklore. National Institute for Japanese Language and Linguistics in collaboration with Anna Bugaeva, Miki Kobayashi, and Yoshimi Yoshikawa. He published Ainugo Chitose Hogen Jiten (The Ainu-Japanese Dictionary Chitose Dialect, 1995, Sōfūkan: Tokyo), Ainu no Monogatari Sekai (The World of Ainu Narratives, 1997, Heibonsha: Tokyo), Express Ainugo (A Self-study Book of Ainu, co-authored by Mutsuko Nakamoto, a speaker of Chitose dialect, 1997, Hakusuisha: Tokyo), Katariau Kotoba no Chikara (The Power of Words to Talk, 2010, Iwanami: Tokyo), New Express Ainu (A New Self-study Book of Ainu, 2013, Hakusuisha) etc. He has been supervising the Ainu language of Goldenkamui, a bestseller comic by Satoru Noda, in which many Ainu characters are playing active parts, and using the comic he himself published a book for introduction to Ainu culture, Ainu Bunka de Yomitoku Goldenkamui (Goldenkamui to Understand in Ainu Culture, 2019, Shūeisha: Tokyo). He is serving chairman on several committees of The National Ainu Museum opened in 2020 in Shiraoi, Hokkaido and The Foundation for Ainu Culture. He was awarded Dr. Kyōsuke Kindaichi Memorial Award in 1995, Agency for Cultural Affairs 50th Anniversary Commendation in 2018, and Agency for Cultural Affairs Commissioner's Commendation in 2020.

Osami Okuda is Professor in the Department of Human Sciences at Sapporo Gakuin University. His main research interests are the descriptive study of Ainu language and the study of the performance and transmission of Ainu oral literature. His publications include the chapter 'Nivkh and Ainu' in *The Vanishing Languages of the Pacific Rim* (Oxford University Press, 2007, co-authored with Hiroshi Nakagawa), 'Ainugo no Inritsu no Gihō to Ruikei' [Techniques and Typology of Metrics in Ainu] *Kōshō Bungei Kenkyū* 43, 2020). Awarded Kindaichi Kyōsuke Prize in 2000 for the study of the Shizunai dialect of Ainu.

Tetsuhito Ōno was born in Kagawa Prefecture in 1973, he graduated from Tokyo University of Foreign Studies in 1996 with a degree in Arabic. In 1992, in Tokyo, he met Ainu people living outside Hokkaido, and became a member of Pewre Utari, an organization for Ainu and non-Ainu exchange, and became involved in support activities for the Ainu people. From 1997, he worked as a staff member of the Ainu language study group at Rera-cise, an Ainu restaurant in Tokyo, to promote the Ainu language, and from 2000 to 2004, he assisted Ainu language researcher Suzuko Tamura in her research. Since 2004, he has worked as a local government official in the town of Samani, Hokkaido, supporting the activities of the Ainu people, conducting research on the Ainu language and culture, and working as an Ainu language instructor in Samani, Biratori, Akan, and Mukawa. He has written four books from 2006 to 2007 and two books from 2013 to 2014 for the radio station of Sapporo Television Broadcasting. He is the author of a book of essays on Ainu culture, *From the Foot of Apoi*, published by the town of Samani's Library in 2014.

Tomomi Satō is Professor of Linguistics at Hokkaido University. He has been engaged in research projects related to the study of Ainu old documents and field Ainu linguistics. He is the author of *Ainugo Bunpō no Kiso* [Introduction to Ainu Grammar] (Daigakushorin, 2008). His recent publication includes 'Gengoshi no Kenkyūhōhō to Ainugoshi no Shomondai' [Methods of Historical Linguistics and Problems in the History of the Ainu Language] (*Rekishi Gengogaku* [*Historical Linguistics in Japan*] 5, 2016) and 'Classification of the Types of Noun Incorporation in Ainu and its Implication for Morphosyntactic Typology' (*Studia Orientalia* 117, 2016).

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Yasushige Takahashi holds a doctorate in Language and Literature from the Graduate School of Letters, Hokkaido University (2004). After working as a researcher at the Center for Ainu and Indigenous Studies, Hokkaido University, he is currently a part-time lecturer at Hokkai-Gakuen University. His major field of study is linguistics. His current research interests include descriptive linguistics of the Tokachi dialect of the Ainu language, documentation and dialect classification of Ainu dialects, and translation and analysis of Ainu heroic epics.

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Alexander Vovin (1961-2022) was Directeur d'Études at the École des hautes études en sciences sociales (EHESS), Paris, France. He defended his PhD dissertation in 1987 at Saint Petersburg (then Leningrad) State University. Alexander Vovin served as Junior Researcher at the Institute of Oriental Manuscripts (then the Leningrad branch of the Institute of Oriental Studies of the Academy of Sciences of the USSR) 1983-1990, as Assistant Professor at the University of Michigan (1990-1994), Assistant Professor at Miami University, Oxford, Ohio (1994-1995), Assistant (1995-1997), Associate (1997-2003), and then Full Professor (2003-2013) at the University of Hawai'i at Mānoa, and Directeur d'Études at the École des hautes études en sciences sociales (2014–2022). Elected European Academician in 2015. Recipient of a 2015 prize from the Japanese National Institute of Humanities. Visiting positions: International Research Center for Japanese Studies (2001–2002, 2008–2009), Ruhr-Uiversität Bochum (2009), National Institute for Japanese Language and Linguistics (2012). Listed in Who's Who in America from 2011. His major areas of scholarly interest included Japonic, Mongolic, Koreanic, Turkic, Tungusic, Ainu, Yeniseic, Kradai, and Austronesian historical linguistics (phonology, morphosyntax, etymology) and philology. Major publications: A Reconstruction of Proto-Ainu (Brill 1993), A Reference Grammar of the Japanese Classical Prose (Routledge 2003).

Yoshimi Yoshikawa graduated from the Department of Japanese Studies, Faculty of Foreign Studies, Tokyo University of Foreign Studies. Masters and Doctorate from Graduate School of Humanities and Social Sciences, Chiba University. In March 2021, she submitted her doctoral dissertation, "Existential Aspect Forms in Ainu," and was awarded a doctorate in literature. During her doctoral studies, she also worked as an adjunct researcher at the National Institute for Japanese Language and Linguistics (NINJAL), where she participated in the compilation of *A Glossed Audio Corpus of Ainu Folklore* (Nakagawa, Hiroshi, Anna Bugaeva, Miki Kobayashi, and Yoshimi Yoshikawa (2016–2021), NINJAL) (Available from https://ainu.ninjal.ac.jp/folklore/). Since April 2021, she has

been working at the Ainu Culture Research Center, Hokkaido Museum, as a researcher. As a joint researcher of the Research Institute for Languages and Cultures of Asia and Africa (ILCAA) at the Tokyo University of Foreign Studies, she has been organizing and analyzing materials on the Saru dialect of the Ainu language. In the future, she plans to focus her research on the differences in aspectual expressions between the various Ainu dialects.

Anna Bugaeva

Introduction

1 Background information on Ainu

Ainu is a language previously spoken in Hokkaido, Sakhalin, and Kurils.¹ It is the only non-Japonic language of Japan and is typologically different not only from Japanese but also from other Northeast Asian languages. It would be no exaggeration to say that the search for human history on the Japanese islands begins with studies on the origins of the Ainu. The volume is aimed at preserving invaluable knowledge about Ainu, a language-isolate, which is now on the verge of extinction. The last two decades have been marked with the increase of global awareness of language endangerment and emergence of language documentation as a separate field focusing on building multi-purpose corpora of endangered languages. Originally, Ainu was not a written language but of all endangered languages Ainu possesses the largest documented stock of oral literature which is an integral part of human intellectual heritage – the particular course that language investigations have taken in Japan places it in the unusual situation (more below) of being richly documented (texts), but significantly under-described in terms of grammar. A detailed study of previous Ainu documentation is crucial for the production of a detailed adequate description of Ainu and possibly for answering questions about human prehistory such as "Who are the Ainu and how are they related to other Asian people?"

Extensive documentation of Ainu and its linguistic research started a little more than a century ago, e.g., Piłsudski (1912), Y. Chiri (1923) (see Kirikae (2003)), Kannari and Kindaichi (1959–1966), Nevskij (1972), Murasaki (1976), Kubodera (1977), Tamura (1984–2000), Shizunai Board of Education (1991–1995), etc. It has produced a number of comprehensive dictionaries of Ainu such as Batchelor (1938), Hattori (1964), Nakagawa (1995), Kayano (1996), and Tamura (1996) and several grammars of Sakhalin Ainu (Chiri 1973 [1942]; Murasaki (1979)) as well as of the Hokkaido dialects of Saru (Kindaichi 1993 [1931]; Tamura 1988, in English: 2000), Saru and Horobetsu (Kindaichi and Chiri 1974 [1936]), Ishikari (Asai 1970), Shizunai (Refsing 1986, in English), and Chitose (Bugaeva 2004, in English; Satō 2008). Despite this proliferation of works, none of those grammars is comprehensive. By the high standards of modern linguistic work, we are still at a rather early stage of Ainu research.

However, although now Ainu as a first language is truly on the verge of extinction, thanks to accumulated efforts of researchers in Japan, the language, culture, and oral literature have been well documented and Ainu studies will continue and are most likely to thrive when presented on a wider international scale.

¹ The Kuril variety of Ainu disappeared in the beginning of the 20th century.

2 Significance of the volume

This volume will open the field of Ainu studies to the world and help to attract many new students and researchers.

As an isolate with no known relatives, Ainu is of great significance to linguistic typology – the crosslinguistic study of what is possible in language – because of the many rare or unique features that its grammar exhibits. Though Ainu is a language widely cited in the typological literature mostly in regard to phenomena such as noun incorporation and applicative constructions (Baker 1988; Baker 1996; Spencer 1991), the greater part of the published typological work relies on secondary sources. The aim of this volume is to present an updated quality description of Ainu, which will be based only on primary sources and written up by a group of experts on Ainu, most of whom have experience of Ainu fieldwork and their own materials. This unprecedented cooperation of the leading experts of Ainu will definitely help to increase the rigor and clarity of our understanding of Ainu language structures, and to set it in the perspective that linguistic typology provides for analyzing the extremely varied languages of the world. The deeper and wider understanding of Ainu, i.e., virtually its "rediscovery" by the international community of linguists and its reconnection with a vast stock of Ainu oral literature by a wide range of scholars may significantly contribute to the linguistic theory and in a long-term perspective may provide answers to problems of human prehistory.

The volume is novel and innovative because no existing Ainu grammar has ever attempted to provide a truly typologically-informed and typology-oriented description of the language on a full scale. This may also be viewed as combining of two different scholarly traditions, viz. the Japanese philological tradition emphasizing text studies, which probably was (along with the early development of recording technologies in Japan) one of the reasons why the Japanese had engaged in the extensive documentation of Ainu fifty years before the importance of language documentation was realized in the West, and the Western linguistic tradition emphasizing analysis and methodology, which has been successfully applied to the description of other endangered languages since the early 1960s.

It is important to fully open the field of Ainu studies to the world and help people to appreciate the linguistic and cultural contribution of the Ainu of Japan to human intellectual heritage. This volume will make a step forward in the process of the so-called "gradual rediscovery of *Japan as an ethnically and culturally diverse nation*" (Morris-Suzuki 1998: 183).

3 Organization of the volume

The volume comprises a total of twenty-one chapters that elaborate language-particular as well as universal aspects of the Ainu phonology and grammar. Each chapter will

first give a brief review of the previous research on a particular topic, and then present what the author considers to be a most plausible analysis, followed by a description of promising directions for future research.

The twenty-one chapters are grouped into two parts and an appendix. Part I, entitled "Overview of Ainu studies", consists of twelve chapters which explain the fundamental issues of Ainu research such as the basic linguistic features of Ainu, history of Ainu studies both in Japan and Europe, theories on the origins of the Ainu language and ethnos, language contact phenomena, dialectal variation, Ainu oral literature, and sociolinguistic situation. Part II "Typologically interesting characteristics of the Ainu language" is composed of seven chapters that highlight the most appealing issues of Ainu phonology and morphosyntax. Revolving around but not confined to its head-marking and polysynthetic character, Ainu manifests many typologically interesting phenomena, related in particular to the combinability of various voice markers and noun incorporation. Other interesting features of Ainu include vowel co-occurrence restrictions (and its relation to tongue root harmony, which is prevalent in Northeast Asia), a mixed system of expressing grammatical relations, which includes the elements of a rare tripartite alignment, nominal classification distinguishing ordinary and locative nouns, elaborate possessive classes, verbal number, a rich four-term evidential system, and undergrammaticalized aspect, which will be explained in the volume. The appendix includes sample texts in the Southern Hokkaido (Chitose) and Sakhalin (Rayciska) dialects of Ainu (with interlinear glosses and translations).

The description is both typologically-informed and typology-oriented. All examples are either from field materials of the contributors or from primary sources. In glossing examples and texts, we follow the glossing conventions of Nakagawa et al. (2016–2021) but prioritize the Mouton glossing conventions when they are not the same; a list of additional glosses specific to this volume is given below.

In order not to repeat any previous publications, we have not included into the volume a chapter providing an overview² of the Ainu language, for that the reader is directed to such English publications as Shibatani (1990: 3–86), Tamura (1997: 57–65), Bugaeva (2012: 461–509), Dougherty (2018: 100–116), and Fukazawa (2019: 3–24). However, we have managed to fully maintain the autonomy of chapters in the volume, so the reader may perfectly choose to read only those chapters which are of particular interest for their research. To facilitate this, we decided to include the following extensive chapter summaries, which are intended to navigate the reader through the volume.

² The chapter which comes the closest to an overview is probably Chapter 1 (Bugaeva), yet the purpose of this chapter is to reveal the key features of Ainu, which make it so different from its neighboring Northeast Asian languages, rather than to provide a brief description of Ainu phonology and grammar.

I Overview of Ainu studies

Chapter 1 "Ainu: A head-marking language of the Pacific Rim" by Anna Bugaeva

Ainu is strikingly different from other languages of Northeast Asia such as Altaic languages, Korean, and Japanese. Like these languages, Ainu is SOV and agglutinating, but unlike them it is polysynthetic, incorporating, and head-marking. This chapter argues that most key features in Ainu are related to head-marking, which is widely attested in the languages of the Pacific Rim, i.e., coastal areas around the Pacific including northern Australia, the north coast of New Guinea, Oceania, coastal eastern Asia, western coastal North America, Mexico and Central America, and western coastal South America. Following Nichols (1986), the author regards the head- and dependent-marking characteristics as diachronically the most conservative features. The fact that Japanese and other neighboring Northeast Asian languages are dependent marking speaks against their relatedness to Ainu and makes Ainu a Northeast Asian survivor from the post-Neolithic spreads of language families of the Inner Asian type: Tungusic, Turkic, Mongolic, Japanese and Korean, along with Nivkh, Chukchi-Kamchatkan, and Eskimo-Aleut families.

The head-marking type of Ainu is manifested at the clause level, the NP level, and partially at the sentence level. It is shown that a number of morphological categories and processes (e.g., verbal indexing, verbal number, borderline case-marking, applicatives, incorporation, polysynthesis, possessive classes, etc.), which are generally claimed to correlate with head marking (Nichols 1986: 64), are all present in Ainu.

Chapter 2 "Ainu ethnic origins" by Juha A. Janhunen

The Ainu are conventionally thought to be the most "ancient" inhabitants of Japan. This is normally understood to mean that they have existed as a coherent ethnic group since, at least, the beginnings of the Jōmon period. According to a related popular line of thinking, the Ainu are once assumed to have covered the entire territory of the Japanese Islands, until they were marginalized to the island of Hokkaido and adjacent regions in the north.

The author challenges this conventional view by stressing the constant evolution of ethnic identity and the complex origins of ethnic markers. While the Ainu as an ethnic group contain features that continue the genetic heritage and cultural traditions of Jōmon Japan, their language represents only one of multiple lineages that were once present on the Japanese Islands. Due to a historical accident, triggered by the intrusion of the Yayoi culture from the continent and the subsequent expansion of Yamato Japan, the Ainu linguistic lineage was relocated from its earlier location in central Honshu to Hokkaido, from where it spread further northwards to Sakhalin and the Kuril Islands. In this process, Ainu covered other languages, whose speakers contributed both genes and cultural elements, as well as linguistic features, to the

complex that ultimately came to form the historically attested Ainu ethnicity. This process was completed only some centuries ago, shortly before the Ainu came under the threat of the modern colonial expansion of Japan and Russia.

Chapter 3 "Major old documents of Ainu and some problems in the historical study of Ainu" by Tomomi Satō

The oldest record of the Ainu language recorded by a Japanese is the "Matsumae no Kotoba", a list of 117 items, written in the early 17th century (author unknown). After that, there are no very good records until the late 18th century. Other early 17th century documents, viz. the "Ezo kotoba" (1704), "Ezodan hikki" (1710), and the "Hokkai zuihitsu" (1739), have limited use, yet they are of some value for investigating the old phonological system of Ainu and estimating the old pronunciations. "Moshiogusa" (1792) compiled by Kumajirō Uehara and Chozaburō Abe was the first Ainu dictionary to be published in the world. Importantly, this dictionary also contains texts of forty-six pages and is a precious source in terms of both quality and quantity. There are few original records after "Moshiogusa", and there are few documents which are of value for the study of the history of Ainu. An exception is "Ezoki" (1795), which is believed to be created independently around the same time as "Moshiogusa"; it contains prayers, texts, and information on a kind of secret language, and has a high linguistic value. "Ezo kotoba irohabiki" (1848) contains many explanations of the meanings of words and detailed information on their usage, and thus has a unique role as an Ainu language dictionary. Although there are many limitations, the historical change of the Ainu language can be reconstructed to some extent using these old documents.

Chapter 4 "Ainu language Western records" by Alfred F. Majewicz

The Ainu language records by Westerners date back to the earliest encounters of the latter with the representatives of the enigmatic "hairy people" of the Far East in the third decade of the 17th century; the first of them known were primarily relatively short lists of words varying in length and reliability, usually included in travelogues and missionary report epistulae addressed to Rome, now mostly constituting but historical facts, although some of them played a decisive role in the later identification of the inhabitants of regions visited and described or the determination of territories inhabited by the Ainu. With the time passing, they became more and more extensive, turning into glossaries~vocabularies and dictionaries.

Descriptions of the structure of Ainu started in the second half of the 19th century, to be followed by consecutive editions of Batchelor's grammar attached to his dictionary (1887) which for decades served as practically the only reference source for audience outside Japan till modern, supported by modern linguistic knowledge, grammars

were released. An impressive 4-volume "Ainu grammar" in German (Dettmer 1989), offering a lot beyond the title and an edition of Japanese Ainu dictionary deserve special mention.

Short sample phrases occasionally appeared added to word lists and dictionaries, but it was epic traditions, songs and other forms of folklore, and prayers that constitute the absolute majority of texts published in the Ainu language in general, Western output included. Among the latter, those particularly by Piłsudski (1912) and Nevskij (1972), and more recent by Philippi (1979) stand out prominently.

The last category of writings included in the chapter embraces research on the origins, phonetics, record collections, toponymics, and bibliographies of Ainu studies.

Chapter 5 "The Ainu language through time" by José Andrés Alonso de la Fuente

The history and prehistory of the Ainu language are two areas of research which are accessible to us through the application of different methodologies. On the one hand, the careful inspection of early documentation, which in the case of Ainu begins in the fourteenth century, is the traditional domain of philology. On the other hand, historical linguistics deals with the comparison of all the varieties of Ainu, a byproduct of it being the recovery of information regarding the parent language, that is, Proto-Ainu. For language isolates like Ainu, this hypothetical construct can be arrived at mainly by internal reconstruction. The most recurrent auxiliary tools allowing for refinements are language contact, like in the Ainu-Japanese or Ainu-Ghilyak settings, and, to a lesser degree, typology. In spite of rich dialectal records and a good understanding of the interaction dynamics in the Ainu linguistic world, the time depth which we can reach goes no farther than one thousand years in the past. Any hypotheses formulated for a period beyond that point, although in theory possible, must be approached with caution. The main goal of this chapter is to describe the historical phonology of Ainu. In doing so, Alexander Vovin's Proto-Ainu reconstruction (1993) will be used as guideline.

Chapter 6 "Ainu elements in early Japonic" by Alexander Vovin

This chapter demonstrates that in ancient times there was quite extensive borrowing from Ainu into Japanese, which ultimately should come as no surprise, since language contacts are never unilateral. The author demonstrates that that not only are there Ainu loanwords that can be found in the texts of the Nara period (710–794 AD), but also there are even Ainu textual interpolations in the early Heian period (794–1192 AD) texts, that at least in one known case result in an Ainu-Japanese macaronic poems. He also ventures a hypothesis that the Ainoid languages were spoken in the past in the Japanese archipelago well beyond Tohoku and Kanto regions. In particular, he detects some words that are likely to be Ainu in refrains to folk songs of the Miyako islands.

Chapter 7 "Language contact in the north" by Hidetoshi Shiraishi and Itsuji Tangiku

The chapter examines the socio-linguistic situation on the island of Sakhalin, which served as the primary stage for language contact in the northern part of the Ainu language area. Ainu had been in contact with Nivkh, Uilta, and other Tungusic languages, often through trading. Using historical records by Japanese visitors on the island from the end of the 18th century to the middle of the 19th century as a primary source, the authors assume that multilingualism practiced by the ethnic groups at that time was extremely limited and localized. The second half of the chapter focuses on loan words among the languages of Sakhalin and examines the scale and direction of borrowings. While Nivkh and Uilta have many lexical items in common, the number of common items with Ainu is comparatively small, suggesting that language contact along the north-south axis of the island of Sakhalin was limited.

Chapter 8 "Hokkaido Ainu dialects: Towards a classification of Ainu dialects" by Hiroshi Nakagawa and Mika Fukazawa

Based on the analysis of basic vocabulary, the idea to divide the Hokkaido dialect into two larger groups of the Southwest dialects and Northeast dialects is generally accepted. There is also an idea to set the Soya dialect as a Northern dialect and separate it from the Northeast dialect group. Independently from the lexicostatistical research of basic vocabulary, it is thought that there is a linguistic and cultural boundary between Shizunai and Niikappu of the Hidaka region on the Pacific coast. This matches the boundary of the *sum un kur* 'people of the west' and the *menas un kur* 'people of the east' that was accurately confirmed in the late 17th century. Although the main linguistic evidence for the west-east division is found in basic vocabulary, a similar division is apparent in the elision of word-initial /h/ and the pseudo sound correspondence *ca-\pa-*, as observed in *par : car* 'mouth' and *pas : cas* 'run', and in the names of semi-divinities like Okikurmi and Samayekur and the names of genres of oral literature, etc.

Another conceivable classification is to distinguish the group including Saru dialect of the Hidaka region, Mukawa dialect of the Iburi region and Chitose dialect of the Ishikari region (hereinafter, Saru dialect group) from all other dialects. This group extends from the Pacific coast and crosses to the east and west. A main common feature is the structure of personal affixes. While in other dialects, transitive verbs employ circumfixes such as e_1 -kore₂- an_3 ' I_3 give₂ (it) to you_1 ', the Saru dialect shows an extensive use of prefixes such as $eci_{1,3}$ -kore₂ (same meaning). Another characteristic of this group is that the personal prefixes ku- (1SG), and ci- (1PL.EXCL) (before all vowels except for i-) are compressed into k- and c-. Interrogatives are also distinct, e.g., hemanta (Saru): nep (elsewhere) 'what' and makanak: nekon 'how'; the same is

true for some lexical and grammatical items, e.g., the existence verb form and the lack of a juxtapositional particle.

It is clear that the reliable classification of dialects ought to be considered not only from the basic vocabulary framework, but also as a multi-layered endeavor.

Chapter 9 "Differences between Karafuto and Hokkaido Ainu dialects" by Itsuii Tangiku

Sakhalin (=Karafuto) dialects are broadly categorized into the northern East coast, Central area, and Southern East coast dialects of Sakhalin Ainu. Most of the recorded materials are in the Rayciska dialect from the central region. In the various Central dialects, the syllable-final consonants /p/, /t/, and /k/ neutralize into /h/ (cup (H) > cuh (S) 'sun', satke (H) > sahke (S) 'dry', rek (H) > reh (S) 'beard'), and the wordfinal r// consonant forms an open syllable (r//kar (H) > r//kar (S) 'make') because of the copying of the preceding vowel which, unlike in Hokkaido Ainu, has acquired a status of phoneme (Murasaki 1979). Furthermore, the unique long vowels of Sakhalin Ainu correspond to the irregular high accent on the first syllable seen in various Hokkaido dialects. In terms of vocabulary, some of the basic vocabulary is different. Differences between the Rayciska dialect and various Hokkaido dialects are especially great in daily conversation.

In Hokkaido Ainu, the use of the head-marking possessive construction with the possessive suffix **-V(hV)** is restricted to body parts and kinship terms (e.g., ku-tek-ehe 'my hand'), while in Sakhalin Ainu it is possible with a much greater range of nouns (e.g., ku-atuy-ehe 'my sea', i.e., 'the sea where I live', nokanramu pu-y-ehe '(his) younger brother's warehouse'). Moreover, in Sakhalin Ainu, the same possessive suffixes are also used to nominalize verbs. Such nominalized verbal forms can have different functions, for example, in the sentence final position, they often form questions.

Next, the personal affixes *an-/-an* of Hokkaido Ainu, which mark the so-called fourth person (its functions include the first person plural inclusive, the indefinite person, etc.) can be used in Sakhalin Ainu as markers of the first person singular, but the opposition of the first person plural inclusive vs. exclusive distinction is lost there. Many of the **-pa** type plural verbs, excepting existential and motion verbs, are missing. Instead, the plurality suffixes -hci/-ahci are used.

Chapter 10 "Ainu oral literature" by Shiho Endō

This chapter reviews the genres of Ainu oral literature and focuses on the differences in linguistic features in the oral literature by region and genre. There are at least two metrical melodic genres, namely yukar 'heroic epics' and kamuy yukar 'divine epics', and one prosaic genre uwepeker 'prosaic folktale', as they are called in the Saru dialect of Ainu (Southwest Hokkaido). In Ainu oral literature, the protagonist is referred to by the markers *a-(an-) / -an*, which have a number of functions including the indefinite, or in some genres, by the first person plural exclusive marker *ci- / -as*. This presents a great challenge for analysis on whether Ainu oral literature can be treated as genuine "first person literature", i.e., direct style narration, which is highly unusual for the world's folklore.

The linguistic features in oral literature are not all the same as their aspects vary by genre, but the greatest distinction is between the poetry and prose. In prose narration, 'when talk(ing)' is *itak kor* lit. 'talk when/if', just as in everyday conversation, but in poetry, various methods to arrange the rhythm are often applied. For example, to express the above meaning the light verb ki may be inserted as in $itak\ ki\ ki\ kor$ lit. 'talk(ing) do do when/if'. However, even poetic literature in the same Saru dialect may vary. *Apehucikamuy* 'grandmother god of fire' in songs of gods may become i-resu kamuy 'god who raised me' in prayers. Even lexicon featuring conventional phrases may differ by genre.

Chapter 11 "Meter in Ainu oral literature" by Osami Okuda

The meter in verse is one of the key issues in language and literature. In Ainu oral literature, the syllable counting metric system with around five syllables in a line has been noticed from the beginning of the linguistic and literary studies of this language. The author has recently revealed that there exists another metric system in Ainu, the accent arrangement meter with accentuated syllables at the beginning of four-syllable lines and that these two metric systems have been adopted differently according to the genres of Ainu oral literature. This chapter describes these two metric systems and the typological features of Ainu verse referring to the previous studies on the versification of the languages of the world.

Chapter 12 "The history and current status of the Ainu language revival movement" by Tetsuhito \bar{O} no

The Ainu language, which has been long used as the native language of the Ainu people, was forced to experience a decline as a result of discrimination and repression against the Ainu people and the assimilation policy for the Ainu from the state. However, at the same time, Ainu people in many locations are actively recording and revitalizing their language through various means. Although the distrust and criticism of researchers on the part of the Ainu people had always been deep-rooted, as the Ainu themselves became more oriented toward the revival of the Ainu language, and as academics reflected on their own experiences, a cooperative relationship between the two groups was gradually established. Since the 1980s, Ainu language

classes have been held in various locations with the support of the government. Since the Law for the Promotion of Ainu Culture was enacted in 1997, the Foundation for Research and Promotion of Ainu Culture has carried out many projects to promote the Ainu language. Furthermore, ethnic Ainu researchers and promoters have actively promoted their language. Though the way to revitalization of the Ainu language as a daily language or native language is still distant, it can be said that the activities of the Ainu people to revitalize their language are flourishing. On the other hand, there are still many challenges such as the training of human resources, development of teaching materials, establishment of teaching methods, organization of a lexicon, and issues regarding differences in dialects. Cooperation with Ainu language researchers through the organization and provision of resources is becoming even more important.

II Typologically interesting characteristics of the Ainu language

Chapter 13 "Phonetics and phonology" by Hidetoshi Shiraishi

This chapter provides an overview of the phonetic and phonological characteristics of Ainu by reviewing linguistic works since the first half of the 20th century. These include topics on segmental as well as suprasegmental phonology, covering issues on vowels and consonants, syllable, prosodic word, phonological phrase, and intonational phrase. Although these topics are described without presupposing any theoretical framework, discussions from a specific viewpoint in the literature are laid out when it leads to a better understanding of the topic. Topics on controversial issues and on-going research are described using multiple sources from different viewpoints.

Chapter 14 "Parts of Speech – with a focus on the classification of nouns" by Hiroshi Nakagawa

Parts of speech in Ainu can be categorized into seven classes: nouns, verbs, adverbs, prenominals, interjections, auxiliary verbs, and particles. Any word that has an adjective-like meaning falls into a category of intransitive verbs. Nouns are further subcategorized into ordinary nouns, locative nouns, pronouns, and formal nouns. Ordinary nouns may take conceptual forms, which are free and unmarked, and affiliative forms, which are used when making a possessive expression, i.e., a possessive relation that cannot be transferred (inalienable possession) such as ku-tek-e 'my hand', is expressed with a personal prefix plus affiliative suffix on the possessee NP. A possessive relation that can be transferred (alienable possession), such as in ku_1 - kor_2 seta₃ 'my dog' lit. 'the dog₃ (that) I₁ have₂', is expressed with a different relative clausebased construction consisting of a personal prefix plus kor 'have' plus the conceptual form of the possessee NP. Furthermore, the Ainu language makes a grammatical distinction between nouns that have the feature <location> and those which have not. Unlike locative nouns, ordinary nouns in their conceptual form cannot be <location>, cf. kim ta 'at the mountain' (locative noun) and *nupuri ta 'at the mountain' (ordinary noun). Thus, ordinary nouns cannot be immediately followed by a locative/allative case postpositional particle; instead, addition of a generic locative noun or 'place' or a relation-specifying locative noun is required, e.g., nupuri or ta 'in the mountains', lit. 'in the place of mountains' (ordinary noun + locative noun + particle) or nupuri ka ta 'on top of the mountains', etc. The locative nouns have a basic form and long forms. The latter have been called an affiliative form like ordinary nouns, but they are different both syntactically and morphologically. The locative nouns are further divided into category 1 and category 2. The former in their basic form require an antecedent noun phrase, but the latter do not. Finally, it was hypothesized that marking for <location> has the function of clarifying syntactic roles in Ainu, which doesn't mark noun phrases for the syntactic roles of subject and object in the third person.

Chapter 15 "Verbal valency" by Anna Bugaeva and Miki Kobayashi

This chapter focuses on valency-changing alternations or 'voices' in a broad sense. Ainu is a true paradise of voice: it has several valency-increasing applicative and causative markers, valency-decreasing reciprocal, reflexive, and antipassive markers, as well as a typologically rare indefinite causative, which does not affect valency, and as many as three sociative markers. All these alternations show at least some typologically unusual features and demonstrate a striking mutual combinability.

Ainu is a language in which the syntactic valency of a verb is easily determined because 1-argument and 2/3-argument verbs take different personal affixes (in 1PL. EXCL and 4th person only) but semantic valency, i.e., the actual semantic roles the arguments take, can vary for some verbs. The first part of this chapter describes verb-coded valency alternations, while the second part investigates uncoded argument alternations by using a predicate calculus-based approach to semantics.

Chapter 16 "Noun incorporation in Ainu" by Tomomi Satō

Ainu noun incorporation (NI) can be categorized into four main types: object NI (85.9%) ($wakka_1$ - ta_2 'draw₂ water₁'), intransitive verb subject (natural force) NI (6.8%) (sir_1 - $pirka_2$ 'weather₁ is good₂'), intransitive verb subject (possessor-requiring noun) NI (5.6%) ($kema_1$ - $pase_2$ lit. 'the legs₁ of sb are heavy₂', i.e., '(sb) is old'), and transitive verb subject (natural force) NI (1.7%) (koy_1 - $yanke_2$ 'wave₁ raises₂ (sb)'). The ability to incorporate subjects is a major feature of incorporation in Ainu, although there are not so many examples. Typologically, it is especially important that transitive subject

incorporation, which was previously claimed to be impossible (Baker 1988), is also attested. In the case of the intransitive verb NI with a nominal such as *kema* 'the leg of sb', the subject is co-referential with the possessor of the incorporated noun, which can be regarded as a 'stranding' structure. It should be noted that this is morphosyntactically very peculiar in that it violates the normal definition of "wordhood" that word-internal elements do not undergo any syntactic operation. The distribution and frequency of various types of NI in Ainu can be interpreted as a result of the interaction of several NI restrictions and NI rescue rules. Based on this distribution we can build up a kind of incorporation accessibility hierarchy, which provides significant implications for linguistic typology.

Chapter 17 "Verbal number" by Hiroshi Nakagawa

In Ainu, nouns are not obligatorily marked for the category of number. Instead, there is a singular vs. plural distinction in verbs. This is the so-called verbal number, and the general traits of it can be seen in Ainu verbs, too. This morphological distinction of singular/plural forms is encoded by suffix alternation and suppletion, which are limited to only some verbs. Among the verbs which have a number distinction, the form of intransitive verbs roughly corresponds to the number of Agents functioning as the subject (participant number), but for the transitive verbs it corresponds to the number of action(s) (event number). However, even if an actual action takes place several times, there are cases when it is expressed with a singular form. Therefore the "singular form" should be regarded as a default one, and the plural form is used when it is necessary to clearly express the plurality. Besides those plural forms, the form with a clitic pa has been treated as plural, but it has different functions from the one formed with the plural suffix -pa. While the latter shows the event number, the former shows basically participant, especially Agent plurality, and when the verb itself shows the plurality of its Agent, the addition of pa serves to add an emphasis for the Agent plurality or to show the plurality of action. The distribution of the clitic pa is limited to Saru, Chitose, and Ishikari dialects, while clitics ci or hci are used in other districts. As their functions are similar, it can be hypothesized that historically (h)ci forms were widely spread across Hokkaido and Sakhalin, but in the dialects like Saru and Ishikari pa developed and replaced ci.

Chapter 18 "Aspect and evidentiality" by Yasushige Takahashi

In Ainu, aspect and evidentiality are not necessarily mandatory grammatical categories. However, various expressions related to these grammatical meanings are observed. Aspect is expressed by analytical means which combine the use of conjunctive particles and verbs (ruyanpe₁ ruy₂ kor₃ an₄ 'It's raining' lit. 'rain₁ is heavy₂ and₃ exists₄'). In many dialects, opposition of progressive and resultative aspect is seen. Evidentiality is expressed with nominalizers. In most dialects, for example in Tokachi (Northeast Hokkaido), there is a four-term evidential system consisting of visual (sir lit. 'appearance'), non-visual sensory (hum lit. 'sound'), hearsay ((h)aw lit. 'voice'), and inferential (ru lit. 'footprint') evidentials, all originating in nouns, which is rather unusual crosslinguistically. When followed by a copula ne, nominalizers form a noun-complement construction ($upas_1 ruy_2 ru_3 ne_4$ 'Snow fell' lit. '(It) is₄ (the) trace/footprint₃ (of) the snow₁ (being) heavy₂.')

This chapter also takes up the phenomena of aspect and a constraint on person, aspect, and asymmetric negation, evidentiality and the stage/individual-level distinction, and the grammaticalization of evidential markers.

Chapter 19 "Existential aspectual forms in the Saru and Chitose dialects of Ainu" by Yoshimi Yoshikawa

The chapter focuses on aspectual forms that contain the existential verb an in the Saru and Chitose dialects of Ainu and discusses their semantic functions. The first part of the chapter focuses on kor an, wa an, kane an, and hine an (all of which are conjunctive particles plus the existential verb an), while the second part focuses on the auxiliary verb a and the auxiliary verb aan.

The forms *kor an*, *wa an*, *kane an*, and *hine an* are often equated with the Japanese *-te iru* (*-te aru*) forms due to syntactic and semantic similarities. However, these four forms can be difficult to analyze as aspectual forms and, while they share similarities with the *-te iru* (*-te aru*) forms, they are not the same. In this chapter, the author first takes up *kor an* and *wa an*, which are at the core of the study of aspect in Ainu and discuss the difficulties in situating them as aspectual forms. After that, she overviews the aspectual and non-aspectual meanings expressed by the four forms and describes the characteristics of each.

Regarding the auxiliary verb *a* and the auxiliary verb *aan*, she considers them both to be forms that can display tense, aspectual, and evidential properties, and the meanings they express differ from time to time. In terms of tense, *a* and *aan* basically express the past. In terms of aspect, *a* is perfective and *aan* is perfect. In terms of evidentiality, she argues that *a* represents direct evidence and *aan* represents indirect evidence.

III Appendices: Sample texts

Chapter 20 "An uwepeker "Retar Katak, Kunne Katak" and kamuy yukar "Amamecikappo" narrated in the Chitose Hokkaido Ainu dialect by Ito Oda" by Anna Bugaeya

This chapter presents two Ainu folktales narrated by Ms. Ito Oda (1908-2000), who was one of the last speakers of the Chitose dialect belonging to a Southern subgroup of the Southwestern Hokkaido Ainu group. Retak katak, kunne katak 'white clue and black clue' is an *uwepeker* 'prosaic folktale', and *amamecikappo* 'sparrow' is a *kamuy* yukar 'divine epic' with melody, meter, and sakehe 'refrain'. Both folktales were recorded in the autumn of 1998 by the compiler. This is a third revision of these two folktales, which is done for the sake of consistency with the volume. The first two editions and the audio are available as Bugaeva (2004) and the digital online corpus (Nakagawa et al. 2016–2021).

Chapter 21 " 'Meko Oyasi', a Sakhalin Ainu ucaskuma narrated by Haru Fujiyama" by Elia dal Corso

This chapter presents a re-edited version of a Sakhalin Ainu *ucaskuma* (folklore tale) narrated by Haru Fujiyama (1900–1974), who was one of the last native speakers of the Rayciska dialect of the Sakhalin Ainu variety. The text, originally elicited from Haru Fujiyama by Kyōko Murasaki during her fieldwork on Sakhalin in the 1960s, appears in Murasaki's Karafuto Ainugo – Shiryō (The Karafuto Ainu language – Materials) first published in 1976 and it is presented here fully re-transliterated on the basis of the original audio recording, glossed and translated into English for the first time.

Appendix: List of additional abbreviations used in this volume

1/2/3/4 1st /2nd/3rd/4th person phonological alternations transitive subject, possessor

ADM admirative

AFF affiliative (= POSS: possessive)

COOR coordinative DEB debitive DIM diminutive DIR directional DIR(.CAUS) direct causative DV defective verb
EP epenthetic conso

EP epenthetic consonant FIN finite

HAB habitual
INDR(.CAUS) indirect causative
INFR(.EVID) inferential (evidential)

INT intensive

IP interrogative (particle)
IPFV imperfective aspect
JXT juxtapositional

LF long form of locative nouns (= POSS: possessive)

NI noun incorporation NONVIS(.EVID) nonvisual evidential

O object PF prefix

POSS possessive (= AFF: affiliative, LF: long form of locative nouns)

P.RED partial reduplication
QI quasi-incorporation
REP(.EVID) reportative evidential

RETR retrospective RFN refrain RTM rhythm

S intransitive subject

sbsomebodySOCsociativesthsomethingSUBsubordinativeTENTtentative

V sakehe-refrain in kamuy yukar 'dinine epics'

-V (final) vowel VBLZ verbalizer

vd ditransitive verb (three-place transitive)

vi intrantitive verb

vt transitive verb (two-place transitive)

VIS(.EVID) (visual) evidential

Languages and dialects

A Ainu
AS Asahikawa
B Bihoro
C ... Common ...

EOJ Eastern Old Japanese
GPR Great Pacific Rim
HA Hokkaidō Ainu
HO Horobetsu
KA Kuril Ainu

KD Kuril Ainu (Dybovski) KK Kuril Ainu (Krašeninnikov) ΚL Kuril Ainu (Klaproth) ΚT Kuril Ainu (Torii Rvūzō) K۷ Kuril Ainu (Voznesenskij)

N Nayoro NA Nairo OB Obihiro Proto-... Ρ... PR Proto-Ryukyuan

RA Raiciska/Raichishika/Rayciska

SA Sakhalin Ainu

S0 Sōya Υ Yakumo

WOI Western Old Japanese

Acknowledgments: It was Masayoshi Shibatani who first officially recognized in his highly cited book The Languages of Japan (1990) that there was more than one language spoken in Japan. Without this initial recognition an inclusion of a volume on Ainu into the series Handbooks of Japanese Language and Linguistics (HJLL) would have hardly been possible. The idea of the inclusion of the Ainu volume into the HJLL series was enthusiastically supported by Masayoshi Shibatani's student, Taro Kageyama, who was director of the National Institute for Japanese Language and Linguistics (NINJAL) in the period of 2009–2017. I would like to thank both of those prominent scholars, who became the HJLL series editors, for carefully monitoring and supporting every stage of my editorial work, and also thank the copy-editor John Haig, proofreader Emi Mukai, and the current director of NINJAL Yukinori Takubo.

It became possible to include a collaborative Ainu project into a large-scale NINJAL project "Typological and historical/comparative research on the languages of the Japanese archipelago and their environs" (2013–2016) headed by John Whitman. I was able to gather all active researchers of Ainu in Japan including students into the Ainu research group which met regularly two/three times a year at domestic research meetings (NINJAL) and international symposia (Helsinki 2014 and Sapporo 2015). I am grateful to the participants of those meetings and to John Whitman for his leadership, as well as to the NINJAL project research assistants Iku Nagasaki, Yūko Osanai, and Shunsuke Hidaka and the office staff Michiko Hirai who helped with organizing research meetings. In the period of 2016–2021, the Ainu-related activities were taken over by the NINJAL research project "Endangered languages and dialects in Japan" headed by Nobuko Kibe, who I would also like to thank, along with her office staff, Michi Funaki. I believe that because of these activities we are now witnessing a true renaissance of Ainu studies in Japan and hopefully worldwide and we are truly grateful to all the Ainu people, past and present, who have allowed us to share their beautiful language and culture with the world!

My personal heartful thanks go to my teachers of Ainu and linguistics, my former PhD supervisor Tomomi Satō, postdoc host researcher Hiroshi Nakagawa, and linguistic typology mentor Vladimir P. Nedjalkov (1928–2009). Last, but not least, is my mother Taisia G. Bugaeva (1937–2021), a researcher of Korean and other Northeast Asian languages, who I would like to thank for encouraging me from an early age to engage in Oriental studies and linguistics. I hope it was a meaningful endeavor.

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Part I: Overview of Ainu studies

Anna Bugaeva

1 Ainu: A head-marking language of the Pacific Rim

1 Introduction

The Ainu (traditionally, hunter-gatherers) formerly inhabited not only the island of Hokkaido in northern Japan but also the northern part of Honshu, the southern part of Sakhalin, the Kuril Islands, and the southern part of Kamchatka, and in prehistoric times, probably the entire Japanese archipelago, see Janhunen (Chapter 2, this volume) and Vovin (Chapter 6, this volume). Their unusual physical appearance, which most Westerners associated with Caucasoids instead of Mongoloids, differs from other Asian populations.

The Ainu language appears to be strikingly different from languages of Northeast Asia, i.e., the so-called Altaic languages (Mongolic, Manchu-Tungus, Turkic), Korean, Japanese, Nivkh, Yukaghir, and the Chukchi-Kamchatkan languages. As mentioned in Introduction, the interesting features of Ainu include noun incorporation, a wealth of voices, a mixed system of expressing grammatical relations with the elements of tripartite alignment, nominal classification distinguishing ordinary and locative nouns, an alienability opposition in nouns, a four-term evidential system, and verbal number. Like all languages in this region, Ainu is SOV and agglutinating, but unlike many of them, it is polysynthetic, incorporating, and head-marking both at the clause and phrase level. This chapter argues that most key features in Ainu are either directly or indirectly related to head-marking, which is marginal in Northeast Asia, where most languages are dependent-marking.

2 Head- and dependent-marking languages

The classification of languages into head- and dependent-marking, originally introduced in Nichols (1986) and further developed in Nichols (1992), is based on the tendency of languages to mark dependency relations either on the head or a dependent element of their constituents. Constituents of a sentence, i.e., phrases and clauses, are organized hierarchically consisting of heads and dependents. The head is the word which determines the syntactic type of the entire constituent governing the

Acknowledgments: Parts of this paper were presented at a workshop "Investigating language isolates: typological and diachronic perspectives" of the SLE 54 (Athens) conference held online in September 2021. I thank the workshop organizers and participants for their feedback, as well as Johanna Nichols for her comments on the paper and John Haig and Emi Mukai for their careful proofreading.

dependent, i.e., there is requirement of one word in a particular grammatical function by another.

Thus, according to Nichols (1986), the head- and dependent-marking parameter is a morphological-structural parameter which classifies languages according to the locus of morphological marking (inflection, affixation, cliticization) of syntactic relations within a constituent. Morphological marking can be located on the dependent word (dependent-marking type), head word (head-marking type), both words (double-marking type) or neither word (no marking type). Nichols discusses the dependency relations in noun phrases, clauses, and sentences, but the last in much less detail.

An important typological observation of Nichols (1986: 64) is that a number of familiar morphological categories and processes are classified either as head-marked or dependent-marked.

(1) Head-marking:

verbal agreement or cross-reference with nominal arguments incorporation instrumental, directional (etc.) affixes on verbs inflected adpositions pronominal (possessive) affixes on nouns polysynthesis

(2) Dependent-marking:

case adnominal genitive non-finite verbs agreement in adjectives uninflected adpositions which govern cases

Though no language is exclusively head-marking or dependent-marking, most languages are predominantly of one or the other type (or double-marked). Based on a sample of 236 languages, Nichols and Bickel (2005a) claim that regarding the whole language typology, i.e., both at the clause and NP level, the head-marking type is well attested in the Americas and Melanesia but vanishingly rare elsewhere; the dependent-marking type is strongest in Africa, Eurasia, and perhaps Australia-New Guinea and infrequent (though not rare) elsewhere.

In her further research, Nichols (2017) shows that the head-marking type is extremely common in the Greater Pacific Rim (GPR) population compared to the rest of the world. Most of the GPR belongs to the Pacific Rim macroarea as defined in Nichols, Witzlack-Makarevich and Bickel (2013): coastal and near-coastal areas all around the Pacific (clockwise: northern Australia; the north coast of New Guinea; Oceania; coastal eastern Asia; western coastal North America; Mexico and Central America; western coastal South America) plus the rest of the Americas, New Guinea, and Australia. "Though in geography, linguistic typology, traditional economy, and other respects these non-coastal areas differ from the coastal regions, they have the same ultimate colonization history as their coastal counterparts (settlement from Beringia and Southeast Asia respectively), ... bearing on possible founder effects in the linguistic populations." (Nichols 2017: 59) The age of the GPR linguistic population is over 20,000 years, while the age of just the narrow Pacific Rim population is over 10,000 years; cf. the age of the American linguistic population is probably over 24,000 at a minimum and continuous (multiple) colonizations of Australia/New Guinea/near Oceania began c. 60,000 years ago (Clarkson et al. 2015; Wood 2017; Bird et al. 2019).

As we can see, head-marking languages are not frequent worldwide, so head marking can be regarded as a historical marker (Nichols 1998: 148). According to Helmbrecht (2001: 1424), the head- and dependent-marking characteristics are regarded by Nichols as diachronically the most stable features so that they can be used as a tool to hypothesize about the genetic and areal relatedness of languages much beyond the time limits of the traditional historical-comparative method.

And although morphological marking type alone can never be invoked as a positive criterion for genetic relatedness, it can, for instance, be used as negative criterion for relatedness. It is likely that a sharp discontinuity in type bespeaks a relatively recent migration (Nichols 1986: 98-99).

3 Head marking as a key characteristic of Ainu

The head-marking character of Ainu is manifested in both verb and noun phrases. In ensuing sections, I am going to discuss a few morphological categories and processes in Ainu (data from Saru and Chitose dialects) which are claimed to correlate with head-marking as indicated in (1) and occasionally refer to those correlating with dependent-marking in (2).

First, I will focus on head marking in the verb (Section 4) and such features as verbal agreement or cross-reference with nominal arguments, inflected adpositions, instrumental, directional (etc.) affixes on verbs, incorporation, polysynthesis as well as inclusive/exclusive opposition in first person pronouns and verbal number (SG/PL) involving suppletion, which I have added to the list because both indicate a further elaboration on the head.

Second, I will look at head-marking in the noun phrase (Section 5) and such features as pronominal (possessive) affixes on nouns and more precisely possessive classes (Nichols 2017: 60).

And finally, I will try to evaluate the degree of head-marking in sentences (Section 6) focusing on a few subordinate clauses and turn to concluding remarks (Section 7).

4 Head marking in verb phrases

4.1 Verbal agreement or cross-reference with nominal arguments (=indexing)

Ainu has exclusively borderline case-marking (Iggesen 2005: 202–205), which means that nominative, accusative, and genitive cases are absent.

- (3) kani kosonte ku-kor short-sleeved.kimono 1SG.A-have 'I have a Japanese short-sleeved kimono.' (Tamura 1984: 62)
- (4) eani nakairi e-kor 2SG ragged.clothing 2SG.A-have 'You have ragged wadded clothing.' (Tamura 1984: 62)
- (5) ku-yup-ihi (kani) en-kik 1SG.A-elder.brother-POSS 1SG 1SG.O-hit 'My elder brother hit me.' (Tamura 1993 [1979]: 15)

As we see, all subject and object (pro)nominal NPs in (3)–(5) appear unmarked for case, 1 and there is no genitive case on the possessor in (5). Instead, the first- and second-person arguments (both subjects and objects) are indexed on the verb with personal prefixes ku- (1SG.S/A), en- (1SG.O), and e- (2SG.S/A/O²) respectively, while the third-person subject (5) and object (3)–(4) are zero.

It is most natural not to use pronominal NPs as in (5) and omit nominal NPs unless they are needed for emphasis or to introduce in discourse new participants. Grammatical relations are primarily marked on the verb (=the head), which is a characteristic of a head-marking language. In early studies of Ainu, this phenomena (6) is regarded as hōgō-teki katsuyō 抱合語的活用 (incorporating conjugation) (Kindaichi 1993 [1931]: 255-261).

¹ According to Kibrik (2012: 232), who combined in WALS the feature "verbal person marking" with "number of cases" in the sample of 217 languages, the most frequent type was "Both A and P arguments AND NO morphological case-marking" – 47 languages, which means that those languages are consistently head-marking.

² S, A, O: Intransitive subject, transitive subject, and object affixes in Ainu; the A series is also used for possessors.

(6) hinak ta **eci-en-**nukar hawe an? where LOC 2PL.A-1SG.O-see REP.EVID exist.SG 'Where did you said you saw me?' (Tamura 1993 [1979]: 19)

However, in practice two personal markers do not often appear on the verb and that is not only because the third person is zero but also because there is a restriction on the co-occurrence of the first-person subject and second-person object markers, which is probably a trait of the hierarchical alignment. Say, instead of simply combining the first-person singular subject prefix ku- and the second-person singular object prefix e- into *ku-e, Ainu (Saru) uses eci- instead, which is normally a marker of the second-person plural subject/object, see Table 1.

(7) numan **eci-**nukar ruwe ne yesterday 1SG.A+2SG.O-see INFR.EVID COP 'I saw you yesterday.' (Tamura 1993 [1979]: 19)

Importantly, there is also an extra "fourth person" that is indexed on the verb. It has the functions of the first-person plural inclusive (8), the indefinite or impersonal passive (9), second-person honorific (10), and logophoric (11). The last function is particularly important because it is used not only in conversations but also to encode the person of the protagonist in folktales since they are cast as direct speech of the protagonist; for details see Bugaeva (2008a, 2008b) and especially Nikitina and Bugaeva (2021).

- (8) a. tu-n a-ne wa ipe-an ro
 two-person.CLF 4.A-COP and eat-4.S COHORT
 'Let's two of us (you and me) eat!' (lit. 'let's (you and me) be(come) two and eat') (Tamura 1993 [1979]: 6)
 - b. a-kor huci i-ipe-re
 4.A-have grandmother 4.O-eat-CAUS
 'My grandmother feeds us (you and me).'
 (Tamura 1993 [1979]: 16)
- (9) **a-**ona-ha utar sorekusu topattumi
 4.A-father-POSS PL exactly night.raid(er)
 ani **a-**ronnu p ne kus,
 INS 4.A-kill.PL NMLZ COP because
 'Since my father and relatives had been killed in the topattumi-raid'
 (Nakagawa et al. 2016–2021: K7908051UP.355)
- (10) aoka **a**-sik-ihi **a**-arka-re hawe? 4PL 4.A-eye-POSS 4.A-hurt-CAUS REP.EVID 'Do your eyes hurt?' (Tamura 2001 [1972]: 151)

- (11) a. "asinuma arpa-an kusu ne." sekor nispa
 4SG go.SG-4.S intention COP QUOT rich.man
 haw-e-an
 voice-POSS-exist.SG
 'The rich man said, "I will go." (Tamura 1993 [1979]: 20)
 - b. "toan hekaci i-kik-kik." sekor poyson haw-e-an that boy 4.O-hit-hit QUOT child voice-POSS-exist.SG "The child said, "This boy hit me." (Tamura 1993 [1979]: 20)

This fourth person is extremely convenient because it has no co-occurrence restrictions with any other person and can virtually stand in place of almost all persons under certain conditions; see (12) where the fourth-person subject occurs in the logophoric context, i.e., instead of the first-person subject. And also, as we can see from examples (8)–(11), fourth person shows tripartite alignment (a- for 4.A and possessor, a-an for 4.S, and a-a1 for 4.O), which means that it overspecifies grammatical relations making them more transparent on the verb and thus contributing to the head-marking type of Ainu.

(12) tan vuk tan ukuran e-okere е-е wa this deer this evening 2SG.A-eat and 2SG.A-finish vak easir mat ne **a-**e-kor ре ne na truely woman/wife as 4.A-2SG.O-have NMLZ COP SFP if 'If you eat all of this deer tonight, I will make you my wife.' (Nakagawa et al. 2016–2021: K8010291UP.238)

Tripartite alignment on the verb is also attested in the first-person plural exclusive (*ci*- for 1PL.EXCL.A and possessor, -*as* for 1PL.EXCL.S, and *un*- for 1PL.EXCL.O) as in (13); cf. the inclusive in (8), while first-person singular shows nominative/accusative alignment (*ku*- for 1SG.S/A and *en*- for 1SG.O), and second (*e*- for 2SG.S/A/O and *eci*-for 2PL.S/A/O) and third persons (zero) are neutral; independent pronouns are all neutral see Table 1.

(13) a. **c-**e-w-ko-ysoytak kor

1PL.EXCL.A-about.APPL-RECP-to.APPL-tell.stories and

oka-as

exist.PL-1PL.EXCL.S

'We (her and I) are talking to each other.' lit. ('we (her and I) talk to each other

and exist')³ (Tamura 1984: 12)

³ *Wa oka* (and exist.PL) marks progressive aspect, see Takahashi (Chapter 18, this volume) and Yoshikawa (Chapter 19, this volume).

b. ci-kor hapo un-haw-e-kovki 1PL.EXCL.A-have mother 1PL.EXCL.O-voice-by.APPL-bully 'Our mother scolded us.' (Tamura 1993 [1979]: 16)

Table 1: Person marking in the Saru dialect of Ainu (Southern Hokkaido, Southwestern group), adapted from Tamura (2000: 49) with slight modification.

person-number	S/A/O pronouns	S markers	A markers	O markers
1SG	káni 'l'	ku-		en-
1PL.EXCL	cóka 'we (I and he/she/they)'	-as	ci-	un-
2SG	eani 'you.SG'		e-	
2PL	<i>ecioká</i> 'you.PL'		eci-	
3SG	<i>sinuma</i> 'he/she'		Ø	
3PL	oka 'they'			
"4":				
1. 1PL.INCL 'we (I and you)'	aoka			
2. Indefinite/impersonal pass.		-an	a-	i-
3. 2SG/PL honorific	aoka			
4. SG/PL logophoric	asinuma/aoka			

Overall, the alignment in Ainu is mixed (nominative-accusative, tripartite, neutral, and even hierarchical, recall (7)), but that is irrelevant to the head-marking morphological type because, as argued in Kibrik (2012: 216), the locus of marking is totally independent of alignment type.

On the other hand, inclusive/exclusive opposition in first-person pronouns (cf. (8) and (13)) seems to be found more in head-marking languages (Nichols 2017: 61), which, I think, is because it indicates a further elaboration on the head.⁴

4.2 Verbal number

Another important factor, which I consider relevant to head marking, is verbal number (SG/PL) involving suppletion and affixation in Ainu. According to Veselinova (2005), who investigated verbal number and suppletion in 193 languages, verbal number pairs/triples are common in North America, South America, in the Pacific region, and in many languages of the Trans-New Guinea family, as well as in Asian isolates (Ainu, Ket, and Burushaski); the western limit of this phenomenon appears to be the Cau-

⁴ Cf. There is also a possibility that it's just an accident of being favored in the same geographical area (Nichols, p.c.).

casus (but also Africa). This distribution roughly coincides with the GPR languages, most of which are head-marking.

In Ainu, in the case of intransitive verbs the plural refers to the number of subject participants (15) and in the case of transitive verbs to the plural of object participants or multiple results of actions (17), for details see Nakagawa (Chapter 17, this volume). Overall, verbal number helps to disambiguate the number of S and O especially in the case of zero-indexed third person as in (14)–(16) and number-ambiguous fourth person as in (17).

- (14) mina tura mo-no а hine ipe laugh together.with quiet-ADV sit.SG and eat 'He sat down smiling and ate his dinner.' (not 'they') (Nakagawa et al. 2016–2021: K7708242UP.184)
- (15) **rok** wa okav kusu sit.PL and exist.PL because 'They sat down.' (not '(s)he) (Nakagawa et al. 2016–2021: K8303243UP.258)
- (16) a-kor ekas-i anak a-o-ipe-p-i 4.A-have grandfather/elder-POSS TOP 4.A-at.APPL-eat-thing-POSS sir-ka ta anu wa appearance/ground-top LOC put/place.SG and 'Grandfather put the dish down on the ground.' (not 'dishes') (Nakagawa et al. 2016–2021: K7803231UP.073)
- (17)sinna cise a-kar wa or-o ta another house 4.A-make and place-POSS LOC a-i-ari ruwe ne wa 4.A-4.O-put/place.PL INFR.EVID COP and 'People built a separate house, and we were placed to live here.' (i.e., not 'I was placed.' (Nakagawa et al. 2016–2021: K7908032UP.031)

4.3 Verb-initial word order

According to Nichols (1986: 104), although the head-marked clause pattern favors verbinitial word order, overall, the head-marking languages have the greatest freedom of choice as to word order: they can be either verb-initial or verb-final with equal ease, unlike dependent-marking languages which tend to be confined to the verb-final type. There appears to be a functional motivation to head-marking morphology favoring verb-initial order: if the verb comes first in a head-marking language, then the grammatical relations (which are marked on the verb) are established at the outset (Nichols 1986: 81).

Basically, Ainu is a SOV language with a lot of flexibility regarding the order of the subject and object, especially in double-object constructions, see examples (71)–(73) in Nakagawa (Chapter 14, this volume). Yet, it is strictly verb final. However, the abovementioned motivation of grammatical relations being established at the onset seems to be attempted for Ainu as well. Consider the following examples:

- (18) orano nani kar hine huray-e usev then immediately hot.water make and wash-TR.SG ITERA iwatarap **ki** hine hurav-e nea wash-TR.SG ITERA that baby do and 'Right away, (my wife) boiled some water, and washed the baby's body carefully.' (Nakagawa et al. 2016-2021: K8109171UP.159)
- (19) sorekusu ir-to he-tuk-pa ра exactly one-dav head.PF-push-TR.PL PL a-mat-ne-po-utar-i 4.A-woman-COP-child-PL-POSS a-po-utar-i ki pa pe ne kusu 4.A-child-PL-POSS do PL NMLZ COP because 'The daughters and sons all grew each day.' (Nakagawa et al. 2016–2021: K8109171UP.296)

What we see in (18) and (19) is a right dislocation of the third-person subject NP: the speaker uses the nounless verb phrase first and then disambiguates its subject or object (if necessary) by placing it afterwards as the subject or object of the transitive light verb *ki* 'do' to facilitate the hearer's processing.

There remains an important theoretical issue of whether NPs in head-marking languages are arguments or clause constituents of any kind at all. A number of researchers consider them mere appositives that lexically specify or qualify the actual arguments, which are on the verb (Boas 1911, Jelinek 1984, Van Valin 1985, Baker 1996, Kibrik 2011, 2012, Nichols 1986: 107, Nichols 2017: 65). However, a more widely accepted view is that argumenthood is shared between bound pronouns and coreferential NPs (cf. Mithun 2003). As to Ainu, the latter view seems to fit better because there is an extra <location> elaboration on the noun which will be discussed in the end of next section. see example (25).

4.4 Borderline case-marking and inflected adpositions

As mentioned in Section 4.1, Ainu has exclusively borderline case-marking (Iggesen 2005: 202–205), which not only means that arguments are unmarked for case, but also

that there is overt marking only for concrete or "peripheral" case relations and delimiting case markers from other morphological-functional entities is difficult.

In fact, adjuncts in Ainu are case marked, but it is quite difficult to come up with a closed list of cases in Ainu because they do not enter into paradigmatic relations and vary across the dialects. According to Tamura (2000 [1988]: 95–103; 129–135), there are at least 12 cases in the Saru dialect of Ainu (southern Hokkaido), which are morphologically classified into postpositional adverbs⁵ (comitative tura(no), degree pak(no)'till, until', instrumental ani, dative/allative eun, translative turasi 'along', pes 'follow going down', kari 'through') and postpositional particles (locative ta, locative/allative un, ablative wa, perlative peka 'across', mutative ne 'as'). Strictly speaking, only the latter should be regarded as cases because the former is heterogeneous in that some markers can stand alone and/or take verbal pronominal affixes. This is possible because many postpositional adverbs originate in verbs (or adverbs) and are still in an early stage of grammaticalization from them, for example, the dative marker eun originating in the transitive verb 'be at, on; stick to' (20b) and instrumental marker ani originating in the transitive verb 'hold' (21b).

- (20) a. ona-utar-i **eun** haw-e-an ре ne kusu father-PL-POSS DAT voice-POSS-exist.SG NMLZ COP because 'Since she told her father and relatives . . .' (Nakagawa et al. 2016–2021: K8106233UP.218)
 - b. iteki eun itak ki ka nen PROH DAT speech do what even haw-e-an yak pirka voice-POSS-exist.SG if be.good 'It's better not to say anything to (mother).' (Nakagawa et al. 2016–2021: K8010291UP.465)
- (21)a. menoko kar ре **ani** sake a-kar woman make thing/person INS liquor 4.A-make 'We would make sake from things the woman has grown.' (Nakagawa et al. 2016–2021: K8010291UP.324)
 - b. **ani** asir-no uni-hi a-kar ре ne INS be.new-ADV home-POSS 4.A-make NMLZ COP 'I will build a new house with (that).' (Nakagawa et al. 2016–2021: K8010291UP.228)

⁵ If we were to include here all postpositional adverbs listed in Tamura (2000: 95–103), we would come up with a much longer list.

As mentioned, many (though not all) postpositional adverbs can be indexed, i.e., in terms of Nichols (1986), they are "inflected adpositions", which is what we expect of the head-marking type. They combine with NPs to form adjuncts and can take personal affixes for A as in (22b) or for O as in (23b) and (24) depending on a particular lexeme. It is common to omit the pronoun if the postpositional adverb is indexed.

- (22) a. kamuv renkavne god accordingly 'by the will of the gods'/'thanks to the gods' (Tamura 2000: 96)
 - b. ku-renkayne k-ek 1SG.S/A-accordingly 1SG.S-come.SG 'I came because I wanted to.' (at my own intention or convenience) (Tamura 2000: 96)
- (23) a. *atuv* noski pak-no wakka rik-i-n upper.place-EP-INTR.SG middle till-ADV water sea/ocean ruwe ne akusu INFR.EVID COP then 'The water raised to the middle of the sea.' (Bugaeva 2004: 340)
 - b. **i-**pak-no nitan ре isam 4.O-till-ADV be.fast thing/person not.exist 'There is no person as fast as me.' (Tamura 1989: 72)
- (24) **e-**tura an-an 2SG.O-COM exist.SG-4.S 'I lived together with you.' (K7807153KY.128) (lit. 'I lived following you.')

Postpositional particles (locative ta, locative/allative un, ablative wa, perlative peka 'across', mutative *ne* 'as') show more case-like behavior in that they cannot be used without their respective NPs and are not inflected (=indexed). Moreover, those occurring in locative expressions obligatorily require a noun phrase to be <location>, i.e., a locative noun of category 2 (kim 'mountains', pis 'beach', rep 'ocean', ya 'shore', wor 'water', uni 'home', rik 'high place', ra 'low place', pena 'upstream', pana 'downstream' etc.) as in (25) or an ordinary noun combined with a locative noun of category 1 (or 'place', sam 'near', ka 'above', corpok 'below', kotca 'before', osmak 'behind', utur 'between', tum 'inside', hontom 'in the midst' etc.) as in (26), see Tables 6 and 7 in Nakagawa (Chapter 14, this volume).

- (25) a. **kim** ta ka a-ri yakne mountains LOC even 4.A-skin then 'After I have butchered the catch in the mountains . . .' (Nakagawa et al. 2016–2021: K8010291UP.155)
 - b. **a-uni** un paye-an pe ne na 4.A-home.POSS ALL go.PL-4.S NMLZ COP SFP 'So, let's go to my house.' (Nakagawa et al. 2016–2021: K8010291UP.160)
- (26) a. *a-kasuy wa a-se wa sem* **or** *un a-rura*4.A-help and 4.A-shoulder and porch place ALL 4.A-carry
 'I helped by carrying it on my back to the shed.'

 (Nakagawa et al. 2016–2021: K8010291UP.179)
 - b. ape sam ta an a-aca ram-no kane
 fire near LOC exist.SG 4.A-uncle.POSS be.low-ADV somewhat
 i-e-rankarap hine ora ene haw-e-an hi
 4.O-to.APPL-greet and then like.this voice-POSS-exist.SG thing/place
 'My uncle who was sitting near the hearth politely greeted me and said.'
 (Nakagawa et al. 2016–2021: K8010291UP.068)

Importantly, Ainu distinguishes grammatically between locations and non-locations even with arguments of two or three-place transitive verbs both inherent and derived which take an object with the semantic role of Location, e.g., *oma* 'exist, be' (vi), *oma-re* 'put sth into sth' (vd), *osma* 'jump into' (vt), *o* 'be at some place; get on sth' (vt), *o* 'put/place sth (PL) on sth' (vd), or *kus* 'pass through/along' (vt). If both the subject and the object(s) are third person, cases in which they are difficult to identify do arise so marking one of the arguments as <location> as in (27) helps to track grammatical relations and is particularly relevant when one of the arguments is omitted, see also example (75) in Nakagawa (Chapter 14, this volume).

(27)ipe-an ciki oraun e or surku ora eat thing/person place aconite.poison then eat-4.S if then e-oma-re e-anu yak pirka wa na 2SG.A-enter-CAUS and 2SG.A-put/place.SG if be.good SFP 'When we finish eating, put poison in his food (= ep 'eat thing' = 'food').' (not 'put food in his poison') (Nakagawa et al. 2016–2021: K7708242UP.169)

The classification of nouns into those which inherently have the meaning of <location> and those that do not (and therefore need to be accompanied by a locative noun to be used in a locative expression), does not directly correlate with the head-marking type. Yet, it shows that some nouns have valence and some do not. If the noun has

valence we cannot call it head "marking" because it is not overt, but valence in nouns and elaboration of valence types, e.g., non-possessible, possessible, obligatorily possessed (Section 5), is mainly a head-marking trait (Nichols p.c.).

4.5 Instrumental, directional (etc.) affixes on verbs (=applicatives)

Another striking feature of Ainu head-marking morphology are applicatives, which are absent in the Northeast Asian languages (except Chukchi-Kamchatkan languages) but are abundant in the morphosyntax of North American languages and the GPR languages in general. They are valency-increasing derivational voice markers, which register (but do not index) the presence of a direct object on the verb. Applicatives are generally regarded as an operation of promoting an otherwise peripheral participant (instrumental, directional/benefactive, etc., i.e., those discussed in Section 4.4) to a direct object (Peterson 2007) as in the cross-linguistically rare promotion of a participant with a Comitative Co-Patient role to the direct object in (28b) where the original two-place transitive becomes three-place and the instrumental case marker *tura-no* is deleted, cf. (28a).

- (28) a. *kam-ihi* patek pone **tura-no** bone INS-ADV 4.A-shoulder meat-POSS only iwak-an wa wa and return-4.S and '(I sent the spirits in the mountains, and) only brought back the meat on the (lit. 'with') bones.' (Nakagawa et al. 2016–2021: K8109171UP.076)
 - b. kim ta a-hop-pa utar kam utar а-е-р mountains LOC 4.A-leave-TR.PL 4.A-eat-thing PL meat PL a-**ko-**se hine 4.A-with.APPL-shoulder and 'I carried the food I had left in the mountain with the meat.' (Nakagawa et al. 2016–2021: K8010291UP.045)

However, the so-called "promotion" is not necessarily the case in Ainu; non-applicative paraphrases are often absent and the use of an applicative is the only possibility to bring a new participant into the stage – by making it a direct object. But, notice that the applied object as in (29) may actually not appear as an NP if it is mentioned or implied by the previous context as in (30) and (31), yet we know that there is an extra object argument because there is an applicative marker on the verb.

- (29) a-ak-i
 - 4.A-younger.brother-POSS
 - a-e-yay-ko-si-ram-suye
 - 4.A-about.APPL-REFL-to.APPL-REFL-heart-swing
 - 'I was worrying **about** my younger brother.' (lit. 'swing one's heart towards oneself about') (Nakagawa et al. 2016–2021: K8007292UP.197)
- (30) na a-po-ho na e-pon kusu
 yet 4.A-child-POSS yet 2SG.S-be.small because
 a-e-paskuma ka e-oripak
 4.A-about.APPL-tell even to.APPL-show.respect
 'Son, you are still young, so I refrained from telling you.'
 (Nakagawa et al. 2016–2021: K7908051UP.231)
- (31) ene hemanta a-**ko**-mokor rusuy like.this what 4.A-by.APPL-sleep DESI 'Then, for some reason I got sleepy (and fell asleep).' (Nakagawa et al. 2016–2021: K8007292UP.230)

There are three applicative markers in Ainu, which I tentatively term as instrumental e-, dative ko-, and locative o-. In practice each of them can encode a number of semantic roles, but the exact role is attributed to the interaction of the semantics of the prefix and the verb as in (32) and (33), for a detailed account see Bugaeva (2010, 2017a). The important functions of Ainu applicatives are as follows (Bugaeva 2010: 760):

- e- 1. Content, 2. Location, 3. Instrument, 4. Theme, 5. Cause/Purpose, 6. Other (Comitative: Co-agent, Manner, Beneficiary, Path);
- *ko* 1. Addressee, 2. Goal, 3. Recipient/Beneficiary, 4. Comitative: Co-patient, 5. Malefactive Source, 6. Other (Cause/Purpose);
- o-1. Goal, 2. Location.
- (32) tomam tum **o**-ahu-p sir-i
 damp.ground inside to.APPL-inside.house-INTR.PL appearance-POSS
 a-nukar
 4.A-see
 'I saw them entering the marshland.'
 (Nakagawa et al. 2016–2021: K8007292UP.014)
- (33) iwor so kurka **e-**rok kamuy opitta a-nu-re valley sitting.place above at.APPL-sit.PL god all 4.A-hear-CAUS 'I have prayed to all of the Kamui living over the hunting fields.'

 (Nakagawa et al. 2016–2021: K7908032UP.237)

Applicatives in Ainu are ubiquitous: they are allowed with almost all verb classes except the extreme ends of the transitivity hierarchy, i.e., not with meteorological, bodily processes, change of state verbs at one edge and effective action verbs at the other (Bugaeva 2015b: 838). Even a few apparent unaccusatives (or at least they would be in this category in other languages) are attested with applicative prefixes: ray 'die' > e-ray 'die at some place' (Nakagawa 2001: 99), rer 'sink' > o-rer 'sink into sth' (Nakagawa 1995: 427), contrary to the claims of Baker (1988: 254) that there is a restriction on the formation of applicatives from unaccusatives.

In Tamura (2000: 206), applicatives are referred to as "prefixes that express case relationships". And indeed, they are like "head-marking case markers", and moreover could have been a preferred case-marking strategy in the past, given the innovative and undergrammaticalized nature of most Ainu case markers (recall Section 4.4).

Another important function of Ainu applicatives is facilitating noun incorporation because no adjunct⁶ can be incorporated into the verb as such; in order to be incorporated it should be first promoted to the direct object by an applicative prefix.

4.6 Incorporation

In this section, I am going to focus on the object noun incorporation, which is the most frequent type in Ainu and cross-linguistically. It is valency-decreasing: note the change of the A pronominal marker a- in (34a) to the S pronominal marker -an in (34b).

(34) a. nep ka savo a-kar ре what even rice.porridge 4.A-make thing/person e-kor ciki nep i-kor-e 2SG.A-have if what 4.0-have-CAUS 'If you have something to make a porridge, anything, please give it to me.' (Nakagawa et al. 2016–2021: K8106233UP.065)

b. sayo-kar-an par-o a-at-te rice.porridge-make-4.S mouth-POSS 4.A-attach-CAUS ki kus usey hene ne hot.water for.example do because COP 'I will make a porridge and feed it to her and give her warm water to drink.' (Nakagawa et al. 2016–2021: K8106233UP.066)

Some other examples of O-incorporation from inherent transitives in our corpus (Nakagawa et al. 2016–2021) include, for instance, kuca-sanke 'close a hunting hut', wor-o 'soak sth in water', sewri-tuye 'slit throat(s)', and aynu-hunara 'look for people', see

⁶ Adjunct incorporation is common in Chukchi.

more examples and a theoretical discussion of noun incorporation in Satō (2012; 2016) and Satō (Chapter 16, this volume).

There are also three infrequent incorporation types such as a valency decreasing S-incorporation with natural phenomena nouns resulting in zero-valency verbs (35), a valency retaining S-incorporation with body part nouns (36), and a valency-decreasing and cross-linguistically very rare A-incorporation with (super)natural phenomena and insect nouns (37). In (36a), the body part noun tas-u 'the breath of' is incorporated in its possessive form so, although it occupies the position of the former subject of the intransitive verb tuy 'cut' in (36b), its possessor is raised to the status of a new subject; no valency decrease occurs. As to (37a), originally we have 'hunger twists me' (= 'I am starving') as in (37b), but the subject (Agent) of the transitive verb kem 'hunger' is incorporated into noye 'twist', while the erstwhile object (Patient) en-'me' is raised to the subject position (ku), so we end up having something like 'I am twisted by hunger'; the valency rearrangement is similar to the passive. For a fuller discussion of different types of incorporation see Bugaeva (2017a: 897–903).

- (35) *sir-wen* yakun somo k-arpa appearance-be.bad if/then NEG 1SG.S-go.SG 'If it rains (lit. 'if the weather is bad') I won't go.' (Hattori 1964: 322)
- (36) a. tane tas-u-tuy-an already breath-POSS-cut-4.S 'I was already barely breathing.' (modified Nakagawa et al. 2016–2021: K7908051UP.136)
 - b. tane a-**tas-u** tuy already 4.A-breath-POSS cut Same translation. (lit. 'My breath was already cutting.)' (constructed example)
- (37) a. ku-tokap-ipe ka somo ki wa 1SG.S-noon-eat even NEG do and **ku-kem-**noye noyne ku-yaynu 1SG.S-hunger-twist look.as 1SG.S-think 'I did not eat lunch, so I feel as if I am dying of hunger.' (lit. '... I am twisted by hunger.') (Tamura 1996: 717)
 - b. ... **kem en-**noye . . . hunger 1SG.O-twist lit. 'Hunger twisted me.' (constructed example)

Henceforth, I would like to focus on O-incorporation involving derived applicative verbs. There is a tendency for applicative prefixes to be placed next to the verbal root and for the incorporated applicative object to immediately precede them as in examples (38)–(41) below. This kind of the incorporant's left-side adjacency principle makes it explicit which object is incorporated, especially when there are two applicative prefixes on the verb as in (41).

- (38) sine ancikar **okuyma-e-**soy-ne-an hine one night urination-for.APPL-outside-COP-4.S and 'One night I went outside to relieve myself.'

 (Nakagawa et al. 2016–2021: K7908051UP.182)
- (39) onuman **kotan-ko-**sa-p-an ruwe ne evening village-to.APPL-front.place-INTR.PL-4.S INFR.EVID COP '(We waited for it to get dark, and) in the evening we went down to the village.' (Nakagawa et al. 2016–2021: K8007292UP.175)
- (40) **ritur-o-**rewsi-an hine isimne paye-an midway-at.APPL-lodge-4.S and tomorrow go.PL-4.S 'We spent the night midway and left again the next morning.' (Nakagawa et al. 2016–2021: K8109171UP.180)
- (41) hekote kamuy ekesinne e-kamuy-ko-itak face.towards god here.and.there about.APPL-god-to.APPL-talk '(The elder gave the meat to the Kamui) here and there and prayed about (it).' (Nakagawa et al. 2016–2021: K8010291UP.109)

The same adjacency principle works when the inherent object is incorporated by a basic (42) or causative (43) transitive verb, but an applicative prefix is present too introducing an outside (non-incorporated) object.

- (42) onne ne manu p
 be.old COP called thing/person
 a-ko-kiror-niwkes
 4.A-with.APPL-strength-be.unable
 'I have grown weak because of my age.'
 (Nakagawa et al. 2016–2021: K8010291UP.100)
- (43) sorekusu **e-aynu**-wen-te pa kor oka
 exactly by.APPL-human-be.bad-CAUS PL and exist.PL
 '(The men at the Yupet estuary were engaged in *topattumi*-night raids,) and hurt
 people by that.' (Nakagawa et al. 2016–2021: K7908051UP.190)

This principle is not strictly followed in the case of double incorporation; for example, it is followed in (44) but violated in (45). It can also be violated in other cases to avoid ambiguity. Thus, in (46), the verb <code>yay-pas-ko-taci</code> lit. 'apply cinder to oneself' consists of <code>taci</code> 'apply' incorporating <code>pas</code> 'cinder' and the <code>ko-</code> applicative 'to' referring to <code>yay-</code> 'oneself', but the reverse order <code>yay-ko-pas-taci</code> (supposing it were attested) would result in 'apply cinder by oneself' because <code>yayko-</code> (originally REFL+APPL) is lexicalized as a prefix with the meaning 'by oneself'.

- (44) cep-ya-o-kuta-an wa ikoytupa kur
 fish-land-at.APPL-spill-4.S and envy person
 a-kor-pa-re
 4.A-have-PL-CAUS
 'I caught many fish which I brought up to shore and gave to people in need.'
 (lit. 'spill fish to the land/shore')
 (Nakagawa et al. 2016–2021: K7908051UP.347)
- (45) sorekusu a-yup-utar-i ne yakka
 exactly 4.A-elder.brother-PL-POSS COP although
 po-sir-e-sik-te
 child-appearance-with.APPL-be.full-CAUS
 'Older brothers had many children.' (lit. 'made appearance/land be full with children') (Nakagawa et al. 2016–2021: K8106233UP.256)
- (46) konto usa yarsit a-u-oma-re wa a-mi,
 then various rag 4.A-RECP-be.at-CAUS and 4.A-wear
 yay-pas-ko-taci-an yay-etor-ko-taci-an
 REFL-cinder-to.APPL-apply-4.S REFL-snot-to.APPL-apply-4.S
 'I gathered some worn clothes and put them on. I painted charcoal onto my body, and painted snot over myself as well.'
 (Nakagawa et al. 2016–2021: K8010291UP.350)

Overall O-incorporation in Ainu is rather neat and straightforward. Incorporated applicative objects are (to some extent) specified for their semantic role by applicative prefixes and it is quite clear from the verb itself (and the context) what is being done, to whom, by what means, for what purpose, etc.

4.7 Polysynthesis

To qualify as core polysynthetic a language must display holophrasis (i.e., be able to represent a whole clause – including all bound core pronominals – by a single word) and must allow more than one lexically 'heavy' morpheme within the holophrastic verb, whether it be lexical or affixal.

(Fortescue 2017: 122).

According to this definition, Ainu is a polysynthetic language. As showed in Bugaeva (2017a), it can express what takes a whole sentence in most other languages as it can include more than one heavy element: up to two incorporated objects, one lexical prefix (out of two originating in the nouns ho- 'head' and he- 'bottom'), one verbalizing suffix (originating in the verb -kar 'make'), and pronominal affixes for the first/ second and fourth person subject and object, as well as up to two applicative prefixes (out of three: e-, ko-, o-), two causative suffixes (out of four: -re/-e/-te, -ka, -ke, indefinite -yar), reciprocal (u-), reflexive (yay-, si-) and antipassive (i-) prefixes.

I revised Fukuda's (Tamura) (2001 [1955]) templatic model of Ainu, see Bugaeva (2015a: 446), and argued that Ainu has a mixed templatic/scopal organization: the suffixed part is templatic and the prefixed part is scopal (Bugaeva 2017a: 890).

Schema 1: Verbal structure in Ainu: Tamura's model (Bugaeva 2017a: 891)

```
I
      II
              III
                    0
                         IV
                                                  VI
APPL ANTIP,
             APPL base INTR/TR.SG/PL DIR.CAUS INDR.CAUS
      RECP.
      REFL
```

Let us look at all attested derivations from the transitive verb sitoma 'be afraid of, fear sth/sb' (valency affixes are in bold, lexical morphemes are underlined).

- (47) a. sitoma-re (fear-CAUS) 'make sb be afraid of sth' (vd) (Tamura 1996: 665) **ko-**sitoma (from.APPL-fear) 'be afraid of sth from sb' (vd) (Tamura 1996: 340)
 - b. *i-sitoma* (ANTIP-fear) 'be afraid' (vi) (Tamura 1996: 249) yay-sitoma (REFL-fear) 'feel ashamed of oneself (=fear oneself)' (vi) (Tamura 1996: 867) si-sitoma (REFL-fear) 'scary' (vi) (Batchelor 1995 [1938, 1889]: 471) *i-yay-*sitoma-re (ANTIP-REFL-fear-CAUS) 'look indecent' (lit. 'make people fear oneself') (vi) (Nakagawa et al. 2016–2021: K8010291UP.358) si-sitoma-yar (REFL-fear-INDEF.CAUS) 'threaten' (vi) (Kayano 1996: 264) **u-ko-i-**sitoma (RECP-to.APPL-ANTIP-fear) 'be afraid of each other' (vi) (constructed form) ohay-sitoma (?-fear) 'be terribly afraid' (vi) (Nakagawa 1995: 124) wen-i-sitoma (terribly-ANTIP-fear) 'be in great fear' (vi) (Tamura 1996: 826) si-c-e-ohay-sitoma (really-RES-by.APPL-?-fear) 'be afraid of the sight (of)' (vi) (Tamura 1996: 623) aynu-sitoma (human-fear) 'be afraid of new people' (vi) (Chiri 1976 [1954]: 338)

c. **ko-i-**sitoma (to.APPL-ANTIP-fear) 'be afraid of sb' (vt) (Batchelor 1995 [1938, 18891: 261)

i-sitoma-re (ANTIP-fear-CAUS) 'make sb afraid' (vt) (Kayano 1996: 54)

si-sitoma-re (REFL-fear-CAUS) '(for someone_i) to scare oneself_i' (Nakagawa et al. 2016-2021: K7708242UP.153)

uko-sitoma (SOC (=RECP+APPL)-fear) 'be afraid of sth together' (vt) (Tamura 1996: 764)

u-sitoma-re (RECP-fear-CAUS) 'be afraid of sth together' (vt) (Nakagawa

e-vay-sitoma (by.APPL-REFL-fear) 'be ashamed of oneself because of sth' (vt) (Tamura 1996: 161)

e-ohay-sitoma (by.APPL-?-fear) 'be terribly afraid of sth/sb' (vt) (Nakagawa 1995: 77. Nakagawa et al. 2016–2021: K7708242UP.093)

i-ohay-sitoma-re (ANTIP-?-fear-CAUS) 'make sb terribly afraid' (vt) (Nakagawa 1995: 28)

As we can see, there are not only valency markers on the verb but many other lexically 'heavy' morphemes such as wen-functioning as a prefix 'badly, awfully' (< wen 'be bad' (vi)), si- 'really', an incorporated noun aynu 'human' or a morpheme ohay (noun?) with an unclear meaning but valency-decreasing.

Moreover, even the suffixal part seems to be less rigid and templatic than previously claimed in Bugaeva (2017a). Auxiliary verbs, which usually follow the main verbs and are unmarked for person, can cliticize to the main verb as in (48a) and (49a), see base constructions in (48b) and (49b). While it is probably possible to analyze (48a) as S-incorporation (cf. (36a)): hosipi 'return' (vi) being turned to a noun and moyre 'be late' (vi) functioning as an incorporating verb because it can also be used as a fully-fledged lexical verb, such analysis is impossible in (49a) because rusuy is attested only as an auxiliary verb (49b) which cannot take any personal markers on its own.

- (48) a. eytasa ohor-no hosipi-moyre-an yak wen continue.for.long.time-ADV return.SG-be.late-4.S COMP be.bad 'It wouldn't be good if my return home was too late.' (Nakagawa et al. 2016–2021: K8109171UP.081)
 - b. iwak-an moyre kor i-etok-o ta return-4.S be.late and 4.O-before-POSS LOC iwak-an pak-no an wa return-4.S till-ADV exist.SG and 'When we were late to return, (our uncle) before us stayed until we returned.' (Kishimoto 2019: 32, originally Kayano 1998: 92)

⁷ Note that example (48b) is naturalistic and has a different lexical verb.

- (49) a. ora sov-ne-rusuy-an hi kusu sov-ne-an then outside-COP-DESI-4.S thing/place/time because outside-COP-4.S 'I felt like going outside, so I went out of my home.' (Nakagawa et al. 2016-2021: K8010291UP.241)
 - b. sov-ne-an rusuv outside-COP-4.S DESI 'I wanted to go outside.' (constructed example)

According to Nichols (2017: 62), polysynthesis entails open head marking: either verbal slots and/or their fillers are not a closed set, i.e., there is not a strict closed class or fixed paradigm of what can go onto the verb. Although there is a tendency to describe Ainu as a "neat polysynthetic language", see, for example, Arity Calculation⁸ in Nakagawa (2001 [1993]: 43), which is a calculation of the total valency value of the verb based on counting the valency of each morpheme, that is not necessarily the case.

Nichols (2017: 67) notes that there are three ways that an incorporated noun can interact with an argument indexing slot on the verb, i.e., adding a new slot, filling an existing slot and making necessary adjustments to the rest of the valence, and canceling the argument slot, which typically makes the verb intransitive, removing the O slot and leaving only an S slot. Among those three types she considers only the adding type (simple addition of another slot without any regulating derivation) as openly head-marking, i.e., truly polysynthetic, while filling counts as polysynthetic only if it opens the possible fillers of the slot beyond some fixed morphological paradigm, and canceling is not counted as polysynthetic (far from adding a slot or filler, it makes an argument slot inert).

The most frequent type of incorporation in Ainu, i.e., O-incorporation (34b), is canceling, and S-incorporation with natural phenomena (35), which ranks second in frequency, is canceling too. However, the less frequent type of A-incorporation with (super)natural phenomena and insect nouns (37) is filling, and the valency retaining S-incorporation with body part nouns (36) is adding.

Here I would like to argue that Ainu has more features that qualify as open-head marking than were previously noted in Bugaeva (2017a). Consider the following example, in which the base transitive verb *nina-nina* 'crush sth vigorously' is marked with the resultative prefix *ci*-deriving an intransitive verb *ci*-nina-nina 'be crushed, imprinted a lot' (the erstwhile subject is deleted, and the object is promoted to the subject). Then sir- 'appearance/land' is incorporated into the intransitive verb ci-nina-nina, and we would naturally expect a zero-valency verb as an outcome as in (35), yet a new subject seta ru 'dog footprints' appears out of nowhere, i.e., the incorporat-

⁸ Cf. The Polysynthesis Parameter (or the Morphological Visibility Condition (MVC)) of Baker (1996: 14):

[&]quot;Every argument of a head element must be related to a morpheme in the word containing that head".

ing verb is unexpectedly intransitive, and we are dealing with another example of the adding incorporation type.

(50) sem apa-pa ta seta ru
porch door-mouth LOC dog track/path
sir-ci-nina-nina korka
ground-RES-crush-crush but
'There were many dog footprints in front of the porch door.'
(Nakagawa et al. 2016–2021: K7708242UP.104)

5 Head marking in noun phrases

5.1 Pronominal (possessive) affixes on nouns and possessive classes

Ainu has bound inalienables and non-possessible alienables, which is a common type of possessive system among the GPR languages (Bugaeva, Nichols, and Bickel 2022).

5.1.1 Obligatorily possessed nouns

Inalienables are obligatorily possessed, which means they almost never occur without head-marked possessive morphology: the possessee takes the "possessed" or "affiliative" suffix (-POSS) -hV or -V(hV) that registers a possessor plus a person-marking prefix that indexes a possessor and is identical with the transitive subject marker (A) or the object marker (O) of relational nouns. (51) shows the template for the possessive NP construction; it is most natural to omit the possessor noun (N₁), especially when it is overtly indexed on the possessee.

- (51) [[possessor: noun/(pronoun)]N₁ [possessum: PERSON-noun-POSS]N₂]NP (Bugaeva, Nichols, and Bickel 2022)
- (52) taan hekaci **ku-po-ho** ne this boy 1SG.A-child/son-POSS COP 'This boy is my son.' (Tamura 1993 [1979]: 41)

⁹ Possessive/affiliative suffixes are not required with relational nouns when they are prefixed for the person as in (54).

- (53) toan hekaci acapo po-ho ne uncle child/son-POSS COP that boy 'That boy is uncle's son.' (Tamura 1993 [1979]: 41)
- (54)en-ka ta 1SG.O-top LOC sit.SG 'Sit on me.' (Tamura 1996: 267)

Ainu inalienables include nouns of the following semantic categories (the default interpretation without a personal prefix is that the possessor is third person):

- (a) body part terms and their semantic equivalents/extensions such as bodily secretion, excretion, physical strength, disposition, personal representation and images, home, clothes, some tools etc., e.g., tek-e 'his hand', kem-ihi 'his blood', nupe-he 'his tears', etor-o 'his snot', kiror-o 'his strength', kewtum-u 'his feelings', ramac-ihi 'his soul', re-he 'his name', kur-ihi 'his shadow, uni-hi 'his home', mip-ihi 'his clothes' (cf. si, osoma 'excrement', okuyma 'urine' which are encoded as alienably possessed nouns);
- (b) some kinship terms, e.g., unu-hu 'his mother', ona-ha 'his father', po-ho 'child/ son', sa-ha' his elder sister', yup-ihi' his elder brother' and other siblings, grandchildren, nephews etc. (cf. totto 'mother', hapo 'father, acapo 'uncle', unarpe 'aunt', huci 'grandmother', and ekasi 'grandfather' which are encoded as alienably possessed nouns);
- (c) relational terms, e.g., sam-a 'near him', etok-o 'in front of him', and corpok-i 'under him'.

As mentioned, all these nouns can readily be assigned to the category of 'obligatorily possessed nouns' (Nichols and Bickel 2005b) because on their own they almost never occur without the "possessed" suffix. Even in a few documented riddles, they do not occur in their conceptual (i.e., dictionary) forms, unlike other nouns (cf. mukur 'axe', tar 'rope' (Tamura 1984: 54)). Instead, the speakers used the possessive form marked with first person plural inclusive transitive subject marker *a*- 'I and you and (s)he/ all people'.

seta u-koyki-re (55) Wateke: retar p? white dog RECP-fight-CAUS thing 'White dogs fighting with each other?' Sadamo: ah sekor sekor a-mimak-i... oh QUOT QUOT 4.A-tooth-POSS 'Oh, it is called "teeth"!' (lit. 'our/people's teeth)

(Tamura 1984: 54, 56)

There is also a specialized way to allow an otherwise obligatorily possessed noun to be used without a specified possessor or an overt possessor, i.e., to use the antipassive/absolutive marker i-.

(56) i-sapa-kik-ni

ANTIP-head-hit-stick

'a willow stick used for killing salmon after they have been captured' (lit. 'a stick (that) hits the head of it/thing (=salmon¹⁰)' (Batchelor 1995 [1938, 1889]: 204).

A similar usage is also reported in Kindaichi and Chiri (1974 [1936]: 66)) who characterize it as a rarely used 'expletive' marker which is basically an equivalent (=) of the zero-marked third-person possessor. Yet, I argue that this is an unspecified possessor just enabling an independent use of an obligatorily possessed noun.

(57) **i-**yup-i = yup-i
ANTIP-elder.brother-POSS = elder.brother-POSS
'his elder brother'

(58) **i**-sik-i = sik-i
ANTIP-eye-POSS = eye-POSS
'his eyes'

(59) **i-**tek-e = tek-e

ANTIP-hand-POSS = hand-POSS
'his hand'

According to Bugaeva, Nichols, and Bickel (2022), some languages, for example Navajo (Young and Morgan (1987: 3)) and Slave (Rice 1989: 209) (both Athabaskan) or the Arawak and Tupian languages, have an unspecified possessor as part of their person-number possessive paradigm. These end up doing semantic work similar to the derivational *i*- prefix in Ainu, but the *i*- prefix lets the noun be used without possessive morphology while the unspecified possessor lets it be used with possessive morphology but without being specific about the possessor.

¹⁰ Note that the indefinite object ('salmon') cannot be expressed with a separate NP.

5.1.2 Non-possessible nouns

Alienable nouns – animals, fish, plants, utensils, natural phenomena, land features, minerals, celestial bodies, stars, seasons, months, village, house, utensils, tools and some kinship terms – are non-possessible; they cannot take person-marking prefixes (PERSON) but instead use the verb **kor** 'have' which functions as the predicate of a (gapped) pre-head relative clause having the possessor as the subject and possessee as the head noun. Functionally, this construction is employed to encode alienable possession or ownership.

- (60) ku-kor cep 1SG.A-have fish 'my fish'
- (61) **a-**kor mampuri 4.A-have amulet 'my amulet' (in folktales) (Nakagawa et al. 2016–2021: K7708241UP.112)
- (62) **a-**kor huci. a-kor ekasi 4.A-have grandmother 4.A-have grandfather 'my grandmother and my grandfather' (Nakagawa et al. 2016–2021: K7803231.003)

Overall, the kor possessive construction is reminiscent of the non-possessibles of Oceanic and American languages (especially Amazonia, Central America, western North America) which use classificatory words in apposition to non-possessibles and make them bear the inflectional possessive marking (Nichols and Bickel 2005c). But those words are usually nominal and enter a set of possessive classifiers, which have to do with function, relation, activity, or how possession was acquired and create multiple alienable classes as in (63).

(63) Oceanic (branch of Austronesian) Paamese (Vanuatu; Lynch, Ross and Crowley 2002: 42)

ani **ā-**k

coconut CL:FOOD-1sg 'my coconut (which I intend to eat)'

ani ema-k

coconut CL:DRINK-1sg

'my coconut (I intend to drink the juice)'

ani esa-k

coconut CL:PLANT-1sg 'my coconut (growing on my land)' ani **ona**-k coconut **CL:**NEUTRAL-1sg 'my coconut (e.g., to sit on)'

Ainu uses a verbal appositive, a type that is not frequent overall but is well represented in the Pacific, and the minimal one-classifier system of recent Ainu finds a close parallel in several Papuan languages that also use a verb 'have' as their only possessive appositive. As suggested in Bugaeva, Nichols, and Bickel (2022: 16), there was probably a larger system of verbal appositive classifiers in earlier Ainu (they are in bold). Note that example (64) shows the difference between ordinary verb (the second *mi*) and classifier (the first *mi*). See more examples with apparent classificatory verbs *an-te* (exist.SG-CAUS) 'make sb exist', *hekote* 'be married to', and *mut* 'wear (a sword)' in Bugaeva, Nichols, and Bickel (2022: 14–15).

- (64) hotke-an kor a-mi amip¹¹ patek, sleep-4.S and 4.A-wear clothing only a-mi wa an-an 4.A-wear and exist.SG-4.S 'When I slept, I was wearing my only clothing.' (Tamura 1985: 2)
- (65) a-resu kamuy a-resu pito a-ko-ytak
 4.A-raise god 4.A-raise god 4.A-to.APPL-speak
 hawe ene an hi
 REP.EVID like.this exist.SG NMLZ
 'I said the following to my Kamui, to my god.' (Nakagawa 1995: 135)
- (66) *kamuy nis ka ta un cise ta*god heaven top LOC attach.to/belong house LOC *hosipi ki kor*return.SG do and
 'The god returned to his house on top of the heaven.' (Tamura 1996: 771)

The larger system reconstructible for earlier Ainu is reminiscent of the Cahuilla system, while the rapid shrinking from the earlier larger Ainu system to the recent minimal one recalls the expansions and reductions of the inventory of appositives in large families like Cariban and Uto-Aztecan.

¹¹ The noun *a-mi-p* (4.A-wear-thing) 'clothing', lit. 'the thing (that) we (INCL) wear' is one of compound nouns that originate in verbs with their phraseologized objects (unspecified or generic nouns), see full list in Bugaeva, Nichols, and Bickel (2022: 15).

Typological prerequisites to developing or copying appositive possessives are head-marking morphology and possessibility oppositions in nouns. Ainu is probably a remnant of a formerly larger set of north Asian GPR languages with appositive possession, which have been absorbed in the spreads of Tungusic, Japanese, Korean, Chinese, and Austronesian.

6 Head-marking in sentences

According to Nichols (1986: 64), "head-marked patterns leave the subordinate clause intact, so that it is formally indistinguishable from an ordinary independent clause; but they mark the main clause as having a subordinate."

6.1 Adverbial clauses

Overall, Ainu shows more dependent-marking patterns in the complex sentence such as relative clauses (Bugaeva 2017b) and most types of subordinate clauses as in the gapped relative clause with O-relativization in (67) (the head noun is in bold).

(67) nev kusu ene si pase kamuy what for like.this true be.heavy god [a-kor kus nel menoko 4.A-have intention COP woman ene kat-u kar like.this shape-POSS make 'Why did such a great Kamui transform the woman (who) was to be my wife?' (Nakagawa et al. 2016-2021: K8010291UP.276)

However, some adverbial clauses are head-marked. "A conjunctive element may come after sentence-final intonation, and it may be said with the following sentence or verb phrase" (Tamura 2000: 148) as in (68) and (69).

(68) *tunas* eskarun wa ye kor an, kusu keraypo remember and say and exist.SG reason indeed auickly ku-kor kampisos utar or-o ta poro-n-no 1SG.A-have notebook people place-POSS LOC be.big-EP-ADV ku-nuye e-askav 1SG.A-write about.APPL-be.able 'Thanks to (someone) quickly remembering and saying (it), I can write a lot in my notebook.' (Tamura 2000: 158)

According to Tamura (2000: 162), "vakun ['if' and a few other conditional conjunctions] may also be placed at the head of a sentence [or main clause?]", but we cannot deny a possibility that it is one complex sentence because both predicates are finite, 12 cf. (35) where yakun 'if' is attached to the subordinate clause.

(69) *nispa* or-ke katkemat or-ke, arki ruwe ne. rich.man place-POSS lady place-POSS come.PL INFR.EVID COP **yakun** aoka anak-ne a-kor Hitaka. a-kor itak if/then 4.PL TOP-COP 4.A-have Hidaka 4.A-have speech 4.A-say/tell 'Dignified men and women came. If so we (you and me) will speak our language of Hidaka.' (Tamura 1984: 16)

6.2 Noun complement clauses

Noun complement clauses too show head-marking morphology as in (70), (71), and the earlier (32). They look similar to relative clauses (67) in terms of the word order but have no gap inside and lack a base clause, which is helpful in describing relative clauses. Also, they use a set of markers (=complementizers) with evidential meanings, viz. ru-w-e 'the track of it' (inferential), haw-e 'the voice of it' (hearsay), sir-i 'the sight of it' (visual), and hum-i 'the sound of it' (non-visual sensory). As we can see, all markers are in their possessive forms, so noun complement clauses pattern exactly like possessive NPs (51), but instead of N₁, we have a whole modifying clause as a possessor and referent of 'it', for more details see Satō (2008: 134–136, 172, 175–176), Bugaeva (2013), Bugaeva and Whitman (2016), and Bugaeva (2017b).

- (70)ku-wentarap hum-i wen 1SG.S-dream sound-POSS be.bad 'The feeling of seeing my dream is bad.' (lit. 'I dreamt, the feeling of that is bad.') (Satō 2008: 176)
- (71)sir-i apunno sumaw-ne a-nukar wa dead.game-COP appearance-POSS 4.A-see and 'I saw that (the bear) was dying quietly.' (lit. 'The bear died quietly, I saw the sight of that.' (Bugaeva 2004: 243)

Here I argue that these markers belong to the main clause and that the subordinate clause is intact, which is a characteristic of the head-marking type of language.

¹² There are no participles, converbs, or other standard non-finite forms in Ainu.

7 Concluding remarks

This chapter argues that Ainu, like the majority of the GPR languages, is predominantly head-marking, which makes it different from predominantly dependent-marking languages of Northeast Asia. The head-marking type of Ainu is manifested at the clause level, the NP level, and partially at the sentence level. I have focused on a few morphological categories and processes, which are generally claimed to correlate with head marking (Nichols 1986: 64).

At the clause level, I have looked at the following properties correlating with head-marking:

- Verbal agreement or cross-reference with nominal arguments (=indexing) (Section 4.1);
- Verbal number (Section 4.2);
- Verb-initial word order (Section 4.3);
- Borderline case-marking and inflected adpositions (Section 4.4);
- Instrumental, directional (etc.) affixes on verbs (=applicatives) (Section 4.5);
- Incorporation (Section 4.6):
- Polysynthesis (Section 4.7).

Most of these properties are quite conspicuous in Ainu and the GPR languages, but are hardly attested in the Northeast Asian languages, except Nivkh, Ket, and to some extent the Chukchi-Kamchatkan and Eskimo-Aleut languages.

An exception is the verb-initial word order (Section 4.3): Ainu has a verb-final SOV word order. However, as in the verb-initial word order, there is a way to establish grammatical relations at the outset by the right dislocation of the subject/object. Also, I have shown that there is a <location> distinction in Ainu nouns (Section 4.4) which is indirectly associated with the head-marking type. This distinction helps to track grammatical relations in the case of zero-marked third person, which is regarded as an argument in favor of argumenthood being shared between bound pronouns and coreferential NPs in Ainu.

I have argued that Ainu has more features that qualify as open-head marking than was previously noted (cf. Bugaeva 2017a) (Section 4.7); there is not a strict closed class or fixed paradigm of what can go onto the verb (Nichols 2017), i.e., truly polysynthetic. Along with a standard valency-decreasing O-incorporation and S-incorporation with natural phenomena, which are the so-called canceling type less contributing to polysynthesis, Ainu also has A-incorporation with (super)natural phenomena and insect nouns, which is a *filling* type, and the valency retaining S-incorporation with body part nouns, which is an adding type (simple addition of another slot without any regulating derivation), both counting as open-head marking.

At the NP level, I have looked at pronominal (possessive) affixes on nouns and possessive classes, i.e., obligatorily possessed nouns (Section 5.1.1) and non-possessible nouns (Section 5.1.2), which are widely spread in the GPR languages but are totally absent elsewhere.

And finally, it was demonstrated that although at the sentence level, Ainu is mostly dependent-marking (in fact, like many other predominantly head-marking languages), a few adverbial clauses (Section 6.1) and noun complement clauses (Section 6.2), are head-marking with the main clause being marked.

Following Nichols (1986), I regard the head- and dependent-marking characteristics as diachronically the most conservative features of a language. The fact that Japanese and other neighboring Northeast Asian languages are dependent marking speaks against their relatedness to Ainu. In Northeast Asia, Ainu is one of four coastal families (along with Nivkh, Chukchi-Kamchatkan, and Eskimo-Aleut) surviving from the post-Neolithic spreads of language families of the Inner Asian type: Tungusic, Turkic, Mongolic, Japanese, Korean.

Head-marking in Ainu and the GPR languages is ancient and the greater density of human population and language diversity in the region created many opportunities for reanalysis and diffusion.

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2 Ainu ethnic origins

1 Introduction

In the past, the Ainu have variously been characterized as a "unique", "peculiar", or even "queer" people (Fitzhugh 1999: 15), whose status has been regarded as an unsolved "problem" (Sternberg 1929; Kosarev 2009; Spevakovskii 2017) or "mystery" (Vovin 1993: 1). It is also common to view the Ainu as an exceptionally "ancient" people (Spevakovskii 1985), in any case "the most ancient people of Japan" (Arutiunov and Shheben'kov 1992). While the Ainu are often classified as the "aborigines of Hokkaido", it is also commonly claimed that they in the past "occupied the entire Japanese archipelago" (Spevakovskii 1985: 187). Many mutually contradictory attempts to clarify the "origins" of the Ainu have been made by linguists, ethnologists, anthropologists, and archaeologists (see also Arutiunov 1999). Mixed with the requirements of political correctness of today's world, these attempts give a basically mistaken signal, as they do not recognize the fact that ethnic groups are always short-lived entities that constantly evolve in time and place.

Objectively speaking, the Ainu, as documented historically and still extant in remnants today, are no more "problematic" or "ancient" than any other "people", that is, ethnic group. Like all ethnic groups, the Ainu involve a complex combination of physical, cultural, and linguistic features, which, in exactly the combination that is known to us synchronically, has never existed before and will never exist in the future. Therefore, speaking of the "Ainu" in the past, or in the future, is inherently controversial and requires a definition of what it actually means that an individual or a community is identified as "Ainu". It may be noted that in the contemporary Japanese society, being an "Ainu" implies mainly a specific, and in some respects marginalized social status, resulting from decades and centuries of discrimination at the periphery of the officially monoethnic Japanese state (Howell 1999; see also Takakura 1960). This status has hardly been altered by the recent (2008) official "recognition" of the Ainu as the "indigenous people of Japan" (cf., e.g., Okada 2012; Stewart et al. 2014).

Leaving the contemporary social aspects of Ainu identity aside, the present treatise will focus on the historical and prehistorical processes that formed the Ainu as an ethnic group. In this context, we may also speak of Ainu "ethnogenesis" (Hudson 1999: 206–244), meaning that the Ainu ethnic group was diachronically built out of a heterogeneous variety of elements of different origins. Only when these elements met in the composition of a concrete synchronically defined population with distinctive physical, cultural, and linguistic features of its own, can we say that the Ainu as an ethnic group had come into existence. However, although the Ainu as an ethnic group did not exist before the specific complex of features defining Ainu ethnicity was formed, many of the individual components of this complex have historical and

prehistorical roots that can be followed backwards. This gives the Ainu people the diachronic dimension that allows us to speak of their "ethnic origins" and to establish a rough relative and absolute chronology of the Ainu ethnicity (for an earlier survey of this topic, see Janhunen 2002).

2 The synchronic ethnic markers of the Ainu

To begin with, let us list the most important features that synchronically used to distinguish the historically documented Ainu from other ethnic groups.

- (1) Ethnic territory: For one thing, the historical Ainu were until relatively recent times in control of a coherent ethnic territory, which was centered on the island of Ezo or Hokkaido, an island which, before its annexation into the political context of Japan, was inhabited by a more or less monoethnic Ainu population. The same was true of the entire chain of Kurile Islands, as well as of the minor islands of Rebun, Rishiri, and Todomoshiri (Moneron), located in the La Pérouse Strait region between Hokkaido and Sakhalin. Ethnic Ainu population was also present on northern Honshu, southern Sakhalin, and southernmost Kamchatka (Murayama 1971: 343–352), areas that adjoin the Hokkaido-Kurile islands in the south, north, and northeast, respectively. On northern Honshu, the Ainu were gradually marginalized by the Japanese expansion, a development that may have involved absorption of the local Ainu into the expanding Japanese, but also migrations of Ainu groups from Honshu to Hokkaido, Hokkaido, however, with the exception of the Matsumae possessions at the southernmost tip of the island, was dominated by ethnic Ainu until the official "opening-up" of the island for Japanese colonization in 1869–1870. The Japanese activities were countered by the parallel Russian colonization of Kamchatka and the Kuriles, as well as Sakhalin, which was transferred from the Manchu Empire to Russia by the treaty of Peking (1860). However, after the treaties of St. Petersburg (1875) and Portsmouth (1905), the Ainu populations on the Kurile Islands and on southern Sakhalin (Karafuto) came under Japanese administration until the end of World War II (1945), when they were returned to Russia (the Soviet Union). Japanese activities led to drastic changes in the circumstances of all Ainu regional groups. Most importantly, in the course of a few decades, the Ainu were marginalized as the dominant ethnic group in all parts of their traditional habitat. Forced relocations and the post-war evacuation brought an end to Ainu presence in the Kuriles and on Sakhalin, though there are still scattered individuals claiming either full or partial Ainu descent on both Sakhalin and Kamchatka.
- (2) Ethnic boundaries: Second, due to the historical coherence of the Ainu territory, the ethnic boundaries of the Ainu were relatively sharp. In this connection, it is impor-

tant to stress that the territorial status of the Ainu remained essentially untouched by external forces until the colonial period, that is, the middle of the 19th century. Immediately before the colonial period, there seem to have been no other ethnic groups living mixed with the Ainu in their core territory. Moreover, even on the margins of their territory the Ainu had relatively few ethnic neighbors. In the south, on Honshu, there were only the Japanese, whose historical expansion was systematically pushing the southern boundary of the Ainu ethnic territory northwards. In the north, on Sakhalin, the immediate neighbors of the Ainu were the Orok (Uilta, Tungusic) and the Ghilyak (Nivkh and Nighvng, Amuric), the only ethnic groups, apart from the Japanese and Russians, with whom the Ainu were involved in an active community-level relationship of interaction. The principal area of this interaction was the Poronai basin on southern Sakhalin. On southern Kamchatka, the Ainu had contacts with the Southern Kamchadal, the precolonial aborigines of the region, though rather little can be said of the nature of these contacts since the Russian activities in the region led to the extermination of the southern Kamchadal by the end of the 18th century. The presence of Ainu on Kamchatka can also be traced in archaeological material dating back to precolonial and early colonial times (Dikova 1983). Ainu individuals, and even small communities were also present in the Lower Amur basin on the continent, as suggested by both ethnonymic and ethnohistorical information (Bugaeva et al. 2019). It seems, however, that the continental presence of the Ainu did not reflect an actual expansion of the Ainu ethnic territory, but was connected with the Santan Trade (山丹交易 Santan Kōeki), which until the 19th century linked the Japanese Islands with the Amur basin, Manchuria, and Siberia (S. Sasaki 1998, 1999).

(3) Ethnic language: Third, and most importantly, the historical Ainu had an ethnic language of their own, distinct from all the known modern or historically documented languages (for a basic contextual introduction, see Tamura 1999). The natural continuity of this language was interrupted only in the course of the 20th century (Kirikae 1997). All attempts made at relating Ainu to other languages on a genetic basis have failed, which is why Ainu may be viewed as an isolate in the sense that it does not show unambiguous indications of being associated with any other language family (cf., e.g., Vovin 1993: 155–174; Alonso de la Fuente 2012: 2). The internal diversity of Ainu is, however, considerable, which is why it may also be classified as a small family, technically known as "Ainuic", though perhaps even better termed "Kurilic". This family comprises basically three relatively distinct entities, or separate Kurilic languages, corresponding to the regional groups of the Hokkaido, Sakhalin, and Northern Kuriles Ainu. Of these, the language of the Northern Kuriles Ainu became extinct soon after the forced relocation of its speakers from the Northern Kuriles to the Shikotan Island of the Lesser Kuriles in 1884, while Sakhalin Ainu faded away after the post-war evacuation of its speakers to Hokkaido, where its last speaker died in 1994. Hokkaido Ainu, which has survived longest, has still a few native semi-speakers, as well as a growing number of neo-speakers, including also non-ethnic-Ainu individuals with a varying level of fluency, but with no generational transmission of the language. Even so, although the Ainu language, in all of its varieties, is more or less extinct, or "dormant", as a living medium, the fact remains that historically it was the principal factor that defined Ainu ethnic identity.

- (4) Ethnic name: Fourth, the Ainu have an ethnic name for themselves. The term "Ainu", in obsolete usage also "Aino" (Kindaichi 1960), which is today the standard exonym for the Ainu in both Japanese and international usage, may be seen as an ethnic endonym, for, although normally translated 'person, man in general, human being', it basically refers to members of the Ainu ethnic group, as opposed to other ethnic groups, as well as, mythologically speaking, supernatural beings or gods. In this sense, the term "Ainu" 'áynu, used to be known to all regional groups of the Ainu, including those of Sakhalin and the Northern Kuriles (Hattori 1964: 34). The term "Ainu" is also used in reference to the Ainu language, "Ainu Itak" 'áynu 'iták, and the Ainu ethnic territory, "Ainu Moshir" 'áynu mo-sír 'Ainu land'. In collective usage, the Ainu have referred to themselves by the term "Utar" 'utár '(Ainu) people' or (affiliative form:) "Utari" 'utár-i 'relatives' = 'our (Ainu) people', which has occasionally also been used for endonymic identification, as in the name of the *Hokkaidō Utari Kvōkai* 北海道ウタリ協会. The Sakhalin Ainu, however, use a different term, "Enchiw" 'enciw, which recently has been adopted as the label by which the modern descendants of the former Sakhalin Ainu distinguish themselves from the Hokkaido Ainu (Inoue 2016). Another item of relevance in the ethnonymic context is kur 'man, human being' (Hattori 1964: 50), which is synchronically not used as an endonym by the Ainu, but which survives in the exonym "Kuril" (a Northern Tungusic plural form in -1), as initially adopted by the Russians to denote the Ainu, Russian kurily, as well as the Kurile Islands. Variants of this term are attested as exonyms for the Ainu in the languages of Sakhalin and the Amur basin, for instance, Ghilyak kughi, Neghidal kuyi, Ulcha kui. Correspondingly, the Ainu have had exonyms for their neighbors, notably "Shisam" sísam for the Japanese (Hattori 1964: 50), "Orakata" for the Amur Tungus (Janhunen 2014), and "Sumer-en-kur" for the Amur Ghilyak (S. Sasaki 1998: 714–718).
- (5) Ethnic culture: Fifth, the historical Ainu had a distinct ethnic culture, which was manifested in both material and spiritual heritage, including patterns of subsistence, ecological adaptations, and social organization (H. Watanabe 1973, 1999), religious concepts and practices (Munro 1962; Spevakovskii 1988), oral literature (Philippi 1979), as well as forms of dwelling, clothing, and transportation. In spite of regional differences, which typically marked transitions towards neighboring areas and populations, the core of the ethnic culture was remarkably uniform all over the Ainu territory. Although many aspects of Ainu culture are also shared with the neighboring peoples, the way they are combined in the ethno-specific complex characteristic of the Ainu is unique, and some features, such as bear cult and the cult of *inau* (Munro 1962: 28–54), reach their regional high point exactly among the historical Ainu. As a whole,

the Ainu cultural complex reflects, of course, the natural environment provided by the Ainu ethnic territory, and, therefore, it forms a bridge between the south (the Japanese Islands) and the north (Sakhalin, the Kurile Islands, Kamchatka, and the Siberian continent). Like the Japanese, but unlike their immediate northern neighbors on Sakhalin and Kamchatka, the historical Ainu were familiar with relatively advanced metal working, which is why their metal products were an appreciated trading article in the economic interaction with their neighbors, especially the Ghilyak. At the same time, it has to be noted that the traditional economic basis of Ainu culture was fairly unspecialized, in that it comprised a multitude of different activities, including fishing, hunting, gathering, gardening, and small-scale agriculture. A corresponding diversity was exhibited by the Ainu diet, which typically consisted of a combination of seafood, plants, grains, and meat (Kohara 1999), including, occasionally, the meat of stranded whales (Iwasaki-Goodman and Nomoto 1999). Also, there was seasonal variation in the type of economic and social activities, as reflected by the system of dual sedentary bases. It is also noteworthy that the Ainu as a population were relatively numerous as compared with their northern neighbors. The size of the precolonial Ainu population used to be close to 25,000, if not more, while the Ghilyak have had a much smaller population of less than 5000, and the Orok have for generations numbered only a few hundred individuals. This is also reflected in the degree of specialization of the corresponding ethnic cultures, in that the Ghilyak are rather monoculturally oriented towards fishing and sea mammal hunting, while the Orok are actively engaged in reindeer herding. In many respects, the closest parallel to the Ainu cultural adaptation is probably offered by the historical Kamchadal, who also used to maintain a diversified subsistence economy with a relatively large population base.

(6) Ethno-specific physical type: Sixth, the Ainu are known to represent a specific physical type, clearly different from the ethnic Japanese, but also from the types represented by the ethnic groups north of the Ainu (cf., e.g., Kondratenko and Prokof'ev 1989: I; Ishida 1999). In fact, it was this aspect of Ainu ethnicity that most drew the attention of early western travelers, and it is also amply illustrated by the Japanese tradition of ainu-e アイヌ絵 (T. Sasaki 1999). The feature that was considered to be particularly characteristic of the Ainu was their "hairiness" (Batchelor 1892; Landor 1893), but many other parameters, including skull form, skin color, and the structure of the eyes, were studied by scholars working in the paradigm of classical physical anthropology and anthropometry (Kodama 1970). A common conclusion drawn from this line of research was that the Ainu were thought to be some kind of eastern "Caucasoids", more closely related to Europeans than to East Asians. Later studies have corrected this misunderstanding (cf., e.g., T. Hanihara, Ishida, and Dodo 1998) and show that the closest parallels to the Ainu outside of Japan are offered by the "Sundadont" populations of Southeast Asia (Turner 1992). The relative uniqueness of the Ainu physical type is confirmed by modern human genetics (Jinam et al. 2015). At the same time, several recent studies have revealed that the Ainu show a rather close genetic affinity with the Ryukyuans (Koganebuchi et al. 2012). What remains, however, is the fact that the prototypical Ainu are physically very different from the prototypical Japanese, who, in turn, are rather closely connected with the populations on the Asian continent, as well as on the Korean Peninsula.

3 The background of the Ainu ethnic markers

When we wish to project the ethnic markers of the Ainu backwards in time, we will immediately notice that the complex that defines "Ainu-ness" falls apart, in that each marker has a background of its own. Never in the past was there an ethnic group with exactly the same combination of features that the historically documented Ainu had. We therefore have to review the background of each marker separately and see in what sense, if any, we can speak of "Ainu" in any more distant past. In the following, the Ainu ethnic markers are examined from a diachronic perspective. The markers are discussed in the same order as above in the synchronic survey.

(1) Evolution of territorial identity: Although the ethnic territory of the historical Ainu is well defined and relatively compact, it is clear that it must have represented the result of constant changes, involving processes such as ethnic expansion, contraction, and relocation. This means that the ancestors of the Ainu in the past quite probably occupied a territory in some respects different from the one occupied by the Ainu in recent historical times. More specifically, there are many reasons to assume that the Ainu ethnicity, as far as it can be projected backwards in time, completed a gradual movement from south to north in the context of Honshu and Hokkaido. This means that if there is any direction from where the Ainu can be said to "have come", it is the south, that is, the island of Honshu. Certainly, they did not "come" from Sakhalin, the Kurile Islands, or Kamchatka, all of which are regions that were only secondarily included in the ethnic territory of the Ainu. From historical sources and toponymic evidence (Vovin 2009), we know that ethnic Ainu until relatively recent times maintained a strong presence on northern Honshu, including the Tohoku region, from which, apparently, migrations of Ainu to Hokkaido took place even during the last few centuries. Since the earlier non-Japanese inhabitants of northern Honshu are known in Japanese history as the Emishi 蝦夷 (T. Takahashi 1986), it is reasonable to accept the common view that there is a historical connection between the Ainu and the Emishi. This connection need not have been one-to-one, however, and we should not be misled to thinking that the Emishi possessed all the ethnic markers characteristic of the historical Ainu. Therefore, the Emishi are probably best viewed as a generic proto-historical complex which contained at least several elements that were inherited by the historical Ainu. In any case, the Emishi connection leads us to the conclusion that not only Sakhalin, the Kurile Islands, and Kamchatka, but also Hokkaido must be a secondary territory for the Ainu, whose earlier and more "original" homeland was located on Honshu. This is convincingly confirmed by archaeological information, which links the "arrival" of the Ainu to Hokkaido with the Satsumon culture (c. 700–1200 CE), from which there is a more or less direct continuity to the historical Ainu (H. Takahashi 2001). In the southern parts of Hokkaido, the Satsumon culture replaced the earlier local Epi-Jōmon traditions, which, then, cannot be considered to have been Ainu in the ethnic sense, even if it cannot be ruled out that some individual parts of these traditions were incorporated into the Ainu ethnic heritage.

(2) Formation of ethnic boundaries: The territory occupied by the proto-historical Ainu in the context of the Emishi is probably best understood as a rather narrow latitudinal zone which gradually moyed through northern Honshu towards Hokkaido. It apparently never covered the whole of northern Honshu at any single time, and certainly not the whole of Honshu, or the other Japanese islands. At the same time as the southern margin of this zone drew northwards due to the pressure of the expanding Japanese ethnicity and political power, the northern margin also moved northwards to territories that had previously been occupied by other ethnic groups. After the bearers of the Satsumon culture had established themselves on southern Hokkaido, their expansion continued towards the Okhotsk Sea. Here they met with the bearers of a very different cultural tradition, the Okhotsk culture (c. 600–1600), which, unlike the Satsumon culture, was specialized in littoral and maritime subsistence, including also sea mammal hunting (cf., e.g., Yamaura and Ushiro 1999). There is no consensus on whether the Okhotsk culture was a monolithic entity, or a more complex network of many local varieties in the context of the "mediaeval" North Pacific (Vasilevskii 2018), nor is it known whether its bearers represented a single ethnic group, or, as is more likely, several different groups (Deriugin 2008). However, it is clear that it was a phenomenon that expanded to northern Hokkaido from the north, most immediately from Sakhalin, where a relatively similar cultural adaptation has been maintained until historical times by the Ghilyak. From Hokkaido, it expanded further to the Kurile Islands. The gradual replacement of the Okhotsk culture with the Satsumon culture and its derivatives gives us a timeline that allows us to follow the advance of the Ainu ethnicity in the north: northern Hokkaido was occupied by ethnic Ainu by c. 1000 CE, southern Sakhalin by c. 1300 CE, and the Kurile Islands, including the Northern Kuriles, as late as c. 1500–1600 CE. By this time, the Ainu had formed a contact zone with their two most important northern neighbors, the Ghilyak and Orok on Sakhalin. The expansion of the Ainu from the Northern Kuriles to Kamchatka and the beginning of the contacts with the Southern Kamchadal must have taken place only shortly before the colonial period.

(3a) Linguistic expansion: If there is any single ethnic marker that can define a line of direct continuity of "Ainu-ness" in time it is, of course, language. The conclusion that

the ethnic ancestors of the Ainu expanded with the Satsumon culture from Honshu to Hokkaido and beyond implies that the bearers of the Satsumon culture were speakers of an ancestral form of the Ainu language, which underwent a relocation and expansion in parallel with the Ainu ethnicity. The core of the Ainu language is contained in the linguistic lineage formed by its basic lexical and grammatical properties and inherited from its prehistorical ancestors. Since there is no reason to assume that the Ainu linguistic lineage would represent a recent intrusion to the Japanese Islands, its roots must lie in the Jōmon period, which means that it has been present in Japan since, at least, the end of the last glaciation period (c. 12,000 years BP). In this sense Ainu is, indeed, an "ancient" language, while Japanese (Japonic) represents a relatively recent intrusion from the continent, most immediately from the Korean Peninsula, in the context of the Yayoi (900/300 BCE to 300 CE) and Kofun (300–500 CE) cultures (cf., e.g., Hudson 1999: 59–171). The fact that Ainu is the only linguistic survivor from the Jomon period should, however, not be misunderstood as meaning that it represents the only linguistic lineage that was present in Jōmon Japan. The ethnic picture of Jōmon Japan may be assumed to have been similar to other large islands in the Pacific, where typically hundreds of different languages are spoken even today. It has been estimated that towards the end of the Holocene climatic optimum (c. 5000 years BP) the Jōmon population reached a peak of some 300,000 people (Koyama 1979; Koyama and Sugito 1984). Assuming that a typical speech community of that time comprised between 500 and 5,000 individuals, there must have been at least several dozen, but possibly a few hundred separate languages present on the Japanese islands. Some of them may have been related to the Ainu lineage, but certainly not all. Even so, we may identify Ainu as a "Jōmonic" language, in that it probably retains some features, especially in the typology, that were generally characteristic of the languages of Jōmon Japan.

(3b) Linguistic diversification: Although the roots of the Ainu language are located on Honshu, the historically observed diversification of the Ainu (Kurilic) varieties must have started only after the language had been established on Hokkaido. Technically, on the basis of the three main varieties – Hokkaido Ainu, Sakhalin Ainu, and Northern Kuriles Ainu – it is possible to reconstruct Proto-Ainu (Proto-Kurilic), though the attempts made in this direction (Vovin 1993; Alonso de la Fuente 2012) still need to be perfected. In terms of absolute chronology, Proto-Ainu has a shallow depth corresponding to the expansion history of the language to Hokkaido and from there to Sakhalin and the Kurile Islands. The internal taxonomy of the family (Hattori and Chiri 1960; Asai 1975; Yohei Ono 2020) seems to correlate with the archaeological record, in that the first entity to have branched off was Sakhalin Ainu (Murayama 1971: 352; Vovin 1993: 157), which started diverging perhaps some 800 years ago, followed by Northern Kuriles Ainu less than 600 years ago. It may be assumed, though the matter cannot be reliably documented, that the dialects once spoken on northern Honshu were close to those spoken historically on Hokkaido, while those possibly spoken by the diaspora groups in the Amur basin on the continent were extensions of the Sakhalin dialects. Similarly, the Ainu on Kamchatka probably spoke dialects derived from the Northern Kuriles, while the dialects spoken on the Southern Kuriles were more closely associated with those of Hokkaido. It has to be added that there is also internal dialectal diversity within Hokkaido Ainu (Nakagawa and Fukazawa, Chapter 8, this volume), the diachronic background of which is not yet fully understood, though it is probably secondary to the separation of the Sakhalin and Northern Kuriles varieties (Alonso de la Fuente 2012: 5–6).

(3c) Linguistic contacts: The traces of linguistic contacts between Ainu and other languages confirm the general chronology outlined above. Typologically, Ainu remains very different from all neighboring languages, including Japanese (see Bugaeva, Chapter 1, this volume), and as far as it shares any features with the latter, most of them are likely to be results of the "Jomonization" of Japanese, rather than Japanese influence on Ainu (cf. also Yurayong and Szeto 2020). Possibly, Ainu could be classified as an example of "(North) Pacific Rim Typology" (Bickel and Nichols 2006), but even in this context it stands apart from other languages in the region, including, for instance, Ghilyak (Gruzdeva and Janhunen 2020). Also, we do not know how "original" the actually documented Ainu typology is, for it has very probably been influenced by the other languages once spoken by the Jōmon and Epi-Jōmon populations which it replaced on northern Honshu and Hokkaido. What is, however, certain is that Ainu has several very early Japanese (Japonic) loanwords, including items like sippo 'salt' and pasuy 'chopstick', which preserve Old Japanese and/or Pre-Old-Japanese features (the stop pronunciation of *p, the diphthongoid sequence *uy), and which, therefore, must have been received in a period when Japanese was still starting its northward expansion from the core region of the Yamato state, that is, around the middle of the first millennium CE. This, again, suggests that the ancestral form of Ainu was at that time spoken in the immediate northern neighborhood of the Japanese-speaking population. Due to their interaction with the politically and demographically superior Japanese speakers, the linguistic ancestors of the Ainu gained a strategic advantage as compared with other populations on central and northern Honshu, a circumstance that probably explains why Ainu was ultimately so "successful", in that it ended up becoming the sole historically documented survivor of the original linguistic diversity of Jomon Japan. In its new location on Hokkaido, Sakhalin, and the Kurile Islands, Ainu finally covered also the former area of the Okhotsk culture, in which process it must have received additional influences from the language(s) of the Okhotsk people. Unfortunately, we do not know what language(s) the Okhotsk people spoke, though an early form of Ghilyak (Amuric) has been proposed as a fairly reasonable candidate (Vovin 2016). Indeed, Ainu and Ghilyak show traces of relatively early lexical interaction, as in the case of Ainu tunakay 'reindeer' (→ Japanese tonakai) ← Pre-Proto-Ghilyak *tola-ηa.y 'pulling animal' > modern Sakhalin Ghilyak *tlani* (Austerlitz 1976). In principle, it is also possible that Ainu and Ghilyak could both share items deriving from the language(s) of the Okhotsk people – if the latter did not speak Ghilyak. This could very well be the case in, for instance, Ainu $kaco = Sakhalin Ghilyak *kaco > q^has 'shaman's drum' (for$ other proposals concerning this item, see Austerlitz 1984; Alonso de la Fuente 2007, 2012: 110-111).

(4) Ethnonymic identification: Although synchronically used as true endonyms, the modern terms "Ainu" and "Utar(i)" are diachronically shallow in this sense and cannot have functioned as labels for ethnic identification in any more distant past. The situation may be different with the term "Kuri(1)", which, although apparently based on the Ainu appellative for 'man, human being', has become established as an exonym for the Ainu among all their northern neighbors. Under this exonym, Chinese 苦夷 kuyi, the Ainu are also mentioned in the trilingual Tyr inscription of 1413 on the Lower Amur, and the same item is contained in the Chinese name of Sakhalin, *Kuye dao* 庫頁島 'the Island of the Ainu' (Golovachey, Ivliey, Pevnoy, and Rykin 2011: 98 note 1, 125, 216). The fact that an Ainu native appellative noun has become an exonym for the entire Ainu ethnic group suggests that this noun may have had ethnonymic connotations already in Ainu itself. However this may be, the potentially most ancient ethnonym of the Ainu is "Enchiw", which has been compared with Japanese Emishi and its variants Ebisu and Ezo, all of which can reflect an original form of the type *emisV ~ *emiciV (Kindaichi 1960: 2–3, quoted by Inoue 2016: 73 note 3). If this comparison is correct, it gives us another argument for identifying the historical Emishi as the ethnic ancestors of the Ainu. The fact that the term "Enchiw" is synchronically attested only in Sakhalin Ainu would not contradict this conclusion, for, as the first variety to branch off Proto-Ainu, Sakhalin Ainu can very well have preserved archaic features lost in the other varieties. As for the exonyms used by the Ainu for their neighbors, the term sisam 'Japanese' (secondarily also other 'foreigners') dates back to Pre-Proto-Ainu and, in view of the southern marginal dialectal variant (Yakumo) samó, must be a compound, *sii+sam/o, though the meaning of the components remains unclear (for tentative suggestions, cf. Vovin 1993: 137, Alonso de la Fuente 2012: 211 no. 520). For the Okhotsk people, the Ainu used the descriptive term rep-ún-kur 'Sea People, Offshore People', based on rep 'offshore' (Hattori 1964: 51, 218), a term amply attested in Ainu epic folklore, much of which deals with the wars between the Ainu and the Okhotsk people (Philippi 1979: 23–24, 40–44). Another term, referring specifically to the pre-Ainu aborigines of Sakhalin, is "Tonchi", which may indeed have denoted an actual prehistorical ethnic group, perhaps connected with the Okhotsk culture, but possibly also with continental Tungusic connections (Zgusta 2015: 92-95). By contrast, the term "Koropok-guru", also kor-pok-un-kur, as used for the pre-Ainu people on Hokkaido, probably reflects a global folkloric tradition of subterranean gnomes, rather than a concrete memory of the Epi-Jōmon populations once absorbed into the expanding Ainu (cf. also Kondratenko and Prokof'ev 1989: II; Hudson 1999: 36–39).

(5) Sources of ethnic culture: Like all ethnic cultures, Ainu culture is a heterogeneous mixture of elements of different origins and very different chronological depths. The three main components are, however, easily identifiable. First, at the bottom, the Ainu preserve cultural elements dating back to the Jōmon period. Some of these elements may have travelled northwards from Honshu to Hokkaido together with the Satsumon culture, while others may represent direct heritage from the local Epi-Jōmon populations of Hokkaido. What these elements are, exactly, is difficult to specify, but they are likely to be connected with details of subsistence economy, social structure, and general world view, as also reflected in the native lexicon of the Ainu language. Second, during the prolonged interaction with the expansive Japanese-speaking population, the Ainu have acquired a layer of Japanese cultural elements, pertaining to both material and spiritual heritage. Some of these elements were acquired on Honshu soon after the appearance of the Japonic-speaking Yayoi population, while others penetrated northwards later during the interaction between the expanding Japanese and the Hokkaido Ainu (cf. I. Kikuchi 1999). A very early lexical item reflecting strong cultural influence is kamuy 'deity' (cf. Philippi 1979: 11). Among later influences are many elements of material culture, including, for instance, surface dwellings, which gradually replaced pit dwellings all over the Ainu ethnic territory. Of course, the interaction was reciprocal, in that the Ainu, or other Jōmon and Epi-Jōmon populations, have also contributed to the evolution of what we today know as Japanese culture (cf., e.g., Arutiunov 1957). Third, and very significantly, the Ainu ethnic culture contains a strong northern element, acquired in contacts with the Okhotsk population, whose last traces were absorbed into the Ainu ethnicity. Among the most important Okhotsk elements are the exceptionally elaborated bear cult (Janhunen 2003, cf. also Utagawa 1999) and the northern type of shamanism (Wada 1999), but probably also the cult of *inau*, which from the Kurile Ainu spread even to the Southern Kamchadal (Krasheninnikov 1786.2: 179–188). Interestingly, the Ainu term 'ináw 'ritual shavings' (Hattori 1964: 173) is shared with the neighboring languages of Sakhalin and the Amur basin and is of Tungusic origin (Ikegami 1980, for a different opinion see Alonso de la Fuente 2012: 111–112, 196 no. 179). The fact that a Tungusic item like this has spread into all Ainu varieties suggests either Tungusic presence in the Okhotsk culture or a parallel cultural flow from the continent. Another important word – a Eurasian Wanderwort – that has become fully established in the Ainu cultural lexicon is kotán 'settlement' (Hattori 1964: 50, for a different, though unlikely, explanation, see Alonso de la Fuente 2012: 116, 199 no. 258, for the cultural relevance of this term, cf. Nomoto 1999). On a broader geographical scale, cultural parallels link the Ainu with the entire North Pacific region (cf., e.g., Kondratenko and Prokof'ev 1989: III-IV; Dubreuil 1999; Graburn and Lee 1999; T. Kikuchi 1999; Ölschleger 1999), though most of these parallels are too generic to tell us anything of actual ethnic connections.

(6) Background of the Ainu physical type: As soon as palaeoanthropological data became available from Japan it was realized that the ethno-specific physical type

of the historical Ainu is closely reminiscent of the type that characterized the entire population of Jōmon Japan. In this sense, the Ainu are, indeed, true heirs of the Jōmon period, while the prototypical Japanese, or "Yamato people", are descendants of continental immigrants, who started moving to Japan in connection with the introduction of the Yayoi culture, and who also brought the Japanese (Japonic) language with them. This "dual model for the population history" of Japan (K. Hanihara 1991) is now generally accepted (cf. also Low 2012), though its implications are not always correctly understood, especially as far as the linguistic situation is concerned (Miyamoto 2016; Hudson, Nakagome, and Whitman 2020). The relative "uniqueness" of the Jōmon physical type is confirmed by recent studies in human genetics, which also show that there was a certain degree of natural mixing between the Jomon and Yayoi populations (cf., e.g., Y. Watanabe et al. 2019). The proportion of "Jōmon genes" in Japan varies regionally, but the results of genetic analysis confirm what could also otherwise be expected, namely, that it is particularly high not only among the Ainu in the north, but also among the Ryukyuans in the south (cf. also Saitou et al. 2012). It should, however, be stressed that "Jōmon genes" do not necessarily mean "Ainu genes", for the expanding "Yamato people" received a gene flow not only from the ancestral population(s) that were somehow linked with the historical Ainu, but also from the other Jomon populations, whose ethnic and linguistic identity remains unknown. More importantly, in connection with their expansion towards the north, the ancestors of the Ainu received an admixture of "Okhotsk genes", as is confirmed by craniometric (T. Hanihara, Yoshida, and Ishida 2008) and dental (T. Hanihara 2010, Kaburagi et al. 2010) data. The Okhotsk people represented a continental Asian physical type, not dissimilar with that of the modern ethnic groups of the Amur region (Satō and Amano 2007). Not surprisingly, "Jōmon genes" are most prominent among the Hokkaido Ainu, while the Ainu on Sakhalin and the Northern Kuriles showed a greater admixture of "Okhotsk genes". At the same time, due to the ethnic expansion of the Ainu, "Jōmon genes" have spread northwards to Sakhalin and the Amur Basin, where certain ethnic groups, notably the Ulcha, reveal a relatively high proportion of Ainu genetic admixture (Jeong, Nakagome, and Di Rienzo 2016).

4 Chronological aspects of Ainu ethnicity

It should be obvious from the above that all the ethnic markers that define the Ainu ethnicity have a traceable diachronic background, but they have not evolved in tandem as a single bundle of features. The only strand that can be followed unambiguously backwards in time is the linguistic one, connected with the lineage of the Ainu language. A proto-form of this language, Proto-Ainu (Proto-Kurilic), which underlies the historically documented diversity of all the Ainu (Kurilic) varieties, was spoken on Hokkaido at the time of the Satsumon culture, probably less than 1000 but more than 500 years ago. This language was not original to Hokkaido, but had been relocated from Honshu, where its ancestral forms had been spoken since, at least, the Jomon period, and where its presence clearly precedes the arrival of the Japanese (Japonic) lineage from the continent. By all tokens, since no unambiguously identifiable ethnic expansions from the continent are known to have taken place in the millennia preceding the Yayoi culture, the directly ancestral forms of Ainu must have been spoken on the Japanese Islands since, at least, the beginnings of the Jōmon period. Where the language had come from before that time is unknown, and is impossible to know, since we are dealing with time depths beyond the scope of historical and comparative linguistics. In the broad sense, then, the "homeland" of the Ainu language is located on the Japanese Islands (cf. Yugo Ono 1999). However, it is important to stress once more that the Ainu lineage was by far not the only linguistic lineage that was present in Jomon Japan. Rather, it was one of many lineages, and its survival was an accident, not very different from the accident that was involved in the development that brought the Japonic lineage, and not, for instance, the Koreanic lineage, to the Japanese Islands as soon as the cultural and demographic circumstances on the continent made such an expansion possible. Ainu, then, remains by accident the only surviving language of Jōmon Japan. How well Ainu represents the "Jōmonic" language type is unknown, but in view of the general homogeneity of the Jōmon culture we might assume that there was also some degree of typological homogeneity among the languages spoken on the Japanese Islands, especially towards the end of the Jomon period. Also, we do not know how the speakers of the ancestral forms of Ainu identified themselves with regard to the neighboring ethnic groups. An exonym that since the Middle Ages has referred to populations of northern Honshu and Hokkaido with probable Ainu connections is Emishi (and its variants), and it is also a candidate for an endonym that may have been used by the ethnic ancestors of the Ainu themselves. We do not know, however, how ethno-specific this term originally was, where it came from, and whether it is a lexeme of true "Ainu" origin.

The speakers of the directly ancestral forms of Ainu were, consequently, "Ainu" in the sense that they spoke a language of the same lineage, although they did not use the term "Ainu" for ethnic self-identification. It goes without saying that the prehistorical forms of the Ainu language were not exactly the same as the those recorded in historical times, for evolution has taken place all the time due to both internal tendencies and external influences. Insights, though rather limited ones, into how Pre-Proto-Ainu may have looked like, are offered by the method of internal reconstruction (Alonso de la Fuente 2012: 13–123; Janhunen 2020). As for external influences, we will never know how "clean" the Ainu linguistic lineage has remained, but it has, in any case, absorbed elements from both Japanese and the language(s) of the Okhotsk people, as well as, very probably, from the languages of the Jōmon and Epi-Jōmon populations on Honshu and Hokkaido with which it must have had contacts, although we cannot

specify the exact circumstances of these contacts. It may be assumed that many of the speakers of Pre-Proto-Ainu were not monolingual, but knew one or more neighboring languages, some of which may have represented earlier branchings of the Ainu lineage, while others were totally unrelated entities. Some degree of early bilingualism is also likely to have arisen between Ainu and Japanese, but in historical times, especially on Hokkaido, monolingualism was common, with several hundred monolinguals still surviving until the early 20th century (Kirikae 1997: 172–173). To some extent, the former linguistic diversity on Honshu and the other Japanese Islands can also be reflected by the regional variation of the Japanese language (Saitou and Jinam 2017), but Ainu is certainly not the only substratal language that has "Jōmonized" Japanese and contributed to the diversification of the Japanese dialects.

Although the linguistic lineage allows us to speak of "Ainu" already in the proto-historical times when the contacts with the Yamato state were created, the Ainu (Pre-Proto-Ainu) speakers on central and northern Honshu were not yet "complete" ethnic Ainu in the cultural sense. They may, of course, have possessed ethno-specific cultural features of their own, but basically their culture belonged to the generic Epi-Jōmon complex shared also by many other ethnic groups that must have been present in the neighborhood. The Ainu ethnic culture in the strict sense was formed only after the arrival of the bearers of the Satsumon culture to Hokkaido and their interaction with the remnants of the Okhotsk culture. It was this dualism between southern and northern elements, complemented by the constant influx of Japanese cultural influences, that formed the base of the cultural heritage of the historically documented Ainu. The inbuilt dichotomy in Ainu ethnic culture is particularly obvious in its dual orientation towards the maritime (sea) and terrestrial (land/mountain) environment. It should, however, be noted that while many of the maritime components of Ainu culture are likely to be connected with Okhotsk heritage, some of the terrestrial elements, notably the bear cult, are also of a northern origin and were present in the Okhotsk culture, as well. It is, in fact, possible that the Ainu ethnic culture as a whole is dominated by elements absorbed from the Okhotsk culture, a conclusion that is supported by the many parallels that exist in the material heritage of the Ainu and their northern and continental neighbors. These parallels are particularly strong among the Sakhalin Ainu (cf., e.g., the materials in Sokolov and Beliaeva-Sachuk 2019), but many of them are present also on Hokkaido, suggesting a sufficiently early date of cultural contact – quite possibly in the context of the Okhotsk culture.

As far as their biological heritage and physical anthropology are concerned, the historical Ainu are certainly the "purest" extant descendants to the Jomon physical type, with no close "relatives" outside of Japan. This general "purity" is not seriously disturbed by the "non-Jōmon" admixture that the Ainu have received from both the Japanese and the bearers of the Okhotsk culture, as well as, more recently, from the historical ethnic groups on Sakhalin. It is also irrelevant in this context that the "Ainu genes" may have distant connections elsewhere in the Pacific Rim (Bannai et al. 2000). What is, however, important to understand is that the Ainu physical complex was originally not ethno-specific, for basically the same Jōmon type was shared by the entire multiethnic and multilingual population of Jōmon Japan. The Ainu physical type became ethno-specific only when the Ainu ethnicity had become the sole survivor of the original ethnic diversity of the Japanese Islands. It was only at this stage that the complex of "Ainu-ness" came to comprise not only the Ainu language and the Ainu ethnic culture, but also the Ainu physical type. All these properties served as clear markers of the distinctiveness of the Ainu as compared with the Japanese. By this time, the Ainu had also established themselves in their historical ethnic territory, which was only marginally touched by Japanese presence before the colonial era. In this sense, the Ainu ethnicity was "complete", and the Ainu themselves also developed an idea of ethnic distinctiveness, which ultimately came to be marked by the endonym "Ainu".

The question is: How closely does the biological heritage of the Ainu correlate with their linguistic lineage? That is, how direct descendants are the historical Ainu in their ethnic territory to the proto-historical speakers of Pre-Proto-Ainu on Honshu? The answer is that the relationship is rather distant and indirect. The northward movement of the Ainu linguistic lineage must for the most part have involved diffusion, rather than migration. The original Pre-Proto-Ainu speakers in the immediate neighborhood of the Yamato state were probably absorbed into the expanding Japanese speech community, to which they contributed "Jōmon genes" and possibly some "Jōmonizing" linguistic features. At the same time, the Ainu linguistic lineage was adopted by other ethnic groups further north on Honshu, a process that may have been repeated several times until, finally, the language came to be spoken by a population on northern Honshu which took it, together with the Satsumon culture, to Hokkaido. This relocation of language and culture from Honshu to Hokkaido must certainly have involved an element of migration, but, again, the previous population on Hokkaido did not disappear anywhere, but was absorbed into the Ainu-speaking community. For the time being, there is no way to know what the demographic proportions of the Satsumon people and the earlier Epi-Jōmon populations on Hokkaido can have been, and in this case genetic studies and palaeoanthropology are of little help, since the Epi-Jomon populations were probably physically very similar to the immigrating bearers of the Satsumon culture. Even so, the number of immigrants need not have been particularly large, for it was sufficient that they had a cultural edge. The earlier Epi-Jōmon ethnic groups, who spoke an unknown variety of languages, may have contributed linguistic features to Ainu, but basically they underwent a language shift to Ainu, thus increasing for their part the number of Ainu speakers. The same happened later with the Okhotsk people, who also switched to Ainu, but in their case the admixture can to some extent be traced, since they were genetically different from the Satsumon people. Locally, as in the Northern Kuriles, the proportion of "Okhotsk genes" may even have been very high, meaning that the language shift took place without much genetic admixture from the ethnic Ainu.

5 Conclusion

We may conclude that the formation of the Ainu ethnicity involved a prolonged process, in the course of which a number of ethnic markers of different origins were ultimately clustered into the complex that was characteristic of the historical Ainu. As a biological population, the Ainu have their firm roots in the local Jomon and Epi-Jōmon populations on Hokkaido though this population base received a rather significant gene flow from the bearers of the Satsumon and Okhotsk cultures, both of which were intrusive on Hokkaido. The impact of other historically documented neighbors, including the ethnic Japanese, is less significant, though not negligible. By contrast, as a cultural group, the Ainu would seem to preserve only a relatively small amount of ancient local heritage, for the main body of the Ainu ethnic culture is apparently a combination of intrusive Satsumon and Okhotsk features, again with some secondary impact from the historically documented ethnic neighbors. Finally, the Ainu linguistic lineage is originally not native at all to the ethnic territory of the historical Ainu but was relocated from Honshu in connection with the expansion of the Satsumon culture. This process involved a chain of language shifts which ultimately left Ainu as the only survivor of the original linguistic diversity of Jōmon Japan. Due to the expansion of the "Yayoi genes" on the Japanese Islands, the Ainu speakers also came to be the last relatively "pure" representatives of the "Jomon race".

This scheme follows a pattern known from several other parts of the world. It seems to be a general tendency in ethnic formation that biological heritage is locally relatively stable, with genes being transmitted locally over millennia. By contrast, cultural influences flow more freely from different directions, and language, in particular, is easily changed even over a couple of generations. On the other hand, language is the only ethnic marker that allows us to follow the ethnic lineage unambiguously backwards in time, and a common situation is that the language of a given ethnic group has its origins outside of the synchronic ethnic territory of that group. This is also illustrated by the case of Japanese, a language that relatively recently, that is, only 2500-1500 years ago, expanded to the Japanese Islands from the Korean Peninsula, but whose "ultimate" homeland may actually have been located even further away in continental East or Southeast Asia, in a different areal-typological context (Janhunen 1997). Similarly, the Ainu linguistic lineage was moved from its earlier location on Honshu to its historical territory in the north. Although migrations do play a role in such processes, and although they occasionally, as in the case of the Yayoi culture, are even traceable in the genetic and palaeoanthropological data, the typical mechanism of linguistic expansions all over the world seems to be language shift.

To what extent, then, may the Ainu be viewed as the "indigenous people of Japan"? Only in the sense that they represent the single surviving fragment of pre-Yayoi Japan as far as both their language and physical type are concerned. However, as an ethnic group the Ainu are a relatively recent product of more localized processes which have led to the specific combination of ethnic markers that characterized the historical Ainu. Since these processes were completed on Hokkaido, with southern Sakhalin and the Kurile Islands as secondary frontier areas, the Ainu may, with good reasons, be identified as the "aborigines of Hokkaido", even though not all of their ethnic characteristics are ultimately of a Hokkaido origin. In terms of absolute time depth, the Ainu came into being as an ethnic group about 500–1000 years ago. Future will show if they have any prospects of surviving in the current World Order, in which ethnicity and language have increasingly little value. Having lost most of their ethnic markers, including, in particular, the continuity of their linguistic lineage, the Ainu certainly face a big challenge.

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Tomomi Satō

3 Major old documents of Ainu and some problems in the historical study of Ainu

1 Introduction

In this chapter, I will review major old documents of Ainu and show what they may reveal about the historical study of the Ainu language. In the case of Ainu, there are very few reliable and sizable documents dating back as far as the 17th century. As to materials for the linguistic study of Ainu, the situation is much the same even with regard to later documents from the first half of the 18th century. Hence, it is not an exaggeration to say that we have almost no choice about materials belonging to these periods. One of the reasons for the lack of materials in this period is clearly that, because the establishment of the Edo Shogunate was quite recent. Ezo (the island of Hokkaidō) where the Ainu people lived, was not generally considered the territory of Japan at that time (Hamaguchi and Yokojima 2016: 40). By contrast, concerning the latter part of the 18th century and the first half of the 19th century, because the weakened Edo Shogunate feared colonization of Japan by Western powers and engaged in active exploration of the border territories (Hamaguchi and Yokojima 2016: 98), we have so many documents that it would not be easy to study all of them exhaustively. So, for the moment, we have to limit our targets in this chapter by setting certain criteria in order to deal with the enormous quantity of these relatively new materials from the latter part of the 18th century to the beginning of the Meiji era (1868).

First, it goes without saying that manuscripts high in quality and also, if possible, original manuscripts written by the authors themselves would be ideal, because, regardless of the rarity of some given materials, they would have problems as linguistic material if they involved too many errors from copying.

Second, as for the materials of the Ainu language, it is important to take into account the distinction between 'pre-Moshiogusa' and 'post-Moshiogusa' materials. Moshiogusa (Uehara [1792] 1972), published in 1792, is the name of the first Ainu dictionary in the world. This dictionary became very popular after its publication because it was rich in content and much easier to get than any other handwritten Ainu documents, so we can say that its influence on later Ainu materials was enormous; that is, many post-Moshiogusa materials very often relied on Moshiogusa and hence we often cannot easily tell whether a given work relies on Moshiogusa or not. Therefore, concerning post-Moshiogusa materials, it would be better to make every possible effort to choose those that are less influenced by Moshiogusa in order to avoid a bias in data. In what follows, therefore, I will take up as many pre-Moshiogusa documents as possible, whereas post-Moshiogusa materials will be selected rather narrowly, applying the following criteria: 1) autographic and/or as old as possible, 2) less influenced by Moshio-

gusa in both form and content, 3) as large in quantity as possible. Using these criteria, we can at least to some extent reduce the list of documents to be described here.1

Before going any further, it would be appropriate to give here some preliminary knowledge about kana, the Japanese syllabaries used to write Ainu words in old documents in Japan. Until the Meiji era (1868–1912), during which the Japanese government restricted the number and the variety of kana, it was not unusual for a number of different *kana* characters to be used to notate one and the same sound in Japanese documents. For example, while as a *hiragana* for ta, only た is now used, 多, 當, 堂, and others, usually in shorthand style, were freely used as hiragana before the Meiji era. Usually, Japanese was written with *hiragana* like these and Chinese characters, or with *katakana* and Chinese characters. In 1900, the Ministry of Education of Japan established the standard set of forty-eight hiragana (and katakana) characters. Therefore, non-standard *hiragana* characters that were not chosen for that set came to be called hentaigana ('variant kana'). Since the Meiji era, when many foreign words were borrowed mainly from so-called Western languages, it has been common that these foreign words are written with katakana, while words from Chinese are naturally written with Chinese characters. On the other hand, grammatical forms and some Japanese words are usually written with hiragana (Kokugogakkai ed. 1980: 153, 733-737).

However, it should be noted that the notation of old documents of Ainu is somewhat different from that of common Japanese documents (Satō and Bugaeva 2019: 69-70). In Matsumae no kotoba, the allegedly oldest document of Ainu in Japan, and Ezo-kotoba, the oldest clearly dated document of Ainu in Japan, Ainu as well as Japanese are written with hiragana (including hentaigana). Writing Ainu words with hiragana can be considered a marked characteristic of documents belonging to this period, since other documents belonging to almost the same period, Ezodan-hikki (1710) and Wakan-sansai-zue (1712) also use hiragana for writing Ainu words. In fact, although Japanese is also written with *hiragana* in these documents, it is worth noting that, upon closer examination, hiragana (hentaigana) for Japanese and that for Ainu are used slightly differently. For example, 川 (tsu) and 志 (shi) are more often used for the notation of Ainu than for Japanese. In contrast with the documents referred to above, in later documents, while Japanese is generally written with Chinese characters and hiragana including hentaigana, Ainu tends to be written with katakana. In this regard, documents of Ainu in the Edo era are worthy of note in the study of the history of the Japanese writing system in general as well, since they show that the convention of using katakana for foreign words had already been established much

¹ For example, Tokunai Mogami's Ezogashima kotoba [The language of the Ezo island] (Kindaichi 1938: 356) and Enkichi Notoya's Bannin Enkichi Ezoki [A report of the island of Ezo by a keeper Enkichi] (Narita 1972b), though both being worthy of note because of their large volume and rich content, are nevertheless not dealt with here. It is because it would not be appropriate to refer to them independently in an introductory note like this, since they are supposed to be closely related with Moshiogusa in a number of respects.

earlier than the Meiji era, when words borrowed from Western languages like English or German were usually written with *katakana* in Japanese documents.

2 Documents of the 17th century

Matsumae no kotoba (松前ノ言) 'The Words of Matsumae' (n.d., Narita (ed.) 1972a): This document was included in a series of books called Kokuseki-ruisho (国籍類書) 'a series of Japanese books' which once belonged to the Ishikawas in Ise (now Mie Prefecture). It was one of two hundred eighty small books which were read by people in a high position mainly to kill time during their long journeys to Edo, which were probably related to sankin kōtai 'alternative attendance', a system by which the great feudal lords (daimyō) had to spend several months each year in the Tokugawa capital at Edo (modern Tokyo), while their wives and children resided permanently in Edo as hostages.

Matsumae no kotoba is assumed to date back to the period of *Kan'ei* (1624–1645) (Sasaki 1925; Kindaichi 1924). The total number of entries in this vocabulary is 117 (Satō 1998). Ainu words are written in *kana* together with their Japanese meanings. Though few, sentences and phrases are also included. The exact date of this document is not clear, but it must be the oldest Japanese document of Ainu found so far. It now belongs to Tenri Central Library (the Library of Tenri University) in Tenri, Nara Prefecture. This document includes a number of examples which are not found in other documents. Thus, it includes an example 'ゆ王んふ (yuwanfu) 六川の事' corresponding to the present form iwanpe 'six' but this notation may imply that this word once had a form like *iwanp or *iwanpa.

In addition, Satō (2008: 174) suggests, based on the fact that h (n) is used for k, while $\parallel \parallel$ (tsu) is used for n, that the content of *Matsumae no kotoba* is likely to go back to a time earlier than the time of its copying, to at least the end of the Muromachi era (c. the latter part of the 16th century), because such usage of katakana is supposed to be characteristic of this period (Nakada 1972: 227-228).

It would be appropriate here to touch upon a document of Ainu written by a Westerner in almost the same period as those mentioned above. An Italian Jesuit, Girolamo de Angelis, recorded Ainu words (18 entries) in the record of his journeys to Hokkaidō, 'Relatione del Regno di Iezo' [An account of the land of Iezo] (1625) (Cieslik 1962). It should be noted that this material includes a number of older characteristics of Ainu. For example, in modern Ainu, okkay usually means 'adult man', whereas in Angelis's material, the meaning of *occay* (= *okkay*) is explained as 'young man, boy'. What is interesting is that this word is explained as 'boy' in *Matsumae no kotoba* as well. Thus, these materials appear to reveal the same old semantic feature, which has apparently changed in the modern form.

Yet, at the same time, it should be noted that this material includes a number of forms that are hard to explain if we assume they were acquired directly from native speakers of Ainu. For example, emus 'sword' is written as yemuxi. This notational feature can only to be explained by assuming that Angelis's material was copied from some material originally written in kana by a Japanese author because the phonetic value of the initial λ was known to be [je] in this period in Japanese, unlike today's pronunciation [e], and so it was natural that the initial λ was usually romanized as ye by Westerners at that time.² So the romanization like yemuxi 'sword' is most likely to be a result of romanizing mechanically a form originally written in *kana* like $\lambda \in U$ by some Japanese writer. In addition, the romanization xi with the redundant i may also be a reflex of its having been transliterated mechanically from \cup . However, for all that, we cannot deny that Angelis's material still remains incomparably valuable in the study of Ainu because of its antiquity as well as its being clearly dated.

3 Documents of the 18th century

Ezo kotoba (狱言葉) 'The words of Ezo' (Kūnen 2010 [1704]):

This document is an Ainu vocabulary written by a priest called Kūnen (1655? -1731) who travelled in Hokkaido in 1704. It is very important in that it is the oldest attested Ainu vocabulary of considerable size that is clearly dated (Satō 2014). The total number of entries is 456. Ainu words are written in *kana* after the Japanese entries. This used to belong to the Fumon Temple in Fukui Prefecture, but now it belongs to Fukui City History Museum.

This document is notable in that it is believed to include a number of old characteristics of Ainu (Satō 2015a). Thus, the example'く連ふ尔 (kurefuni) 桑の木' (*hurepni* 'mulberry tree') shows that the Ainu pronunciation of hu in this period was either [hu] or [xu], but not the present [Φu]. Also, the example 'あへ連んほう (aherenhou) かつ たたく' (ape erepo 'to push firewood into the center of the hearth') shows that the root rep 'center of hearth or sea' may have once had an unknown consonant (here written tentatively as *H) like *reHp (see also 3.2.). This unknown sound here is assumed to correspond to the kana h, the exact phonetic value of which is not necessarily clear but which likely functions as a kind of (most likely glide or semivowel-like) consonant.

Ezodan hikki (蝦夷談筆記) 'A report on the Ainu' (Matsumiya 1969 [1710]):

This book was compiled by Kanzan Matsumiya in 1710. It had been the oldest clearly dated valuable Ainu vocabulary until Ezo kotoba was recently discovered. It was so famous that there were made many copies of this book, but they also contain many errata, so we have to be careful in using this document to study Ainu. Ainu words are

² Murayama (1987: 78) already reached the same conclusion as I note here.

written in hentaigana (变体仮名) together with their Japanese meanings. The total number of entries is 121.

Wakan sansai zue (和漢三才図会) 'Illustrated Sino-Japanese encyclopedia' (Terashima (ed.) 1998 [1712]):

This is an encyclopedia compiled by Ryōan Terashima, published by Kyōrindō, Osaka in 1712. This includes a short Ainu vocabulary called Ezo kokugo (蝦夷國語) 'Language of the Ezo Land' in the book itself on page 24 of part 13 in the volume 14. Ainu words are written after the Japanese entries. The pronunciation is also written in hentaigana (变体仮名). The total number of entries is 56.

Hokkai zuihitsu (北海随筆) 'An essay on the northern region' (Sakakura 1969 [1739]): This book was compiled in 1739. The author is Genjiro Sakakura. It was also so popular that there are many copies. There are many errata in this document as well, so we have to be careful in using this document to study Ainu. Ainu words are written to the right of the Japanese entries in *katakana*. The total number of entries is 228.

Ezo sōshi (蝦夷草紙) 'The Ezo storybook' (Mogami 1965 [1790]):

This book was written by Tokunai Mogami in 1790. The copy written by the author belongs to the Archive of Tokyo University. Ainu words are written after the Japanese entries in katakana. The total number of entries is 145. The vocabulary is worthy of in Japanese. This implies that the vocabulary was compiled with meticulous care to write Ainu words as accurately as possible.

Moshiogusa (もしほ草) 'Seaweeds for making salt' (Uehara 1972 [1792]):

This is the first published Ainu dictionary in the world. The author is Kumajirō Uehara (or Yūji Uehara). He is said to be the most famous interpreter (ezo tsūji 'Ainu interpreter') in the Edo era. The dictionary was published in 1792. The number of entries is 2000 (Tanaka and Sasaki 1985). It should be noted that it also contains various kinds of texts including those of oral literature at the end of the dictionary.

Ezoki (蝦夷記) 'The records of Ezo' (Kyūkan 1795):

The main characteristics of this book are as follows (Satō 2003b). It is known from the date at the end of the book that it was compiled in 1795. The author's name 'Kyūkan'「九冠」is also written but since it is a pen name, we do not have any further information about the author. It belongs to Sakata City Kōkyū Library in Yamagata Prefecture. Ainu words are written in *katakana* with their Japanese meanings. The total number of entries is 1595. It also includes Ainu versions of various ordinances in the appendix as well as part of Matsumae Onjima Gōchō ('The list of islands in Matsumae') in the main part.

4 Documents of the 19th century

Ezogoshū (蝦夷語集) 'Collection of Ainu words' (Uehara 1824):

The author is Yūji Uehara, probably the same person as Kumajirō Uehara, the author of Moshiogusa (1792), because the Chinese-like pronunciation of the 'Kumaji-' part of his name is 'Yūji'. It was compiled in 1824 (Tanaka and Sasaki 1985). It belongs to the National Archives of Japan. Ainu words are written after their Japanese entries. The total number of entries is 6,000 (Tanaka and Sasaki 1985). It is probably the largest Ainu dictionary in the Edo era.

Ezo kotoba irohabiki (蝦夷言いろは引) 'Ainu words arranged in kana order' (Itoya 1848, Satō 1995):

This vocabulary was written by Kizaemon Itoya in 1848. He lived in Otaru which is located on the west coast of Hokkaido. Since Ainu dialects of this district became extinct very early, this material is highly valuable in that it most likely includes a number of forms of this extinct dialect. Ainu words are written after their Japanese entries. It should be noted that Japanese entries are arranged in the order of the Japanese Iroha syllabary. Such a characteristic is not so common in other Ainu vocabularies in the Edo era. This way of arranging entries shows that it was compiled for a practical purpose as well as with greater care. The total number of entries is 1724 (Satō 1995). It also includes Ainu versions of ordinances at the end.

5 The historical development of Ainu known from old documents

5.1 Notion for 'long' vowels

It was already pointed out that Matsumae no kotoba (17 c.) included notations suggesting the presence of long vowels, which are absent in modern Hokkaido Ainu, e.g. 連いら (reira) for modern *réra* 'wind' and てい多 (teita) for modern *téta* 'here' (Satō 1999, Satō 2016b). Similar notations are also found in Ezo kotoba (1704) (連いら (reira) 'wind'). The relevant forms in other documents are as follows: 「連ら」 (rera) 'wind' (Ezodan hikki (1710)),「れら」(rera) 'wind' (Wakan sansai zue (1712)),「レイラ」(reira) 'wind' (Hokkai zuihitsu (1739)),「レイラ」(reira) 'wind' (Ezo sōshi (1790)),「レイラ」(reira) 'wind' (Moshiogusa (1792)),「レラ」rera 'wind' (Ezoki (1795)),「レラ」rera 'wind' (Ezogoshū (1824)), $\lceil \nu \ni \rfloor$ rera 'wind' (Ezo kotoba irohabiki (1848)).

As far as the word for 'wind' is concerned, the occurrences of 'long' notations seem rather sporadic,³ though at first sight it seems that they can be found more frequently in relatively older documents. However, we cannot assert that there is such a clear difference according to the dates of these documents. What is more important is that there are apparently many cases where a 'long' notation appears rather regularly: \[\&\ \epsilon\$ ふかつふ」(tofukatsufu) for modern tókap 'daytime' (Ezo kotoba (1704),「とう可婦」 (toukafu) 'daytime' (Ezodan hikki (1710)),「とつあつふ」(totsuatsufu) 'daytime' (Wakan sansai zue (1712)),「タウカツフ」(taukatsufu) 'daytime' (Hokkai zuihitsu (1739)),「ト ーガプ」(toogapu) 'daytime' (*Moshiogusa* (1792)), 「トウカプ」(toukapu) 'daytime' (Ezoki (1795)), 「トヲガップ」(towogatsupu) (Ezogoshū (1824)), 「トウカフ」(toukafu) 'daytime' (Ezo kotoba irohabiki (1848)).4 Nevertheless, we should not jump to a hasty conclusion from the seemingly regular occurrence of a 'long' notation in certain lexical items. We should consider this problem by investigating examples from other documents from various points of view.

As Satō (2009) noted, if a speaker had an 'etymological' intuition that to in tokap 'daylight' was related to the independent stem to 'day', tokap was most likely to be pronounced with a long vowel due to the presence of an accent kernel there. Thus, it is most likely that to- in tókap 'daytime' may also have once been pronounced as long by analogy to the pronunciation of the independent to 'day'. If so, it would be better to think that this 'long' notation does not indicate a contrast in vowel length but should rather be interpreted as a redundant intonational property deriving from accent. In this respect it should be noted that the notations of rera 'wind' in old documents are not always necessarily long, so they are not necessarily long phonologically.

This probably shows that long vowels may have existed only as a redundant feature during a limited period in the history of the Ainu language: they should not be regarded as an old property of Proto-Ainu, but only as a secondary development in Hokkaidō dialects. The assumed process would be as follows: first, by analogy to independent monosyllabic CV words, the first syllable of the polysyllabic compound words including the above-mentioned stems was regularly pronounced as long (e.g. *tó* [to:] in *tókap* [to:kap] 'daytime' was pronounced in the same manner as *tó* [to:] 'day') and then the effect extended even to CVCV monomorphemic words with an exceptional accent on the first syllable (e.g. réra *[re:ra] 'wind'). However, after that, at least in Hokkaido dialects, these long vowels did not become distinctive and were eventually lost. Incidentally, in order to explain the exceptional accent in forms like réra 'wind', which does not follow the strong iambic tendency in CVCV stems in the Ainu language, we should reconstruct an unknown consonantal sound in their proto-forms as in *reHra (Satō 2014).

³ Here, a 'long' notation refers to *rei*. Such notation including *ei* is likely to indicate not a diphthong but a long vowel from the point of view of the Japanese notational convention.

⁴ Here, it is likely that the notations tou, totsu (or a miscopy of tou), tau, tsu, and too indicate a syllable with a long vowel.

While an independent morpheme with the phonological shape C(V) (e.g., só 'floor') is usually pronounced as long ([(C)V:]) in modern Hokkaido dialects, it is usually pronounced as short when it is part of a compound. Therefore, there is no phonological distinction in Hokkaido Ainu dialects. By contrast, in modern Sakhalin dialects, an independent morpheme with the (C)V shape is always pronounced as long, whether it stands independently or as a constituent of a compound and is interpreted phonologically as (C)VV. Further, a form with the (C)VCV(C) accented in the first syllable in Hokkaido dialects generally corresponds to (C)VVCV(C) in Sakhalin dialects (kaa 'thread', reera 'wind') (Hattori 1964). Based on this dialectal difference, Hattori (1967) assumes that Proto-Ainu did not have distinctive accent but had a vowel length opposition and that the vowel length developed into the opposition of accent in Hokkaido dialects (cf. Itabashi 2014). Therefore, a kind of 'long' notation found in old documents seems to support Hattori's claim.

However, Satō (2016b), in contrast with Hattori (1967), claims that the opposition of vowel length in Sakhalin dialects is a secondary development. The points are as

- 1) It would be very difficult to explain the occurrence of the long vowel /uu/ in the word tuuki 'sake cup' in Sakhalin dialects, a loan word borrowed from Japanese, without assuming that it secondarily developed from the accented vowel in the first open syllable, which is irregular from the point of view of the normal accent rule in Ainu, because in the original Japanese word the given vowel is short (Old Japanese: tuki (HL), Hokkaido Ainu: túki 'sake cup').
- We can often find examples in which a long vowel in an independent form alternates with a short one in a compound (e.g. nii 'tree'; 'ah-ni 'Manchurian elm' (Hattori 1964)). From the point of view of internal reconstruction, this most likely indicates that the short form found in the compound retains the older form, while the long vowel in the independent form developed secondarily in Sakhalin dialects.

Further, as a counterargument to Hattori (1967), who argues that long vowels in Sakhalin dialects retain the phonological system of Proto-Ainu, the following point should also be considered:

According to Hattori (1967: 45), in Sakhalin dialects, when a stem beginning with /'V/ follows a CVV stem, the resultant form becomes CV'V, not CVV'V (e.g. kaa 'snare'; 'ama 'to set'⁵ $\rightarrow ka'ama$ 'to set a snare' (not *kaa'ama)). If

⁵ Hattori (1964, 1967) assumes a glottal phoneme transcribed as / ' / in the initial position of every morpheme beginning with a vowel in order to keep the syllabic structure of Ainu simple. With this we have only two syllable types in Ainu: CV and CVC. Without it we would have to posit four different syllable types: CV, V, CVC, and VC. However, whereas Hattori's analysis reduces the number of syllable types in half, it makes morphological alternation rules in Ainu extraordinarily complex and so should not be supported. In fact, a glottal phoneme should be assumed not from the primary morphological level, but only after the lexical phonological level. For further discussion, see Satō (2015b: 6).

Sakhalin dialects retained an older characteristic in this regard, as Hattori (1967) argues, a similar alternation should be observed in Hokkaido dialects as well. However, in that case, what matters is accent. According to Hattori (1967), for Sakhalin forms in which the first syllable has a long vowel, Hokkaido dialects normally exhibit an exceptional accented short vowel in the first open syllable of the form. Since in the respective forms in Hokkaido dialects, long vowels are expected to change into short vowels, the condition of the exceptional accent assignment on the first syllable should have been lost and the accent should have been assigned on the second syllable according to the general accent principle of Ainu, i.e., a CVCV stem should be generally accented on the second syllable. However, the case is that relevant forms in Hokkaido dialects regularly exhibit accent on the first syllable, not on the predicted second syllable (e.g., ka 'thread', 'eka 'to twist' $\rightarrow k\hat{a}$ 'eka 'to twist thread', not the predicted ka'éka). This suggests that long vowels in the relevant forms in Sakhalin dialects are a secondary new development and so is an alternation like $kaa + 'ama \rightarrow ka'ama$. If we take the latter part of the long vowel as a kind of glide consonant, we can completely account for this alternation of vowel length in Sakhalin dialects: the sequence *VC'V is not word-internally permissible in Ainu dialects throughout (probably in Proto-Ainu as well) and should alternate with VCV. So *VV+V changed into V'V, the second V of VV being interpreted as C and here reflected as / ' /. If this Sakhalin dialect alternation occurred in Proto-Ainu as well, Hokkaido dialects should also have followed this alternation rule. However, the accent does not fall on the predicted second syllable but regularly on the first syllable in the relevant forms in Hokkaido dialects, for further discussion, see also Satō (Chapter 16, this volume).

5.2 Notation of the word *pirka* 'good'

The forms of the word pirka 'good' found in Ezo kotoba (1704) are as follows (Satō 2016a): 飛類可 (hiruka), 飛 いるか (biruka), 飛る可 (hiruka), 飛いるか (biruka), 飛 るか (hiruka), 飛り可 (hirika). In terms of the use of kana in this period, both characters 飛 and 飛 " are supposed to indicate /pi/ and so this difference would not be a major problem. The important problem is rather that δ (ru) corresponds to /r/ in most cases in the relevant attested forms, though it is true that there is also one exception like 飛り可 (hirika) where ϑ (ri) (not δ (ru)) corresponds to /r/. That is, it can be said that for the notation for /r/ in pirka 'good' & (ru) is used in five of the six examples. If we look only at this, we may conclude that this can be accounted for by the fact that the writer interpreted a vowel-like redundant sound at the end of /r/ as, e.g. a kind of shwa.

However, this assumption does not work well in another respect. Thus, in other forms having the same sequence /ir/ as in pirka 'good', we do not find the same notation る (ru). What we find instead is り (ri). For example, 志りくん祢 (shirikunne) sirkunne 'dark', きゝ里 (kikiri) kikir 'bug' are always written with 里 (ri) or り (ri), but never & (ru). It is not immediately clear why & (ru) is always used in the sequence /ir/ in pirka 'good', whereas θ (ri) or Ξ (ri) are used in sirkunne 'dark' and kikir 'bug'. Moreover, if this phenomenon were limited to Ezoki (1795), we could ascribe it to some reasons specific to this particular document. However, if we look at other documents, we can see that this is not the case. First, in Matsumae no kotoba, which is supposed to belong to the oldest stratum of Ainu old documents, we find only forms like びる 可 (biruka), 志りく川ね (shirikunne), but not, for example, "birika" or "shirukunne" (Satō 1999). Also, in Ezodan hikki (1710), although examples are not so numerous, we can find forms like ぴる可 (piruka) and 志りくん祢 (shirikunne), not "pirika" or "shirukunne" (Satō 2009). Further, in *Hokkai zuihitsu* as well, *pirka* 'good' is written as ビル π (biruka), and sir 'land, atmosphere' is written as $\gg 9$ (shiri). And although the date is not so old, Ezoki (1795) also exhibits this property. All the 42 examples of pirka 'good' are written as *piruka* (not "pirika") without exception. In contrast, in forms such as >リクン子 (shirikunne) *sirkunne* 'dark', シリピルカ (shiripirika) *sirpirka* 'the weather is fine', モシリ (moshiri) *mosir* 'island', シリコトル (shirikotoru) *sirkotor* 'slope', and 志り古るかむる (shirikorukamui) *sirkorkamuy* 'god of tree', although they include the same sequence /ir/, only リ (ri) or り (ri) are used but not ル (ru) or る (ru).6

Taking all these into account, we suggest that the difference in old notations for the same /ir/ sequence of modern Ainu forms cannot be explained by some factors specific to *Ezo kotoba* or as an accidental phenomenon which happens to be false due to the scarcity of the data.

Thus, the question is why δ (ru) or ν (ru) is used in *pirka* 'good', whereas η (ri) or リ (ri) is used in sirkunne 'dark', sirpirka 'the weather is fine', mosir 'island', sirkotor 'slope' and sirkorkamuy 'god of tree'. It is not so easy to answer this question, but for the moment I would like to suggest that the study of CVC+V type compounds (Satō 2014) may be useful in considering this problem. CVC+V type compounds usually bear accent on the second syllable but there are a very few exceptions where the accent falls on the first syllable of the compound, e.g., rep-oraye > réporaye 'push something to the center of the hearth'. In order to account for such exceptions, I have proposed to reconstruct an unknown consonant *H, just as in the case of réra 'wind' (< *reHra) above: rep 'center of the hearth or open sea' may have been derived from a form like *reHp. Likewise, the fact that pirka 'good' was written as (piruka), not "pirika", can also be ascribed to this unknown consonant *H. At least in the 18th century, pirka 'good' may have been *piHrka with an *H sound intervening between i and r. Since r

⁶ It should be noted that though very few, there are examples similar to (piruka) pirka 'good' such as ビル (biru) pir 'wound' and チキル (chikiru) cikir 'foot'.

(and the following redundant vowel-like sound) was separated from i by an *H sound, it was not directly influenced by this *i*, therefore it was written with 3 (ru). In contrast, historically in forms like sir 'land' this *H was absent and so r was adjacent to i and became palatalized, which is reflected in the notation \mathcal{P} (ri). This assumption is problematic in that it needs to posit an unidentified hypothetical *H as a phoneme in the history of Ainu and as a result we would have to assume an entirely foreign superheavy syllable structure like *CVHC in an earlier stage of Ainu. However, I propose this assumption as a kind of thought experiment for further study in the future.

6 Conclusion

It goes without saying that for linguistic study, old documents, whether they were written down by native speakers or not, are quite important not only as linguistic materials, but also in terms of acquiring a broader perspective on a given language including the socio-historical background where it has been placed. In this sense, the study of Ainu old documents should get more attention in future research. Here I have given a list of major documents and briefly described some interesting topics found in them.

Appendix: A sample of an Ainu heroic epic text recorded in an old document Ezo chivaranke narabini jōruriqen [Ainu language of courts and a text of an epicl from Satō (2003a)

The following is a sample text that was recorded by an anonymous Japanese author in the Edo era. The original, which belonged to Shokokan Library in Mito city, was reduced to ashes in an air raid by U.S. forces on August 1, 1945. However, fortunately, a good copy had already been made by Kyōsuke Kindaichi, a famous scholar of the Ainu language, in 1929. The copy now belongs to the Library of Kokugakuin Tankidaigaku in Takikawa city, Hokkaido. As we can see below, it is written with kana, the Japanese syllabary system. Its exact date is not clear, but since this text is written in the single document together with another text that is also found in the famous Moshiogusa (1792), this epic text may date back to as old a period as Moshiogusa. Due to the lack of a Japanese translation, it is not so easy to decipher this text, but it generally seems that this text reflects the traditional style of an Ainu heroic epic rather well, so it is doubtless remarkable for both its antiquity and exceptional accurateness for this period. Hence, we may suspect that the writer was one of scholars

アコロユビ \triangle シシヤクチレ<u>シユ</u> \triangle イエカラカル \triangle ラホキタ \triangle イヌアン a-kor yup-i sisak ci-resu i-e-karkar rapoki ta i-nu-an 4.A-have brother-POSS rare RES-raise 4.O-APPL-do while LOC ANTIP-hear-4.S My elder brother did good nursing for me. Meanwhile, I heard (that), and so

ゴイシカリ△ウンクル△レイリワク子△トウポニウ子クル△カチョ ko Iskar un kur re irwak ne tu poniw ne kur kaco then Iskar live.at man three brothers COP two younger COP man drum people in Iskar, two younger brothers among three brothers

P=タ \triangle ウナフンケ \triangle ションゴPリキ \triangle Pコロユビ \triangle Pコロ<u>シヤ</u>ボ an i ta unahunke sonko arki a-kor yup-i exist NMLZ LOC invitation message come.PL 4.A-have brother-POSS a-kor sapo 4.A-have sister day, invitation messages came. My brother and sister

ウタットラノ \triangle イグタシパ \triangle ケシトカイキヲアリアリ<u>シヤ</u> Δ *utat tura-no ikutaspa kes-to kayki oar-ar-isam* PL COM-ADV banquet every-day too totally-not.exist together attended the banquet. They were absent from home for many days.

ラボキタ \triangle ユプケア $\underline{>}$ ユル \triangle チトウルセン \triangle ハウエヱ子ヲカイ rapoki ta yupke asur ci-turse-re haw-e ene meanwhile LOC strong rumor RES-fall-CAUS voice-POSS like.this oka i exist.PL NMLZ Meanwhile, urgent messages came. The story was as follows.

イシカリ△ウイルプ△アコロユピ△セマンタアンベ△ウコユルシカ

Iskar uyru p a-kor yup-i hemanta an

Iskar inhabit NMLZ 4.A-have brother-POSS something exist.SG

pe uko-i-ruska

NMLZ SOC-ANTIP-be.angry.with.sth

The people in Iskar got all angry at my brother for something.

シャラツカムイ△ユブケイケ△ウコシヤンケ△タプ子アンベ△

sarak kamuy yupke ike uko-sanke tap ne an pe fight divine strong one.of SOC-take.out this COP exist.SG NMLZ They made a hard fight with each other.

アヱホマトウ△アムショカタ△アマツコシヤヌ△

a-e-homatu amso ka ta a-mat-kosanu

4.A-at.APPL-be.surprised bed top LOC 4.A-stand.up-suddenly.SG I was surprised at this. I jumped to my feet on the bed and

アミコシヨンテ△アエヲリキ△クツコルカ子△

a-mi kosonte a-e-oriki-kut-kor kane4.A-wear kimono 4.A-APPL-upwards-belt-have doing.soI girded myself on a kimono.

アラムコパシテプ△アフンボケチウ△カ子ポンカシヤ△アシヤハウヌ

aramkopastep a-kut-pok-e-ciw kane pon kasa

sword 4.A-belt-bottom-APPL-pierce golden small armor

a-sapa-unu

4.A-head-attach.to

Doing so, I was bearing a sword and wearing an armor on the head.

△タプヲロワ△アシヨヨテレケ△イクルカ子ケウゴシヤンパ△

tap or-o wa a-soy-o-terke i-kurkasi kew-kosanpa this place-POSS ABL 4.A-outside-to.APPL-jump 4.O-above expel-suddenly.PL Then, I went out quickly making noises of heavy footsteps.

アヲマタフミ△ケウワツキ△ヲマナナイ子△イシカリコタン△

a-oman-hum-i kew-ew-atki oman-an ayne Iskar kotan 4.A-go.SG-sound-POSS expel-P.RED-repeatedly go.SG-4.S finally Iskar village The sound of my going was sounding heavily. I kept going and finally I reached the Iskar village.

アコシレパ△ヤイヌマレ△アイノアツワ△シツチカラ△ウタレクルカシ△

a-ko-sirepa iyaynumare aynu at wa sit ci-kar 4.A-to.APPL-arrive.at for.God's.sake man gather and appearance RES-make utar kurka-si people above-POSS

For God's sake, there were so many people and the people

テシナタラ△ウタレコツチヤタ△イシカリ△ウイルプ△トウホエウ子イケ△

COP one.of

lined up on each other. In front of the people, two younger brothers from Iskar

カチヨタフカル△イン子ウタレ△アコロユピ△シャラツカムイ△ユプケイケ△

kaco tapkar inne utar a-kor yup-i sarak kamuy drum dance many people 4.A-have brother-POSS fight divine yupke ike

strong one.of

were dancing a drum dance. Many people and my brother had a hard fight

ウゴアンテ \triangle クルカシケ \triangle ヱイランケ \triangle クルカシケ \triangle ユプケタムクル \triangle

u-ko-an-tekurkasikeeyranke?kurkasikeyupketamkurREC-APPL-be.SG-CAUSmoreover?moreoverstrongswordlightwith each other and moreover, I swung around my shining sword violently.

アゴテレケレ△アエタメトゴ△セルコシヤンパ△ウタラパウヌワ△

a-ko-terke-re a-e-tam-etok-o-ser-kosanpa

 $4. A-to. APPL-jump-CAUS \\ \\ 4. A-to. APPL-jump-CAUS \\ \\ \phantom{APPL-sword$

I drew my sword toward

ウタレケシウヌワ△

utar pa un wa utar kes un wa people upper.part attach.to and people end attach.to and the front of the people and the back of the people.

イン子ウタレ△アエタメトゴ△センナラタラ△コカトウコンノ△ユプケニクル△

inne utar a-e-tam-etok-o-sen-natara yupke be.numerous people 4.A-APPL-sword-front-APPL-draw-continually strong ni kur

tree shadow

I killed many people with my sword. A terrible shadow of a pole

イコシウトリ△タツポハテキ△タラプシヨ子△アヲマンテ△

i-ko-si-turi tap-po patek tarap sone a-oman-te 4.O-to.APPL-REFL-stretch this-still.even only dream as.if 4.A-go.SG-CAUS reached me. I remembered only this as if it were a dream.

フナクパキタ△ヤヰシカルン△チセウプショロ△アヲシキマカ△

hunak-paki ta yay-esikarun cise upsor a-o-sik-mak-a where-time LOC REFL-recall house inside 4.A-at.APPL-eye-open-TR.SG After a long time, I came to myself. I opened my eyes in a house.

アベトウイシヤム△アヰホラリ△インガランコ△シシヨタネシイ△

ape tuysam a-e-horari inkar-an ko siso ta fire near 4.A-at.APPL-reside look-4.S then the right.side-seat LOC I sat by the fireside and looked around. At the righthand side seat of the hearth (looking in from the east window opposite to the entryway),

シ子メノコ△アベトウイシヤム△ヱホラリ△チキ子シイ△カ子

チヲシケニ△アキムイカシ△コキツテク△イヨウシタ△ポン

ci-otke-ni a-kimuykasi-ko-kik-tek iyos ta pon RES-prick-tree 4.A-above.head-to.APPL-hit-momentary after.that LOC young staff hit me on the head, and after that a young

メノコ△チトウルセン△カ子チイヲシケニ△チヲメンメウヰ△

menoko ci-turse-re kane ci-otke-ni woman RES-fall-CAUS metal RES-prick-tree ci-o-men-mew-e

RES-bottom.POSS.PRF-pull.out-pull.out-TR.SG woman came at once. The metal staff was pulled out (by her).

ヲシユラ△タフヲロワ△ヱイバタウセアツテ△ポンメノコ

osura tap or-o wa ? pon menoko throw.away this place-POSS ABL ? young woman She threw it away and after that the young woman

キイタカマ△シヨモカエキ△アヌンセ子△ア子イタパン

itak? somo ka ene anun h/senne a-ne tap an speech NEG EMPH so stranger not 4.A-COP this exist.SG said, I am never a stranger to you.

タンコタンレ人イヨチコタン子人ヲロウンマツ人ア子ワ人

ivoci kotan ne tan kotan re or-o mat this village name Ivoci village COP place-POSS live.at woman a-ne wa 4.A-COP and

The name of this village is Ivoci village. I am a woman from this village and

イヨチウングル△ヤエリワッコルワ△イラエケアンコ△

kur vav-irwak-kor wa e-ravke-an ko Ivoci live.at man REFL-brother-have and 2SG.O-kill.SG-4.S and.then I have only one brother and you were killed and then

ヱイキラアヌワ△ヱヱカアン△

e-e-kira-an wa e-e-ek-an 2SG.O-with.APPL-escape-4.S and 2SG.O-with.APPL-come.SG-4.S I escaped with you and I came with you.

石狩ウンマツ△メナシ△シヤムンベ

Iskar un mat menas sam un ре Iskar live.at woman east near live.at NMLZ A woman from Iskar, one from the east

テケパシテワ△イヨチウンクル△アコロユピ△イノシバワ△

wa Ivoci un tek-e-pas-te kur a-kor vup-i hand-APPL-run-CAUS and Iyoci live.at man 4.A-have brother-POSS i-nospa 4.0-chase and

abducted (me) and a man from Iyoci, my brother, chased me and went away.

イシヤムタフ子アンベ△アエホマトウ△

tap ne an pe a-e-homatu not.exist this COP be NMLZ 4.A-at.APPL-be.surprised I was surprised at this.

アショヨテレケ△ピシユンルルシヤマ△

a**-**sov-o-terke pis un rur sam 4.A-outside-to.APPL-jump beach live.at sea.surface near So I went out quickly. Toward the seashore,

リコテレケレ△ホンレパチフ△レベカツタ△

rik-o-terke-re pon repa cip rep-ekatta upper.place-to.APPL-jump-CAUS be.small go.sea.fishing boat open.sea-pull.to I headed a small deep sea boat offward.

ウムンカッカタ△アヰホラリ△

um un kas-ke ta a-e-horari boat.stern ALL top-place LOC 4.A-at.APPL-reside I sat down on the boat stern.

ヒリカアツシヤプ△アベコレウキ△アトウイシヨカタ△

pirka assap a-pe-ko-rewe atuy-so ka ta good oar 4.A-water-with.APPL-bend sea-surface top LOC I bent the oar together with water (=rowed). In the sea,

アヲマヌフミ△アエコンラムカリ△イクルカタ△

a-oman-hum-i a-e-kon-ram-kari ikurka ta 4.A-go.SG-sound-POSS 4.A-by.APPL-have-heart-spin moreover LOC I was excited at the sound of my own going. Moreover,

イトウレンクニプ△

i-turen kuni p4.O-protect should NMLZmy guardian deity's

ユフケフミ△ケウワッキ△ヲマナイ子△イヰトウナンカリ△

yupkehum-ikew-ew-atkiomanaynei-etunankarstrongsound-POSSexpel-P.RED-repeatedlygo.SGfinally4.0-meetfurioussound sounded loudly. The deity went and to me

ヲレブンラ△チヤナヤンケ△レラホセ△ポロ△ロクント△カヤ

o-rep-un rera ci-ya-n-a-ya-n-ke bottom.POSS.PRF-open.sea-belong.to wind RES-land-INTR.SG-?-land-INTR.SG-CAUS rera ehose poro rokunto kaya wind against big ship sail wind from offshore came ashore. Against the wind, a big ship,

テケヱムコ△レウナタラ△タフヲロワヤエマウシテ

tek emko rew-natara tap or-o wa mast half bend-continually after place-POSS ABL its mast bent into the half. After that . . .

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4 Ainu language Western records

1 Introduction

The mainstream academic studies on the Ainu language in the 20th century were the domain of prominent Japanese linguists like Kyōsuke Kindaichi and Shirō Hattori, and linguists specializing in Ainu proper such as e.g., Mashiho Chiri, Itsuhiko Kubodera, Suzuko Tamura, Kyōko Murasaki, and Tōru Asai, and were conducted, with results published, in Japanese. Not for all of them, however, was the primary aim a structural description of the tongue; some of them focused on the astonishingly rich folklore of the Ainu, especially their epics called <code>yukara~yukar</code> and their literary values. 1906 is usually provided as the date when Kindaichi started his linguistic studies of the Ainu epics (cf. Tamura 1967: 608), but his grammatical description of the language appeared in print only in 1931.

The first modern grammar of Ainu compiled by a trained linguist in a Western language, namely that of Kirsten Refsing, on the basis of her own fieldwork was published only in 1986. Practically its only predecessor was the most famous grammar of Ainu by Rev. John Batchelor (1854–1944), for decades known worldwide and referred to as the only one existing since its first appearance in 1887 as an article in a Tokyo academic journal, with consecutive versions published in four subsequent (1889, ²1905, ³1926, ⁴1938) editions of his even more famed Ainu-Japanese-English dictionary.

Thus, Western scholars interested in Ainu, most of them being particularly interested in its origin, were "doomed" to rely on the needed data provided either by Batchelor or by sources in Japanese.

The most comprehensive work in the discipline in any language is the four-volume 2,040-page (1989–1997) Ainu grammar written in German by Dettmer (1927–2014), a specialist in the history of Japan, who was author of a respected academic introduction to the study of the history of Japan and who had no intention of retraining as a linguist. He became interested in the history of the Ainu around 1957 and this led him to the history of the first contacts with the people and the accumulation of our knowledge about them. Dettmer realized the significance of Ainu language records but also their scarcity and lack of any guidance to their study so he undertook the task of bringing some order to the field – hence many among his writings preceding the grammar in question (1967, 1969, 1980, 1981) as well as those written simultaneously with the grammar (1993, 1993a, 1994, 1995, and, conclusive in this respect, 1997) were

devoted to the history of studies of the Ainu language, especially its lexicography, all with the purpose of studying the history of the Ainu in the original language.

Dettmer's grammar¹ is a clever compilation of data from all possible sources, be it Japanese or Western, old or new, juxtaposed with the material presented by Kindaichi and Chiri, complemented, amended, commented, etc. wherever appropriate or possible. At the same time, however, both the grammar and the other works by Dettmer referred to above reveal the abundance of Western sources on the Ainu language as well as their value and importance in, and for, Ainu studies specifically, and in other disciplines (like history) – for special purposes.

Access to these sources, especially those of earlier dates, for decades was limited and difficult not only because of their age but also because of the fact that many of them were printed in very limited editions released locally in remote places with turbulent and tragic histories. The situation has improved dramatically with the publication of Refsing's impressive 25-volume set labeled Ainu Library Collection in four series (here referred to as EEWL, EEWI, EEWCT, and EEWCR, each of them with general introductions providing comprehensive information on the most important of such sources and on their backgrounds and contexts) on the one hand, and the introduction and development of the Web on the other hand, both making most of the sources in question easily accessible – as a principle, in facsimile reprint form. EEWL and EEWI include materials related exclusively to the Ainu language.

What follows is an overview of source and reference materials in "Western" languages (practically languages other than Japanese, but one should be aware of the existence also of sources in languages like e.g., Chinese excluded from this paper). The question to start the overview is what actually potential users of the present Handbook would like, and could expect, to find in this chapter that would satisfy their expectations better than the other existing reference material in the field briefly discussed in Section 2. More specific questions concern issues like: (1) whether only the so-called "early writings in Western~European languages" should be taken into account (as previously done) and, if so, what date should be the chronological end point; (2) whether the term "Western~European languages" should cover only the tongues of "the international sphere of influence" or should the chapter provide information also on data recorded in metalanguages from the "lesser-used languages" of the "West";

¹ In fact, before publishing his 1989-1997 grammar, Dettmer wrote another Ainu grammar (cf. Section 10), i.e., "about 400 pages of rough manuscript draft" (p. xi) to celebrate the 50th anniversary of the publication of "the first modern Japanese monograph on the grammatical structure of Ainu" by Kindaichi (considered by Dettmer to be "the actual founder of Ainu language studies") and Chiri ("Kindaichi's most prominent student"). The chain of events that resulted in the published version of the grammar started from the prominent linguist Shichirō Murayama's (1908–1995) introduction of Suzuko Tamura to Dettmer in 1982 and Tamura's introducing Dettmer to an abundance of unknown to him quasi-published literature which triggered the latter's decision to completely rewrite and reorganize the initial version. According to Dettmer (1989: xi), it was Kindaichi and Chiri (1936) which became the "starting point and foundation for the proposed edition" (1989: xi).

(3) whether source authors and collectors should be limited to "Western" nationals or should the criterion be rather language-oriented (i.e., should sources available in Western languages but written by, or translated from, e.g., Japanese authors be included or excluded); (4) how much attention should be paid to the oldest records of the Ainu language, taking into account their significance and usefulness for, and function in, current research. The conclusion is that something different, new, and value-added must be written about what is old and seemingly well established on this matter, therefore this author has decided to take into account all existing original and significant contributions to the study of the Ainu language regardless of their date of compilation or publication, nationality of authors, or metalanguages used.

2 Bibliographies and other existing reference material

So far, the respective surveys have almost exclusively been limited to the "history of Ainu studies" in response to the demand limited in the same way. The very title of Refsing 2014 – from collecting words to writing grammars – is symbolic and holophrastically but precisely characterizes the output at our disposal. Similarly, the words for 'history' and 'historical' appear in the very well documented works by Dettmer (mentioned above). But results can vary. For instance, Mermet de Cachon 1863 is frequently listed in writings on the history of acquisition of our knowledge about the Ainu language evidently because of the promising word for 'language' in its title: the following is all that concerns the language in the publication:

Their language, simple and easy, does not have an alphabet; it is poor, very vivid, graphic, taking frequent comparisons from the sea, volcanoes, the bear, the deer, etc. Even the salutation goes like "let the spirit and might of a bear be with you". (Mermet de Cachon 1863: 11)

Refsing was right to include the booklet in EEWCT rather than in EEWL in spite of the title. Father Eugène-Emmanuel Mermet-Cachon (1828–1871) was among the pioneering Japanologists and did experience a longer stay in 19th century Hokkaido, compiling the first French(-English)-Japanese dictionary, and lived in 1859-1863 in Hakodate offering courses in French and running a school and a hospital. He also played a role in French-Japanese relations in the service of politicians. Incidentally, his first place of stay in Japan was Naha in Okinawa where he landed in 1854. He has hardly written anything important on the language of the Ainu, but at least he has left behind a trace of his interest in the Ainu (cf. Refsing's introduction to EEWCT 1, 22–24).

Researchers involved in the history of studies of the Ainu language have been naturally excited by discovering and listing the oldest sources recording very limited numbers of words and this again should be evaluated positively. On the other hand, however, such records were very imprecise, often resulting from mishearing, interpretation, errors in notation, and/or in misreading handwriting in rewriting and typesetting for publication. Besides, one has to remember that linguistics as a discipline, with its transcription systems, etc., did not exist at the time of collecting the data. The first such records do have their value above all for a rather small number of well-trained linguists capable of identifying the recorded items and using them for rational purposes like e.g., studying the historical or regional variations of the language, detecting xenic elements or influences, or looking for forms useful in comparative studies.

For historians such lists constitute, above all, evidence for contacts of voyagers, explorers, travelers, missionaries, etc., with the natives now known to be the Ainu. But even in such cases caution is advised: for instance, two words in a record dated (Morera) 1591 (see Section 3), most probably the first Ainu words ever documented in a Western language, were noted down not in the land of the Ainu but in Kyoto from a Kyotoite who had learnt them from the Matsumae (south-western Hokkaido today) lord Kakizaki and his companions visiting the Japanese capital. Taking another Japan-related example, in the first Russian-Japanese dictionary compiled in the 1730s with the assistance of a shipwrecked Japanese named Gonza captured by the Russians on the shores of southern Kamchatka, the equivalent of Russian *vodka* is owomoi ~ awamori; this and a number of similar cases led not only to the conclusion that the poor soul must have been born and raised in the southernmost recesses of Japan but – in the hands of the well-trained linguist Murayama – to the discovery of a treasure for home dialectologists.

One has to remember that there is a difference of cosmic proportions in the importance of records of languages completely extinct (as well as those dead but still remembered by a handful of elders) and languages that still can (and urgently should) be recorded. Assuming that a language is dead when its transgenerational transmission stops, Ainu should be treated as such – and in such cases every record is precious and irreplaceable as a fragment (no matter how small) of mankind's heritage. For the very documentation of such a language as well as its existence in a particular location at a particular moment of history, however, the significance of records of any kind is fundamental.

Assiduously including these old lists of words in their bibliographies, historians and bibliographers of the Ainu and the Ainu language paid no attention to often much more extended and very reliable glossaries of Ainu terminology appended in non-linguistic works, indices of Ainu words in works other than dictionaries, in museum and exhibition catalogs, herbaria – including Japanese-language publications providing additionally Western-language glosses (especially in English and/or Latin); this material escaped also the interest of lexicographers, and it includes items absent from the existing dictionaries. For example, there are 26 lexical items recorded in Strahlenberg 1730, 43 in Furet 1860, 54 in Angelis 1621, 69 in Broughton 1804, while 59 in Munro 1962, 93 in Kayano 1994, at least 100 in Sjöberg 1996, about 175 in Hilger 1971, 258 in Honda 2000, at least 666 in Spevakovskiy 1988, a 358-item list of objects, with Ainu and English names provided in the majority of cases, in FRPAC (2000: 134–150),

and deserving special mention here is AAF (eds.) 1984 with its relatively extensive Ainu-English "Index and Glossary" (AAF 1984: 250-279). Assuming that readers of the present Handbook would be much interested in references to modern academic-level sources of this kind, representative examples of such data will be discussed or mentioned.

Historical sources of international importance on the Ainu in languages other than these turn out to be exceptionally well known among specialists in studies of the people and even older respected bibliographers, with Wenckstern 1895 on top, even if many were only able to get acquainted with these sources indirectly or were only aware of their existence; today, the majority of such sources are available also in Japanese, at times in several different translations. The reason is that in this discipline the contribution of Russians (like Stepan Krasheninnikov, Gavril[o] Davydov, Mikhail Dobrotvorskiy, Nikolay Nevskiy), Poles (like Benedykt Dybowski, Izydor Kopernicki, Ignacy Radliński, and Bronisław Piłsudski), Hungarians (like Benedek Baráthosi Balogh and Aurél Török) proved, on various grounds, to be of the utmost significance. Such sources related to the Ainu language have been taken into account below.

This chapter includes also information on, and references to, sources published by Japanese authors in Western languages as well as sources published in Japanese in which significant Ainu language material in significant amounts is provided together with sufficient explanation in a Western (preferably English – if available) language (cf. e.g., Section 5). Furthermore, selected Western sources including little or no Ainu language data (like translations only of Ainu texts) but precisely identifying and referring to the original texts in Japanese-language publications have been taken into consideration as well because of the possibility of scholars with no command of Japanese simultaneously making use of both sources for further research.

The basic bibliographies of materials in "European" languages for Ainu studies which include publications on the language are Adami (1981) with its continuation Adami (1991a), Adami (1991), and Irimoto (1992). The first of them (92 pp.) is a polyglot bibliography listing 955 works related in any way to the Ainu in languages like English, German, French, and Italian, but also in Dutch, Swedish, Russian, Polish, etc., without, however, providing either translations of the titles into German, the metalanguage of the book, or even short explanations on the contents. The arrangement is alphabetical, no indices provided.

Adami (1991) (138 pp.), in turn, is arranged chronologically, starting from the year 1556 and the name of Luis Frois and ending with the year 1988; it lists 1,122 items and an alphabetic index of authors is appended. The data provided generally repeat the 1981 list, with amendments, additions, indications of the language of publication referred to (judging from the list of abbreviations, 13 languages are involved), and short explanations in Japanese.

Irimoto (1992) (397 pp.) is also a polyglot bibliography listing in Roman-character alphabetic order 3,435 items, including Japanese-language publications with at least titles interpreted in English. Apart from Japanese and English, ten Western languages

are involved but, while Adami neglected works in Esperanto and Finnish, Irimoto seems to have neglected Dutch, Latin, and Hungarian. Both Adami's and Irimoto's bibliographies are very user-friendly for non-Japanese users and are very reliable.

For the earliest sources on the Ainu language, Dobrotvorskiy (1875), Chamberlain (1887a), Wenckstern (1895), and Pagès (1859) are recommended. Pagès lists works related to Japan in chronological order; works between the years 1496-1859 containing information on the Ainu and their language are also included, e.g. (de) Angelis (1624), Pfizmaier (1851), Leupe (1858) and its English translation of 1859. Of limited use can be Shikiba (1942) – although the metalanguage is Japanese, data for Western sources stick out prominently from the Japanese text.

Among bibliographies focusing on the Ainu language recommendable in the first place are data with commentaries in Dettmer (1967-1969), (1980), (1997). Additionally recommendable are Refsing (1996: 28–32), DeChicchis (1995: 119–124), and Suppanschitsch and Stalp (2001), of which the last is limited to German-language publications. DeChicchis lists both Western and Japanese publications, the latter in Roman characters but without explaining titles or contents (some information can be detected from the main text), and Dettmer (1997) is similar. Refsing's list covers exclusively Western publications, with understandable problems and omissions as far as Slavic languages are concerned (here Majewicz (1980) and (1984: 179–193; 21–59) seem more reliable).

Since non-Japanese readers can manifest interest also in information about the prevailing Japanese-language literature on the Ainu language made accessible in English, apart from the previously mentioned Irimoto and Dettmer (1967–1969), Tamura (1967) is a recommended must, and Refsing (Taguchi) (1974), Hickman (1975), and Philippi (1979) can be of substantial help, and a combination of the bibliographies from CWBP-1: 74–87, CWBP-3: 122–139, and CWBP-4: 93–96 can prove helpful for both non-Japanese and Japanese users.

Possibly the most influential bibliography in a Western language in the entire history of Ainu studies prior to the mid 1970s was that of Piłsudski (1912) in his famous Materials (pp. xxii-xxvi) - primarily because it was word-for-word reprinted by Batchelor, for almost a century dominating globally in the research of the Ainu language and culture, in the third $(^{3}1926)$ and fourth $(^{4}1938)$ editions of his much more famous Ainu dictionary, the only one more widely known outside Japan (see Section 4).

One more useful Ainu bibliography is Kabanoff (1991), which is a model example of a list of 46 important unpublished texts recorded from Ainu informants by the Russian linguist Nevskiy in 1921–1922 (see Sections 6 and 10).

Basic, short but informative and competent information on the Ainu language can be found in Tamura (1999) and Refsing (1983) in English, Dettmer (1981) in German, Alpatov (1997) and Kholodovich (1993) in Russian, and Majewicz (1984) in Polish. Haguenauer 1952 and Éliséèv 1924 in French from different editions of the once important and prestigious Les langues du monde are a little outdated but, on the other hand, reflect both progress and standstill in Western research on the Ainu within a period of thirty years, which is obvious from the differences in cited sources. Éliséèv listed only three sources in the bibliography concluding his four-page essay, i.e., Batchelor's dictionary (²1905), Piłsudski's *Materials* (1912), and Laufer's article on the Ainu numeral system (1917). Haguenauer expanded this list with Batchelor's grammars of 1903 (evaluated as "ouvrage médiocre") and that from the 41938 dictionary (without even mentioning the dictionary itself, neglecting the ³1926 dictionary, and sticking to the ²1905 dictionary characterized as "insufficient"), Dobrotvorskiy's dictionary (1875), Tittel (1922) - admitting that the latter was a "compilation" of Kindaichi (1913, cf. end section 5),² and with Kindaichi (1931, only the "grammatical sketch") and Kindaichi and Chiri 1936. Haguenauer (1952: 484) suggested also confronting Laufer (1917) with Rahder (1941). Readers interested in still earlier outlines of this kind are directed to Siebold (1858) (see also Vos 1993) and Pfizmaier (1849) (see also Slawik 1990 and de Graaf 1991).

For the linguistic and non-linguistic background of the history of studies on the Ainu language, of prime interest are Kodama (1970), Refsing (1996) and (2014), and Satō (1991), who indicated the importance of research results on the Ainu based also on early records of the language for research in the history of Japanese.

For broader and more comprehensive information, the reader is directed to grammars, dictionaries, and text collections like Tamura (2000), Bugaeva (2004) and (2012), Refsing (1986), Shibatani (1990), Patrie (1982), Batchelor (41938), Philippi (1979: 1-56), and Piłsudski (1912) with indices (CWBP-2).

3 Wordlist-type vocabularies, glossaries, museum catalogs, and lexical studies

The European tradition of reflection about human language has its roots in Ancient Greece and Rome and the names of the first Greek and Roman grammarians as well as their treatises on the structure of respectively Greek and Latin, well known to us, gradually inspired attempts at describing other vernacular languages of Europe: it turned out that it was possible to accomplish it in the framework worked out by Greek and developed by Roman scholars for almost all languages of old Europe. The Europeans, however, relatively early realized the existence of languages with lex-

² In Haguenauer (1952), Kindaichi 金田一 is referred to as 'Konada' – in accordance with the German original which erroneously rendered this name. In Haguenauer's own words: "H. Titel [sic!...] compilation faite d'après le Karahuto Ainu.go tai.yō de Konada. Kindaiči K., Grammatical Sketch of the Ainu Epic Language (en japonais). Forme la première partie [...] du t. II du Yukara-no ken.kyū du même auteur, Tōkyō, 1931. Cette partie de l'ouvrage aurait besoin d'être révisée en tenant compte au moins des langues altaïques. L'auteur a publié ensuite, en collaboration avec un Aïnou, un Ainu.go.hō gai. seţu, Tōkyō, Iwanami, 1936" (ibid., p. 484).

icons and structures drastically different from their European equivalents, getting acquainted with the languages of the Old Testament, coming into contacts with Arabic and Turkic speaking peoples, and having soon Finno-Ugric peoples in their sphere of influence. The actual linguistic picture of the world became sharper and clearer gradually only with the Age of Discovery (15th–18th centuries), when it turned out that the number of existing languages and the great diversity of their structures surpassed everybody's expectations. The pioneers in documenting strange, so-far unknown, cultures and their intangible assets, customs, languages, traditions, etc., were initially seafarers, sailors, discoverers of "new worlds", lands "belonging to nobody", explorers, etc., and following them were soldiers, conquerors, colonizers, and missionaries; to be sure, there were neither linguists nor ethnographers among them: linguistics and ethnography as specialized branches of research were to emerge centuries later.

The initial phase of the process of getting acquainted with a "newly discovered language" was based on a compilation of word lists as a rule, and Ainu was no exception. Moreover, the interest in the early Ainu word lists was, in comparison with most such languages, more intense because of the unusual ("above-average") interest in the people, and the lists themselves have been printed and reprinted or "borrowed" from author to author, quoted, referred to, or presented in almost every piece of literature on the Ainu people and the Ainu language, becoming thus the best described area of Ainu studies. Hence, comments in this section will be limited in favor of references first to selected surveys and bibliographies of such data (Refsing 1996, 2014, Dettmer 1967-1969, 1980, 1989-1997, Tamura 1967, 2000, DeChicchis 1995, Kodama 1970, Majewicz 1980, 1984, also Nakagawa 1987, Shikiba 1942), and next, when considered necessary or useful, to individual items listed below.

Listing Western-language Ainu word lists inevitably starts with Jesuit missionary Jeronymo (Jeronimo ~Jerolamo ~Girolamo~Jerome~Hieronim(o)) de Angelis (1567–1623), with his 1624~1625 "list of 54 words". Actually, the variations on the given name depend on the language in which de Angelis's text is written (more precisely, on the signature under the text) or the language of narration about him. Blessed (in 1867) Hieronymus de Angelis (also degli Angeli ~ D'Angelo) was born in Castrogiovanni (since 1927 Enna) in Sicily, Italy, in 1567 or 1568; in 1602 he arrived in Japan and stayed for eight years in Fushimi, Kyoto, to move to Sumpu (now Shizuoka), Edo, and (briefly) Nagasaki, to Mutsu (陸奧国 ~ Michinoku 陸奧~道奧 ~ Ōshū 奧州) Province (now Tōhoku region), finally to land on Yezo (Hokkaido) for the first time in 1618 and spend ten days there, being the first known European to set foot on the island. His return to the island took place in 1621, and there was no "de Angelis's third visit" to Hokkaido: in the same year, on orders from his superiors he returned to Edo to spend two years in hiding there before being captured on a Kamakura beach and sentenced by the shogun to death by fire in public on December 4, 1623. A Fiesta del Beato Girolamo de Angelis is held annually on that day in his birthplace.

De Angelis's word list is available from a document in Portuguese dated 1621 (pp. (36)–(37) in the original, pp. 96–99 pagination in Japanese characters in Japanese nese translation, both in Cieslik (1962)). Dates 1624 (M.DC.XXIV.) and 1625 mark two consecutive editions of the Italian version of de Angelis's "excerpts from letters of 1619, 1620, and 1623, related to Japan" in which Ainu lexical material is not listed but appears incorporated in the text, as indicated under Angelis 1621 and 1624, respectively. On de Angelis see particularly Cieslik (2008).

The first Ainu words (only two, but of great importance) documented in a Western language source, i.e., Morera (~ Moreira, 1591) (authorship and dating uncertain), may have, however, preceded de Angelis's lexical records. The words in question were Ainomoxori (= ainu mosir 'the Ainu country or land') and Rebuncur (= repun kur 'alien people from beyond the sea'; of utmost importance is here underlining the difference in the name of the country or island: "the part of the island adjacent to this place is what the Japanese call *Iezorum* 'the land of the Yezo people', while indigenes call it Ainomoxori 'the land of the Ainu' (Pars insulae quae hoc loco apponitur, est eius quam Japonenses Iezorum vocant, indigenae Ainomoxori [...]).

There exist close to one hundred known Ainu word lists ~ glossaries of Ainu lexical items (cf. Dettmer (1980: 320), Refsing (1996: 33; notes 11, 12)). More important among them seem to be the following: Strahlenberg (1730) (26 lexical items in the appended "Tabula Polyglotta"; the author, born Tabbert in Germany, 1676–1747, was a Swedish geographer, cartographer, and military officer who studied ethnography and languages of local natives throughout two decades of captivity in Siberia), Krasheninnikov (1755) (261 lexical items, 26 numerals and 10 personal names included; the author, 1711–1755, was a Russian explorer and academician, famous for his part in the so-called Second Kamchatka Expedition and for his extensive report on the Peninsula), Pallas (1786–1789) (material incorporated in Pallas's once renowned "dictionary of all the world's known languages" was based on Krasheninnikov; Pallas 1741-1811, was a German biologist and academician in Russian service), Vereshchagin, before 1779 (see Lanyon-Orgill (1997: 222–226); Roman Fyodorovich Vereshchagin (1735–1782?) was a Russian Orthodox priest, parson of Paratunka near Petropavlovsk-Kamchatskiy who handed over two Kuril Ainu word lists (22 and 162 words) on August 26, 1779, to members of James Cook's crew visiting Petropavlovsk; Vereshchagin had personally met Krasheninnikov and his two sons were praised by Kruzenshtern, cf. below), Lapérouse (1797) (160 Sakhalin Ainu words; published by Milet de Mureau (1756–1825), who was a French politician and military commander and who, having lost his position, was called to Paris and put by the government in charge of preparing for publication the Voyage de La Pérouse in accordance with instructions written for him by King Louis XVI himself; in 1799 he served as French Minister of Defence under the French Directory), Broughton (1804) (69 "Insu" = Yezo words, ten number names included; Broughton, 1762–1821, was British seafarer and explorer of the shores of the Ryukyus, Honshu, Hokkaido, and Sakhalin), Rezanov (1805) (218 words, 28 numerals included; see Adami (1986), (1992); Rezanov, 1764-1807, was a Russian nobleman and statesman who promoted the project of Russian colonization of Alaska and California to three successive Tsars: Catherine the Great, Paul, and Aleksander I; the latter commissioned him as Russian ambassador to Japan (1804) to conclude a commercial treaty; in order to get there he was appointed co-commander of the first Russian circumnavigation of the Earth (1803–1806), led by Kruzenshtern; unsuccessful in his ambassadorial mission, Rezanov departed the expedition when it reached Kamchatka after visiting Japan; he was also the author of a lexicon of the Japanese language and of several other works, now preserved in the library of the Saint Petersburg Academy of Sciences, of which he was a member; Rezanov's biggest legacy was the great Russian-American Company), Mogami around 1800 (2,725 Ainu entries with Japanese and German equivalents monumentally published as Dettmer (2002: 1–733), with a 197-page photocopy of the original; Mogami, 1755–1836, was a geographer and explorer of Hokkaido, Sakhalin, and the Kurils), Klaproth (1812), (1823) (373 German entry words with equivalents in three Ainu ethnolects: "Kamchatka", i.e. Kuril, "Tarakai" - Sakhalin, and "Jeso" – Hokkaido; Klaproth, 1783–1835, was a German explorer, ethnographer, pioneer of Oriental studies as an academic discipline; himself a polyglot, he focused on collecting data from as many languages as possible from all possible sources; his is in fact also the list, a little differently arranged, of Ainu words referred to as Langsdorff (1812)), Davydov (1812) (see Section 4), Titsingh (1814) (106 lexical items; Titsingh, 1745–1812, was a Dutch surgeon and scholar, merchant, and Dejima "ambassador" to Japan), Siebold (1832), (1858) (Leupe 1858), Rudanovskiy (1860) (a little over 400 lexical items; Rudanovskiy, 1819–1882, was a Russian commodore admiral, cartographer, and explorer of Sakhalin), Furet (1860) (43 words; Furet, 1816–1900, was a French missionary in Naha, later in Nagasaki and Yokohama, but traveled as far north as Hakodate), Rosny (1861) (parallel list of about 200 words in French, Chinese, Korean, and Ainu; Rosny, 1837–1914, was French Sinologist and Japanologist, general Orientalist, ethnologist, linguist, and prolific writer), Satow (1870) (71 lexical items and several phrases with parallel translation, compiled from Japanese written sources and verified with a Sakhalin-Ainu-speaking Japanese in Hakodate; Sir E. M. Satow, 1843-1929, was a diplomat serving in Japan in 1862-1882 and 1895-1900, Japanologist, and linguist), Pinart (1872) (296-entries in Russian-Ainu part, see Asai (1974: 102); Pinart, 1852–1911, was a French explorer of Russia, Scandinavia, the Western coast of the Americas, and the South Pacific from the Aleutian Islands down to Easter Island, ethnographer, collector of indigene vocabularies and philologist, and was among the first to postulate the Bering Strait migration theory to explain the population of the Americas), de Charencey (1873) (304 Ainu names of plants with parallel systematic equivalents in Latin; the compiler, born Charles-Félix-Hyacinthe Gouhier, comte de Charencey, 1832–1916, was a French philologist (i.e. not botanist). From 1888 President

^{3 &}quot;Tarakai" was an alterative name for Sakhalin, and the original used the terms Tarakai for Sakhalin and Jeso for the future Hokkaido.

of the Société de Linguistique de Paris, he published also three other minor studies on Ainu words and their etymologies, cf. EEWL 2, and Refsing (1996: 5)), Metchnikoff (1877) (99 lexical items; Metchnikoff, 1838–1888, was a Russian geographer, sociologist, orientalist, pioneer of Japanese studies in Switzerland (Japanologist at Zürich)), Dening (1881) (about 925 entry words and 38 sentences; Rev. Dening, 1846–1913, was a Church Mission Society evangelist stationed at Hakodate and a writer on Japan. His collection of Ainu words resulted from his own contacts with the Ainu and is thus original. Of special value, it was handed over to Rev. Summers who published it and also used as one of many sources for his own vocabulary), Batchelor (1882) (2,469 entry words, see Section 4), Scheube (1882) (Ainu word list pp. 246–249; Scheube, 1853–1923, was a German physician teaching medicine in Kyoto. He studied the Ainu culture and language in Oshamambe, Hokkaido), Pfizmaier (1883) (see Section 4), Summers (1886) (about 3,000 words; Summers, 1828-1891, Sinologist, author of an early handbook of Chinese, worked with the Iwakura Mission visiting England and was invited to Japan to teach English from 1873 at what became Tokyo Imperial University and in 1880 to teach English literature at what became Hokkaido University), Savage Landor (1893) (273 words; the compiler, often referred to as Landor, 1865-1924, was a British explorer, anthropologist, painter, and writer), Torii (1918) (371 Kuril Ainu and Hokkaido Ainu words in the basic list parallelly, 208 words-constituents of Kuril place names, 37 Kuril Ainu numerals, and Krasheninnikov's list; Torii, 1870-1953, was an outstanding anthropologist, ethnologist, and archaeologist, conducting field research in many parts of the world), Voznesenskiy before 1843 ("about 1,500 [Kuril Ainu] words", partially published by Vovin (1993: 179–210); the actual compiler remains unknown, Ilya Gavrilovich Voznesenskiy, 1816–1871, was a Russian naturalist, explorer of Russian America and Russian Far East, mainly the Kuril and Aleutian Islands and Kamchatka), Berlioz (1928) (unique Ainu-Latin classifying list of words and expressions pertaining to Christian religion; Berlioz is actually the name of Bishop Alexander, 1852–1929, the first bishop of the Apostolic Prefecture of Hakodate, who gave *imprimatur* to the publication).

Apart from FRPAC 2000, see Section 2, the following are references exemplifying recommended catalogs providing specialized Ainu terminology: Kreiner and Ölschleger (1987), Latyshev and Inoue (2002) (Ainu terms noted in Cyrillic and Roman characters), Latyshev and Prokofyev (2006), and Prokofyev (2005) (Ainu is in Cyrillic notation).

The following works in turn are examples of representative Ainu lexical studies: Kirikae (1993), Majewicz and Majewicz (2008), Murayama (1992), Ohnuki-Tierney (1969) and (1972), Refsing (1993), Slawik (1968), (1972), and (1979), Spevakovskiy (1986), Vos (1983) and (1990), and Vovin (1990); older works of potential interest include Gjerdman (1926), and Rahder (1956ff).

Concluding this section, we shall point to extensive Ainu lexical material in the indices of Ainu words and loans in Ainu in CWBP 3: 860-901 and CWBP 1: 754-764 (CWBP 4: 1396 provides a short list of Ainu words that appeared in Tungusic contexts).

4 Dictionaries

In her introduction to EEWL 1 Refsing (p. 13) observed: "It is difficult to say exactly when "glossaries" or "vocabularies" began to turn into "dictionaries" as some of the early glossaries certainly had the proportions of small dictionaries, such as the *Moshi*ogusa, ⁴ [...], Pfizmaier's Vocabularium [cf. below, [...]]" or Summers 1886. "The first work, however, to assume the word "dictionary" in its title was" Dobrotvorskiy's Ainu-Russian dictionary "published by his brother Ivan in Kazan in 1875, just [two] years before Batchelor settled in Hokkaido. [...] The next Ainu dictionary to see the light of day was the first edition of "Batchelor 1889." (Refsing p. 14)

This section starts, however, with Pfizmaier's Vocabularium (1854) mentioned by Refsing – not in order to argue with her opinion which can easily be shared and supported but for practical reasons serving the organization of the present chapter. Its author (1808–1887) was an Austrian linguist, Japanologist, Sinologist, and polyglot, member of the Vienna Imperial Academy of Sciences (Kaiserliche Akademie der Wissenschaften) and professor of Vienna University, author of a Japanese-German dictionary (Wærterbuch der japanischen Sprache, only its first fascicle appeared in print in 1851) and probably the first ever direct translation of a Japanese literary work (1847, a story by Tanehiko Ryutei 柳亭種彦) into any Western language, and a grammar of Turkish in French, among many others, although he hardly traveled anywhere farther than Paris.

Pfizmaier's 1854 Ainu-German vocabulary with numerous Japanese lexical equivalents indeed was the first lexicographic compilation of Ainu words of "small dictionary proportions" in any Western language. Based mainly on the 1804 second impression of a Japanese-Ainu classifying (thematically arranged) dictionary and reader Ezo hōgen moshiwogusa (蝦夷方言藻汐草 'a miscellany of the local language of Ezo') compiled by the interpreter Kumajirō Uehara under the supervision of Chōzaburō Abe, see Satō (Chapter 3, this volume), with some additional use of data from lexical collections of Lapérouse and Davydov, the Vocabularium lists some 3,000 Ainu items noted in the Japanese katakana syllabary rearranged in accordance with a clumsy and long since abandoned native Japanese method called *iroha* written from right to left, with Ainu and Japanese words retransliterated into Roman characters and translated into German.

In the history of linguistics, the work serves as a model example of an armchairscholar's close to ideal research result. Refsing (1996: 6) briefly but precisely characterized Pfizmaier as one who "had engrossed himself in the most exotic field of study imaginable at the time and corresponded with other orientalists in Europe and even in Japan" but "never traveled far from his own study". Refsing admits, nevertheless, that "as a scholar" he "was very productive" and his interest in Ainu was one of many and

⁴ See Satō (Chapter 3, this volume).

emerged only in two short periods distant from each other (1849–1854 and 1882–1883). the latter used to correct his earlier results in accordance with what he had learned from numerous new sources made available in the three decades between. Pfizmaier 1883 is such an addenda et corrigenda; although neither clearly a wordlist (including at least one such list on "Ainu Flora", pp. 32-68 (362-398), with . . . 304 items, cf. Section 3 on de Charencey) nor a dictionary, in this writer's library it is – with premeditation – permanently shelved together with Ainu dictionaries, cf. also Pfizmaier 1882. In Refsing's (1996: 6) sound opinion, "With the work of [...] Pfizmaier, Ainu language studies in Europe entered a new and more scientific phase".

Davydov's Ainu lexical collection mentioned above as a supplementary source for Pfizmaier of a much earlier date – 1812 – is the 'dictionary of ethnolects of peoples inhabiting the southern recesses of the Sakhalin Peninsula collected on location by the late lieutenant Gavrila Davydov' incorporated in the third part of Kruzenshtern's⁵ report of his 1803–1806 circumnavigation. The word for 'dictionary' is exactly the same as in the case of Dobrotvorskiv 1875. In 1813 the German edition of the 'dictionary' was published separately among "Collections of words from languages of certain peoples from Eastern Asia and North-Western coast of America made accessible by A. J. v. Krusenstern"; in its preface (Vorbericht, p. i) Kruzenshtern called "Dawidoff" "der Verfasser des Wörterbuchs der Aino", i.e., 'the compiler of the Ainu dictionary'). Pfizmaier (1851), being a 179-page supplement volume to the December 1851 "proceedings of sessions of the philosophical-historical Classe of the Academy of Sciences in Vienna" arranged alphabetically in Roman characters in fact is the . . . second (concise) Western-(in this case of course German-) Ainu dictionary (shelved together with Pfizmaier 1854), yielding thus the palm to the really first Western-Ainu "dictionary", namely that by Davydov himself, Russian-Sakhalin Ainu of 1812 and its 1813 German-Ainu version, both with entry words in the respective languages ordered alphabetically and followed by their Ainu equivalents, the former in Cyrillic, the latter in Roman characters; in the latter, there are 1,987 entries, 1,934 of them consecutively numbered.

Gavrilo Ivanovich Davydov (1784-1809), a lieutenant serving the Russian-American Company, made his ill fame with raids on Japanese settlements on the Kuril island of Etorofu / Iturup in 1807 as "retaliatory measures" persuaded by Rezanov as a sort of private revenge for the latter's diplomatic failure with Japan (cf. Section 3), but otherwise was an experienced explorer of Russian America, the Kuril Islands, and Sakhalin, praised by Kruzenshtern. He managed to publish only a part of his materials, including abundant ethnographic and lexicographic data, and the remaining part, the lexicographic collections under scrutiny here included, was published posthumously.

⁵ The Earth circumnavigator Adam Johann von Krusenstern, in Russian Ivan Fyodorovich Kruzenshtern, 1770-1846, born in a prominent Russified Baltic German family, died, and entombed in today's Estonia, became Admiral, scholar, honorary member of the Russian Academy of Sciences, foreign member of the Royal Swedish Academy of Sciences, and Head of the Naval Cadet College.

Kruzenshtern and Davydov have been credited with the conclusion that those who had been known as hairy Kurilians, Sakhalin Aino/Ainu, and Yezo/Hokkaido Aino/Ainu, identified themselves as belonging to the same folk and should be treated as such.

Dobrotvorskiy (1875) is a 670-page volume in which the Ainu-Russian dictionary extends over 487 pages (separate pagination) and includes "10,930" numbered entry words, with entries counted in "tens", but numerous sub-entries remain uncounted, and numerous entries are far from being limited to providing Russian equivalents. Thus, the dictionary offers Ainu material much more abundant than the final count number indication suggests. There is yet another statistic, unverified by this author, according to which the dictionary "included over 5,700 [more precisely 5,733] Ainu words, over 100 personal names, and 511 Sakhalin toponyms". According to Refsing 1996:14, "the dictionary contains 10,930 words of which about half are provided from Dobrotvorskii's own field work, while the rest are taken from a variety of glossaries". Importantly, Dobrotvorskiy indicated sources of items quoted while his own firsthand material is visible: only words he himself recorded occur with accent marking.

Mikhail Mikhailovich Dobrotvorskiy, 1836–1874, like most other collectors of Ainu words, was not a linguist: he was a military physician in southern Sakhalin for over five years in 1867–1872 (where everything was either "military" or "prison/hard-labor-related" at that time). He was truly interested in certain aspects of native cultures there, especially in folk medicine of the local Ainu, but one can hardly find native terminology in his 1873 study "Russian commoners' medicine as compared with folk medicine of the Sakhalin Ainu". His interest in the Ainu language and in word collecting was practical but genuine, deep, and serious: "the Ainu language was the only means of communication when one wanted to help them" (Dobrotvorskiy (1875: 15), separate pagination preceding the dictionary), therefore he started learning it from his very arrival on the island, additionally motivated by another military physician there and his close friend, the later General Fyodor Depreradovich, who was fluent in Ainu and the author of an ethnographical study on the Sakhalin Ainu as well as an (unpublished) Ainu dictionary. Dobrotvorskiy's approach to his inquiries into the Ainu language was medical – he started with studying the anatomical nature of Ainu sounds in order to create an orthography for recording the tongue.

Dobrotvorskiy's dictionary is a posthumous publication. The dictionary part, constituting the core of the volume, is preceded and followed (with separate pagination in both cases) by various studies, essays, and other items complementing it. Preceding it are: the biography of Dobrotvorskiy and "Preface" by his brother Ivan, the editor and publisher of the volume and Kazan University professor, a critical bibliography of sources on the Ainu and their language (pp. 19-30), general information on the people, their culture, and community (31–46), and a detailed presentation of his "Orthography of Ainu words" (47–76). The dictionary part is followed by 13 appendices (1–96), among them: a critical analysis of Pfizmaier's (1851a) work *Über den Bau* der Aino-Sprache, notes on the Ainu including the lists of Kuril islands inhabited by them and of aboriginal settlements (Ainu, Nivhgu, and Ulcha – possibly rather Orok) on Sakhalin, Ainu statistics (56–57), their religion, philosophy, and poetry (58–67), medicine, foods, clothing, household, occupations, "seasons and months" (89), and "remarks on declension, conjugation, and particles and their use" (90–91).

Writing about Dobrotvorskiy 1875, Refsing (1996:14) concluded: "in any case [it] represents a tremendous work and a useful source for Ainu studies, albeit very hard to obtain for decades". Now it is available as vol. 3 in EEWL series.

The next lexicographical publication to be mentioned in this section is Radliński (1891) which also includes the word for 'dictionary' in its title and constitutes the largest known number of words of Ainu from the northernmost inhabited Kuril island. It is a first-hand record taken by a Polish zoologist, naturalist, and explorer Benedykt Dybowski (1833–1930), who was exiled to Siberia (1865–1875) but then pardoned for his enormous achievements in the research of Lake Baikal fauna and allowed to return to Europe. Soon he voluntarily assumed the official position of physician for the entire territory of Kamchatka and the Aleutian and Commander Islands (1879–1883). There, he started collecting words from indigenous languages, compiling thus extensive glossaries, labeled 'dictionaries', for at least seven different ethnolects. Being fully aware that his records could be inexact, Dybowski was equally well aware that

There are circumstances that make the dictionaries particularly important and exceptionally valuable. The autochthons of Kamchatka and adjacent islands are dying out. For their total extinction, according to ethnographers' estimation, one cannot wait even decades. Even if one assumes that an explorer, linguistically trained, comes to Kamchatka in the future with the intention to write down words in accordance with the principles of linguistics, it may turn out that it is too late, that the peoples concerned no longer exist. These vocabularies, therefore, are becoming the only trace of the tongue of an extinct people and simultaneously the only evidence of the existence of the people who spoke it. (Radliński 1891: 2)

The inexactness Dybowski feared, and surely the practical motivation related to his profession, resulted in a strikingly disproportional number of nouns, often derivatives rather than simple basic forms, in relation to other lexical categories. Among these nouns, many are names of objects in everyday use, names of flora and fauna species, physiological functions, and situations of pathological affliction.

Five of Dybowski's dictionaries were published between 1891-1894 in a series entitled "Dictionaries of ethnolects of Kamchatkan peoples"; two are considered lost. The series opens with the "Dictionary of the language of the Ainu inhabiting the Shumshu island in the Kuril Archipelago close to Kamchatka as collected by Professor B. Dybowski, compiled by Ig. Radliński".

Dybowski collected as well exhibits of material culture, anthropological, botanical, and naturally zoological objects in tremendous amounts but, being exceptionally modest and regarding himself incompetent outside his disciplines of research, he did not hesitate to selflessly transfer respective collections to trusted scholars: thus, his Sakhalin Ainu anthropological collection was studied and results published by one of the founders of Polish anthropology Izydor Kopernicki, while his linguistic and ethnological materials have been published by Ignacy Józef Eligiusz Radliński, 1843–1920, a noted philologist specializing in classical and biblical languages and in the study of religion.

Radliński (1991: 15–67), preceded by an untitled preface, 1–2, explaining the provenience of the source data and methodology of preparation for print, and a "Short information about the Ainu", 3-14, localizing the material in historical, political, and ethnological contexts followed by Dybowski's explanations concerning his relations with the Ainu informants and the latter's history, contains about 1,900 entries arranged alphabetically, with Ainu head words in Roman characters transliterated from parenthesized original Cyrillic records followed by Polish and Latin semantic equivalents.

In Dybowski's own words: "the glossary of Kuril words was dictated to me by Kurilians from the island of Shumshu, by accident forced to stay for several years (1878–1881) on Kamchatka just when I arrived to Petropavlovsk in the summer of 1879." The source is very reliable as among Dybowski's Kuril informants "men could converse in Russian, knew Aleut [known by Dybowski], and one of them could even write in Russian. An even greater advantage, however, facilitating my task was that Kuril Aleuts [brought to the Kurils from Aleutian Islands by the American-Russian Company could speak the Kuril language (i.e., Ainu) and one of them, a relatively well-educated man, was able to write correctly in Russian" (Radliński 1891:14).

Dybowski also investigated on the spot, in Petropavlovsk and Yavina~Yavino (the southernmost settlement in Kamchatka on its western coast, the place of the Japanese invasion in July 1904 to capture Kamchatka, a settlement that ceased to exist in the 1940s) the problem of the possible resident Ainu population in southern Kamchatka in relation to Krasheninnikov's testimony to 'nearer' and 'farther' (dalniye ~ дальние) Kurilians. According to him, "The Ainu of the Shumshu island do not recall any case of their ancestors inhabiting the area called today (1879–1882) Kurilian in Kamchatka, namely the vicinity of Lake Kurile (Курильское озеро). [. . .] When inquiring about the Ainu, the oldest inhabitants of the Yavina village related that islanders from Shumshu had been coming to Yavina almost every spring from time immemorial. They were hunting on the coasts of Kamchatka and in ancient times they were reaching the mouth of Lake (Ozernaya) River where they were fishing. None of the informants recalled any Ainu settlement on the Peninsula" (Radliński 1901: 282). According to the same source, not a single case of Itelmen (i.e., Kamchadal) settlement on any of the Kuril Islands was known. Moreover, not even a single case of an incidental Itelmen visit to any of the Kuril Islands had taken place. All this makes Dybowski's testimony a very strong argument against conclusive statements concerning permanent Ainu settlements in Kamchatka (cf. Majewicz 1981).

Radliński (1891) was republished in 1892 and the introductory part (pp. 1–14) was published also in French in the same year but, contrary to references, neither a French nor a German translation of the "Dictionary" appeared in print. The material from Radliński (1891) was basic for Shichirō Murayama's monograph on Kuril Ainu (1971).

Rev. John Batchelor, mentioned at the very beginning of this chapter, was an Anglican missionary and, like Dening, a representative of Church Mission Society. He was born in England, which he left in 1875 for Hong Kong. Since the local climate "did not agree with" him, he left for Japan to arrive in Yokohama in 1877 soon to move to Hakodate and started working with the Ainu, studying their language and traveling across Hokkaido in the company of Dening. After an interval for visiting England (he left Hakodate at the end of 1881 to be back there in April 1883), he stayed almost uninterruptedly in Hokkaido till 1940 in close contact with the Ainu, studied their language (and Japanese as well) and culture (with focus on their lore), and – engaged in his mission to Christianize them – translated the New Testament, Psalms, The Book of Common Prayer, and other minor religious scriptures into Ainu (texts available in EEWL-5-6-7).

The four consecutive editions of Batchelor's dictionary mentioned in the preceding sections as well as their author have been given much attention in the respective literature, being described, praised, and severely criticized, so this author will confine himself to referring only to a few sources of opinions shared, like Dettmer (1985) and (1997: 551–573) or Refsing (2014) and (1996: 9–10; 14–15), and to quoting the following from the latter: "Batchelor's dictionary has been the main source for Western Ainu studies for many years, notably for [. . .] Naert [1958] when he tried to prove [...] that Ainu is an Indo-European language. As Dettmer (1989: xiii) points out Naert may well have thought that he was using a work of a comparatively recent date, but in essence the data in Batchelor's dictionary had not been changed since the first edition" (1996: 15).

To be sure, however, the editions differ from one another; they grew bigger and richer with data, and in other contents (cf. Sections 6 and 8), so there are also advocates advising researchers to have access to and make use of all four editions simultaneously. It is interesting to observe that even most ardent bibliographers and collectors scrupulously listing and enriching the existing lists of Ainu lexemes overlooked Batchelor's (1932) 900-word 55-page *Appendix* to his ³1926 dictionary.

The fiercest critic of Batchelor's dictionary was Chiri whose opinion is quoted in Refsing's (1996: 10) translation:

When speaking of dictionaries of Ainu, people invariably think of Dr. Batchelor's dictionary. Such is the extent of this dictionary's fame. [...] quite contrary to the trust [...] generally placed in it, I must say that I have never in my life seen a dictionary with so many flaws. [...] it would be closer to the truth to say that it consists solely of flaws.

Refsing (2014: 189) resorted to elegant diplomacy in commenting on this potentially devastating evaluation:

Batchelor's dictionary contains valuable material that can certainly be used with a critical and cautious approach. The dictionary gives both Japanese and English translations for the Ainu entries, and perhaps Batchelor's knowledge of Japanese was more at fault than his knowledge of Ainu, since in a number of instances one finds that while the Japanese translation is totally misleading, the English one is much closer to the point. Perhaps one may question whether Chiri actually bothered to read the English translations? (here cf. Dettmer 1985)

Among critical remarks concerning Batchelor's dictionary, one frequently expressed concerned the negligence of territorial differences reflected in Ainu. Actually, the study of local varieties of the language ("dialects", in many cases already idiolects) started only in 1955 (Hattori 1964), see Nakagawa and Fukazawa (Chapter 8, this volume), and differences in speech between Hokkaido, Sakhalin, and Kuril speakers were realized many decades earlier. Batchelor's first Ainu teacher was a Sakhalin Ainu (Dettmer 1997: 552). Batchelor was given a chance to visit Sakhalin in 1907 and 1908, and in the introduction to "The Grammar" in ³1926 he recalled his encounter with Piłsudski (see below) and the fact that "the only language we could properly converse in was Ainu! He in Saghalien Ainu and I in Yezo" (1926: 3). The encounter took place in Sapporo in the summer of 1903 and is mentioned also in Batchelor's memoirs (EEWCT 5: 136).

Having spent almost his whole life in Japan, Rev. Batchelor was honored with the Order of the British Empire and his dictionary still remains the only Ainu dictionary to offer Ainu lexical data to all who are interested but unable to read Japanese. Specialists estimate the number of entries/words of the dictionary (except the first edition) at between 15,000–20,000 and for the English-Japanese part at 4,000.

Bronisław Piłsudski, 1866–1918, also mentioned above, was the Polish politician Marshal Józef's elder brother sentenced to the death penalty, which was changed into hard labor (*katorga*) convict and political exile in Sakhalin for his (problematic) involvement in an attempt at the life of Russia's tsar Alexander III. He spent almost two decades in the Far East (Sakhalin, Vladivostok, Lower Amur Region, and Japan) and became famous for results of his research on the aboriginal peoples there and their cultures and tongues.

His very unimpressive looking 270-page book of 1912 turned out to be ultimate source on the Sakhalin Ainu oral tradition and its language on the grounds that: (1) the material offered by the book is the richest and most competently collected of all the field data accumulated in the times when the Sakhalin Ainu still cultivated their original way of living, their customs, rituals, their language and their traditions retained in their specific archaic tongue in memories of individuals passing them over to younger generations and hardly commonly known; and Piłsudski, married into an Ainu family, actively participated in all the ups and downs of that life, festivals, rituals, was accepted by the entire Sakhalin Ainu community as their friend and protector in their uneasy relations with the authorities, was passionately interested in their folklore and thus was well acquainted with all their story-tellers, while his command of the language was expert and flawless as firsthandedly testified to by e.g. Sieroszewski (see CWBP 3, 662, 682, 691, 793) and Batchelor (cf. above); (2) as an author Piłsudski was fortunate to work with Jagiellonian University professor Jan Rozwadowski (1867–1935), one of the best linguists of his time and one of the best academic supervisors available at the time of the compilation of the book; the supervisor of the English metalanguage of the book was Michał Seweryn Dziewicki (born in Great Britain, his mother was English), teacher of English at Jagiellonian University and one of the pioneers of academic English studies on Polish soil, and to secure precise and systematic transcript of his Ainu texts Piłsudski consulted, and was taught phonetics by, the founder of experimental phonetics and dialectologist Jean-Pierre Rousselot (cf. Sections 5 and 6); (3) no attempt to collect data comparable in standard and in size to what Piłsudski's Materials offers was made before the Sakhalin Ainu underwent the process of complete acculturation as people losing their language and culture and desperately striving to melt with and disappear among the surrounding omnipotent, unsympathetic, ruthless, and uncompromising Japanese.

Piłsudski returned to Europe in 1906, bringing along abundant fieldwork material which he started preparing for publication. Some of his earlier writings had appeared in print also in Russia, but what he managed to publish before tragically passing away proved to be but a fraction of what he had accumulated as shown by the monumental edition of his Collected Works (CWBP, so far four volumes with over 4,000 pages of print).

One of the items in his luggage was his own Ainu manuscript dictionary which was publicly demonstrated and described during his speech at the meeting of the Philological Faculty of the Academy of Sciences and Letters (Polska Akademia Umiejętności) in Cracow on March 13, 1911. In the summary of the speech, formally signed by the Secretary of the Faculty but doubtlessly prepared by Piłsudski, one reads:

The dictionary compiled by the author will have at least 10,000 entries and about 2,000 proper names, geographical and personal. It will differ from the two best existing dictionaries of the Ainu language [Dobrotvorskiy 1875 and Batchelor ²1905] in that the author [i.e. Piłsudski] will make specific distinctions between dialects and supply old lexical items that are still used in songs and prayers but are unknown to the majority of the younger generation undergoing the process of japanization. Besides this, the author $[\ldots]$ for the first time will provide explanations of about one hundred conventional words used while hunting, during sea voyages, or when the Ainu want to communicate in the presence of someone acquainted with their language but wish to hide the contents of their conversation from him. The compiler in many cases will provide parallel meanings in Japanese, Orok, and Nivhgu to facilitate the establishment of mutual influences of all these neighboring peoples upon each other.

(Piłsudski 1911, as quoted in CWBP-1: 598)

Never published but mentioned as being in the hands of a number of scholars, the dictionary is considered lost but its partial reconstruction in form of a dictionary-index to Piłsudski (1912) was published in 1986 (Majewicz and Majewicz) and, with amendments, in 1998 (CWBP-2: 309-872). See also Majewicz and Majewicz (2004) and (2008); the latter was used as prime source in the compilation of Sakhalin Ainu-Japanese dictionaries in Japan (Ueno et al. 2006), (Ōtsuka et al. 2008). On the basis of Piłsudski (1912), an Ainu-Russian dictionary has also been compiled and published (Kosarev 2004).

5 Descriptions of phonetics/phonology and grammars

The phonetic and/or phonological component of Ainu is dealt with in virtually every work on the language labeled "grammar", but practically it constitutes but a part of the explanation on the "transcription" or "orthography" or even "pronunciation" used in the respective grammar.

The first title of a text on the Ainu language, written by an author who doubtlessly heard the living language used as the first and mother tongue in all generations, to announce "phonology" as the focus of attention was most probably Laufer (1917), and the author's aim was not simply practical. He admitted, however, that it was "Piłsudski [who was] the first author to offer some remarks on the phonetics of the Ainu language", continuing that,

Batchelor has almost neglected this fundamental part of the language, and his transcription of Ainu [was] no more than an attempt at adopting the English alphabet to the writing of Ainu and then it is possible to compare with Hebrew and Indo-European, ... a language the sounds of which are not yet accurately ascertained. (Laufer 1917: 198)

The first theoretician, or rather extremely well-prepared practitioner, to give his attention to the sound of Ainu was none other than l'Abbé Rousselot, 1846–1924, founder of theoretical as well as applied experimental phonetics and author of the fundamental Principes de Phonétique Expérimentale (1897-1901). He studied the living Ainu speech during the 1910 Anglo-Japanese Exhibition in London where the Japanese brought ten Ainu to serve as a tourist attraction for visitors to the Pavilion of Japan. The Ainu in London became first-hand informants for both Rousselot and Piłsudski. Preparing for print his renowned *Materials* of 1912, Piłsudski approached Rousselot in 1909 to learn from him how to render in print systematically and precisely his texts recorded in hasty handwriting and get advice on compiling a "phonetic dictionary" of Ainu (according to Rousselot, Piłsudski wished to compile the dictionary with him as co-author), but the phonetician needed native speakers; the Exhibition created such an opportunity, hence both sought permission to contact the Ainu. Rousselot's London research results were published also in 1912.

As to grammars of Ainu, it is probably Dettmer's grammar (1989–1997) (cf. Section 1) that is so far the most comprehensive reference work on Ainu and diverse matter related in any language, and, for those who read German, the most extensive introduction of Japanese research results in Ainu studies. As mentioned, it is a smartly composed summary of data from all sources accessible to and considered important by its author to be confronted with Kindaichi and Chiri (1936) treated as the point of reference (cf. Section 1 and footnote 1 in this chapter). The entire edition is organized into two "parts" (Teile), I and II, each consisting of two volumes, A and B. Teil I is labeled 'texts [i.e., citations from sources] and references' and includes chapters (Kapitel) on "sounds", "substantiva", "pronomina", "numeralia", "verba", "adjectiva", adverbia", "particles", "interjections", "word-formation", and "syntax". Teil II, entitled 'commentaries and indices', is divided into chapters like e.g.: "Ainu settlements", "ethnic and racial classification of the Ainu", "genetic classification and dialects of the Ainu", numerous tables (45), maps (10), cross-sections (9), illustrations (27), lists (13), indices of subjects, Japanese terms, personal names, place names, list of works consulted, etc.

The most famous grammar of Ainu still remains Batchelor's, for decades known worldwide and referred to as the only one existing since its first appearance in 1887 as an article, with consecutive versions published in the four subsequent editions of his dictionary (Section 4). Although severely criticized, as has been almost everything Batchelor accomplished, the grammar little differed from most other Eurocentric grammars of the same period when modern linguistics was either to be born or in the early years of its infancy. A trained linguist should not be too much afraid of dangers from using it: titles of individual chapters – like "Word-building", "The Noun", "The Adjective", "The Numeral", "The Pronoun", "The Verb", "The Interjection", "Postpositions", "Syntax", sound familiar and offer information more or less expected and sought for. Chapters like "The Article" stating that "There is no article [...] in the language" were standard in decades around the turn of the 19th and 20th centuries. On Batchelor as a "grammarian" see also Dettmer 1994a.

Other contemporary (or "modern", post-Kindaichi-Chiri (1936), the latter being "the starting point" in the history of modern Ainu language studies as suggested by Dettmer, cf. footnote 1, also Refsing (2014: 196)) grammars to be mentioned here are more conventional (i.e., "less specific") than Dettmer and contain material rather expected as standard from any grammar of any language. Refsing (1986) was the first modern grammar of Ainu published in a Western language and it described what the author termed Shizunai dialect, in fact the idiolect of Ms. Sute(no) Orita (1899~1900–1994) from the village of Toyohata, 12 kms. north of the town of Shizunai in southern Hokkaido. Refsing admitted that "at least one other woman from the same area was able to speak the language, but [she] did not succeed in contacting her" (Refsing 1986: 65) and that she inspected tapes with records of the speech of Mr. Tatsujirō Kuzuno, an elder from the region, but to her it "appear[ed] to be somewhat different from Ms. Orita's" supposing that "Mr. Kuzuno ha[d] spent his life near the coast, while Ms. Orita ha[d] lived further inland – about twenty kilometers away, and perhaps even this comparatively short distance can account for the dialectal differences". Refsing classified the lexicon of the investigated ethnolect into three lexical categories – nominals, verbals, and clitics, each subcategorized and discussed in detail (Refsing 1986: 74-267) and

this morphological core of the book was followed by a short (267–276) but informative chapter on syntax. The introductory part includes information on "early material on the Ainu language", "pre-war Ainu research", and "post-war Ainu research", with the presentation of linguistic research results of Japanese scholars (Kindaichi, Chiri, Murasaki, Asai, and Tamura) in the field. The publication of Refsing (1986) doubtlessly was a milestone in Western Ainu language research literature.

Another such milestone was the publication of Tamura (2000), a complete translation of an extensive entry from the 1988 Japanese Sanseido Encyclopedia of Linguistics (300 densely printed pages in English); Tamura (1934–2015) was invited to contribute to it because of her unquestionable position of being "the leading expert in the Ainu language [and the] work was chosen for translation because it represents the high level of study regarding the Ainu language and [...] would benefit the worldwide linguistic community" (Kazuto Matsumura in the "Preface", vii). Its core constitutes a long chapter entitled "Syntactic Elements and Syntax" (25–192), followed by "Word Formation" (193-224), "Methods of Expression" (dealing with issues like "simple declarative sentences", "negative expressions", "expressions for reporting information", "criticism", "questions", "responses", "demands", "prohibition", "exclamations", "expressions of desire", "greetings", 225–252), "Vocabulary" ("numerals", "demonstratives", "color words", "special terminology" including taboo and prayer words, "loan words", 253–268), "Place Names" (269–272), "Literature" (on genres of Ainu folklore and traditions, 273–276).

The third milestone should be credited to Bugaeva (2004), a continuator of the long and rich Russian tradition of studies on the Ainu language permanently anchored in Japan and, at the same time, continuator of the world-famous Leningrad/ Petersburg school of typological linguistics. Like Refsing (1986), it is a grammar of an idiolect, in this case the language of Ms. Ito Oda (1908–2000) from whom Bugaeva recorded 15 folktales⁶ (published in one volume together with the grammar, Bugaeva 2004: 109–422) and other data used in composing the grammar in 1998–2000, mostly in hospital. The structure of what is identified as *Chitose dialect*, is presented in form of "Grammatical notes" (19-98), starting from "Sentence structure. Case relations. Number. Possessivity", followed by "Pronouns", "Verbal system", "Negation", "Interrogatives", "Imperatives", and "Relative clauses". The texts appear with interlinear grammatical analysis and translation, supported by frequent page-bottom additional comments.

In 2012, Bugaeva published another grammar overview of what she labeled "Southern Hokkaido Ainu" innovatively 'reducing' 'to a common denominator' (i.e. 'language') data from a few idiolects so far presented in literature as Saru and Chitose "dialects" which "show a few grammatical features that are hardly representative of 'Ainu' as a whole" (Bugaeva 2012: 465); the material offered in both grammars referred

⁶ See two re-edited folktales in Bugaeva (Chapter 20, this volume).

to is invaluable as based predominantly on data recorded by the author herself and at the very last moments of life of the ethnolect in question.

1990 marked the appearance on the Western academic market of Shibatani's rather unexpected and intriguing title *The languages of Japan*: before, there was only one language of Japan in the common wisdom. Few reached for the volume to look in vain for data about Ryukyuan so drastically absent for a century in Western-language literature. These few were disappointed: the book treated of only two languages -Japanese (Shibatani 1990: 89–392) and Ainu (3–86). The disproportion should not be perceived with suspicion – the name of Shibatani, one of the best known Japanese linguists outside Japan, was not on the list of explorers of the Ainu. His presentation of the Ainu language, based on research results of specialists in the language, is a very good example for how skillfully a talented linguist can use second-hand data to produce a valuable result. The author justified his decision to produce his own description of Ainu for some wider public unable to read Japanese in the following way:

In the case of Japanese, there are at least two works that cover the general ground [...] In the case of Ainu we are less fortunate. The only easily available book in English is [...] Refsing's recent book [1986]. But since this eminently readable book deals mainly with the colloquial Ainu of a single dialect – actually a single speaker – I have tried to offer a broader survey, sometimes concentrating more on classical Ainu, which shows a stronger polysynthetic character than the colloquial dialects. [...] some readers may find parts of the discussion somewhat technical [...] (pp. xiii-xiv).

And that is precisely what Shibatani 1990 is – and linguists will not have problems with the said technicality.

At least two other short grammatical outlines deserve attention; these are Murasaki (1978) and Patrie (1982). While the former constitutes an outline of the grammatical structure of Sakhalin Ainu in form of a 56-page pocket-size separate booklet ("a compact English version" of Murasaki's "Sakhalin Ainu grammar" of 1979), the latter is a 35-page appendix to Patrie's thesis on the genetic classification of Ainu for which the author has "translated, collated, and summarized the data from the various works of Chiri, Tamura, Kindaichi, and Hattori. The various analyses [...] are basically those of these scholars". Thus, Murasaki's work should be classified together with Refsing, Tamura, and Bugaeva, and Patrie's rather with Shibatani.

Important extensive publications of recent results of research focusing on specific grammatical structures and phenomena by well-trained linguists include Tamura (1970), Refsing (1984), (1984a), (1985), Alpatov, Bugaeva, and Nedjalkov (2007), Bugaeva (2008), (2010), (2011a), (2011b), (2015a), (2015b), (2016), (2017a), (2017b), (2018), (2021), and Bugaeva, Nichols, and Bickel (2022).

The first grammar-like attempt at describing the structure of Ainu in a Western language has been ascribed to Pfizmaier. His first text concerning Ainu was a short work giving general information on the language published in 1849, but in 1851(a) a much more extensive work appeared in print in which he tried to provide a description of "the construction" (der Bau) of the language. The primary sources for both were the same as for his 1854 dictionary (Section 4). For a critical evaluation of Pfizmaier (1851), see above all Dettmer (1994) and (1989–1997: 524–550), but the work had its critic much earlier: Dobrotvorskiy (1875) (cf. also Dettmer 1989–1997: 542).

Three works more, dated back to the "early" period in the history of research on Ainu, are to be mentioned to conclude this section – two small descriptions by Dixon (1883) and by Tittel (1922), a translation of Kindaichi's "Karafuto ainugo taiyō" as appended to Yasunosuke Yamabe's 1913 book Ainu monogatari 'Ainu stories', and the grammar by Hōsei Nagata as characterized by Dettmer 1992 (in Russian) and 1995 (in English).

6 Texts and text interpretation

Practically, almost every piece of writing mentioning the Ainu language considers it imperative to underline that it has been an unwritten language, a thesis no longer tenable after two decades of regular publication of the quarterly Ainu Taimuzu (アイ ヌタイムズ) printed in Ainu simultaneously in two different writing systems. In fact, an absolute majority of languages remain unwritten and among those "written", in the majority of cases it is religious texts, usually translations of, or from the Bible, more rarely school aids, that constitute the entire written heritage. Often, the very existence of such translations legitimizes the status of a "written language" – and there exist Ainu Bible translations (see EEWL-5-6-7, and – on Batchelor – Section 4).

One of the most widely known intellectual components of the "intangible" Ainu culture is abundant "oral literature" usually classified as "folklore", in fact a wide spectrum of genres of oral traditions, often strikingly long and elaborate poetic epics, but also tales in prose, fairy tales, legends, songs, anecdotes, jokes, riddles, etc., handed down by oral tradition from one generation to another to lay foundations for the folk's education and history. Fortunately for the language and for its owners, a significant amount of this part of the Ainu heritage has been recorded (in writing as well as in audio records), for the most part by Japanese scholars and by the Ainu themselves. Nevertheless, important contributions also in this particular domain should be credited to Western authors as well.

There are, of course, a few really old records of Ainu texts available to Western public (cf. e.g. Vos 1992), and phrases and even shorter texts do appear in earlier Western writings on the Ainu (like Pfizmaier 1850), also those referred to in the previous sections, but it was Batchelor who started (as early as 1888-1890-1892 (12 stories)), printing Ainu lore parallelly in Ainu and in his English translation on a large scale (see also 1924 (50 "fireside stories"), and appended to his "Grammars" in ³1926: 120-138 (6 "stories and legends") and 41938 : 105-145 (the same with 8 "further" such texts added)).

Batchelor's translations of religious texts have been made available in reprints in EEWL vols. 5, 6, 7 – they are exclusively in Ainu, but the English sources are easily accessible; on the language of the translations see Refsing (2000), cf. also Majewicz (2005).

It was, however, Piłsudski 1912 which actually set standards for the publication of Ainu texts and has been considered to be one of the most important works on and records of the Ainu language (see Sections 4 and 5). Franz Boas characterized the value of Piłsudski's materials in a letter of June 6, 1908, to Arthur Curtis James, a patron of the American Museum of Natural History, (preserved with Franz Boas's archives in the American Philosophical Society in Philadelphia) in the following words: "I am reasonably certain from what I know about it that it is exceedingly unlikely that material of this kind could ever be duplicated" (see Inoue 2003:159). Fifty years later Naert (1958: 37) wrote: "the texts in the Sakhalin Ainu language, precisely localized and well transcribed with the phonetic notation worked out in cooperation with Father Rousselot, constitute actually $[\ldots]$ the best source for our knowledge of the Sakhalin dialects [...]", and 70 years later Philippi (1979: 18) echoed: "it is a work of primary importance in studying the Sakhalin Ainu language and folklore".

Piłsudski (1912) contains 27 Ainu texts of the genre ućaśkoma with parallel English translation and comments, but the author collected much more data than he could present in his 1912 book; his own list of texts in his possession prepared for Boas as well as one more ućaśkoma, 11 tuita, and a superb collection of 50 prayer (inon ita) texts can be found in CWBP 3: 261–263, 264–269, 277–311, and 332–417, respectively (see also pp. 756-773). Besides, Ainu texts have been provided in Piłsudski's other works (cf. e.g., an oration to the bear, CWBP 1: 493 (basically the same as the "Farewell oration addressed to the bear..." in CWBP 3: 388–394 but differing in details) and an ojna "on rearing the bear – a legend in song", 558–561 and 717–718).

Probably the only Western researcher of the Ainu folklore that compares to Piłsudski was the Russian scholar Nikolay Aleksandrovich Nevskiy, 1892–1937, whose own collection of Ainu texts of early 1920s, except for Russian translations of three of them, was fragmentarily published only posthumously (he perished in Stalinist purges) and rather carelessly (cf. Majewicz 1985) in 1972. The book contains, apart from a reprint of an introductory article of 1935, 21 texts and their Russian translations and six texts in Russian translation only. In Kabanoff's (1991:115) opinion, "the edition is [rather not] satisfactory because the editor included only the type-written texts [in which] the Russian alphabet had been used for the transcription and no editorial corrections were made in them. There are a lot of the manuscript materials, however, in the archives [...] that have never been published or could be of much help in preparing the texts for the publication. As a rule, Nevskiy transcribed Ainu texts with Latin letters [...]". The latter fact is obvious from the most recent publications of two folklore texts from Nevskiy's archive in Bugaeva and Satō (2021) and Satō and Bugaeva (2022).

Both Piłsudski 1912 and Nevskiy 1972 have been published in Japanese translations.

In the mid 1960s, Ohnuki-Tierney recorded 32 samples of Sakhalin Ainu language and folklore from the northwestern coast of the southern part of the island and published them in 1969a with English translations and commentaries. For folklore researchers not versed in Japanese, the AAF volumes listed in the bibliography should be of use and interest.

Among more recent records of Ainu texts with English translation Bugaeva (2002), (2004), and Dal Corso (2021) cannot be overlooked and the reader's attention has to be drawn to at least three collections of translations only of texts published originally with Japanese translations which are precisely indicated and thus can be used for studies with the originals, and which are important because of the accompanying introductions: Philippi (1979), Tsushima (1996), and Chiri (2013), the latter also available in Esperanto as Čiri (1979).

Of special interest are texts in letters written by an Ainu named Taroji Sentoku (~ Taronci, see CWBP 3: 666-730; 796-804) and sent from Sakhalin to Piłsudski in Tokyo, relatively recently found with the Piłsudski archives in Cracow. As Refsing (2014: 192) correctly observed "very few attempts have ever been made to actually compose written texts in Ainu" (cf. also Majewicz and Majewicz 2008).

For interpretation of Ainu folkloristic texts in Western languages the readers are referred e.g., to Asai (1985), Haginaka (1985), Hatto (1970), Howell (1951), (1952), Murasaki (2001), Obayashi (1990), Rubleva (1992), Sakata (2011), and introductions to Piłsudski (1912), Nevskiy (1972), Philippi (1979), Tsushima (1996), and Strong (2011).

7 Phonographic records

Piłsudski recorded Ainu folklore not only on paper but also on Edison-system phonographic wax cylinders with a phonograph obtained from the Russian Imperial Academy. The collection long considered lost was rediscovered in 1973 in Poland and an attempt was made to recover the recorded contents at Hokkaido University Institute of Applied Electricity in 1983–1986 through the application of laser technologies. The summary of the project known as ICRAP and its results are to be found in CWBP 3: 504–517, 575–645, and 773–791, 817–818 (see also IBPC 1-2-3, Majewicz 1977, 1999, Bańczerowski 1964, Iwai et al. 1985, Kawashima et al. 1985, Ogonowska 1993, Roon 2001); for the most part the relevant literature is in Japanese.

Soon collections with similar contents were sought and found and similar attempts to recover the contents of such records followed.

8 Onomastics

One of the most intensely and ardently plowed acres in the history of research on Ainu were toponymic studies to establish etymologies for place names in northern Japan, and Western contributions here, although incomparably smaller than those of Japanese scholars and local amateur searchers, also had a share. The "classical" works in this domain are Batchelor (21905) (in "Grammar", 32-61) and especially (1925), Chamberlain (1887), and Slawik (1968) and (1977/78), see also Yamada (1985), Sauvageot (1961), Jimbo (1895); some such works concern toponymics of Sakhalin (Dobrotvorskiy 1875, Bushakov 2012, Chikova 1992), the Kurils (Torii 1918: 37–49), or Japan in general (Kagami 1962, also Kagami 2009); of tremendous practical significance are Russian-Japanese and Japanese-Russian glossaries identifying place names of southern Sakhalin (Pereslavtsev 1998 and 2000).

Ainu anthroponymics was investigated by Piłsudski but the data have not been recovered and what remains to be mentioned here is Radkovskiy's (1876) "list of names of all the Ainu . . . " published as late as 1995.

"Inscriptions"

In spite of the conviction that the Ainu never developed or adopted any writing system, there has been a trend in Ainu studies, especially in Russia, focusing on the "interpretation of Ainu pictograms" - and here the following works have to be pointed to as characteristic: Knorozov, Soboleva and Taksami (1986), Knorozov and Prokofyev (1995), and Kosarev (2007).

In relation to the above it seems not out of place here to move to some other semiotic interests in the Ainu culture like Appendices I–III in Torii (1918: 290–305) devoted to petroglyphs, including the unique Fugoppe Cave "inscriptions" in Shiribeshi, Hokkaido, and studies on propriety signs by Piłsudski (1912a, reprinted in CWBP 1: 562-590; 718-719) and Slawik (1952), cf. also Maraini (1942) or, better, its 1994 Japanese translation, for quality photographs.

10 Known significant unpublished material

Now, when we are well advanced in the 21st century, the problem of what is and what is not published requires a different attitude. In the preceding sections references have been made to material formally unpublished (be it dissertations or works in process – these, however, undergo controlled distribution in specialist circles) or items either still kept in archives and thus at least theoretically accessible or known but considered lost. Among the latter, worthy of inspection are Depreradovich's dictionary men-

tioned in Dobrotyorskiy 1875, Laufer's "small Ainu grammar which for some reason or other was never published" (1917: 198) and "a great deal of [...] traditions, and a large amount of grammatical and lexicographical material [...he] collected [...] among the Ainu" (1899), Nevskiy's unpublished texts described by Kabanoff 1991 (one more quotation from Kabanoff (ibid., 115) quoting Kyūzō Katō: Nevskiy's "Tenri archives [...] contain a lot of the Ainu *menoko-jukara*, either only in Japanese or in Russian translation. Most of them [remain still] unpublished."), Robert Austerlitz's opus magnum ("a Nivhgu dictionary with Orok and Ainu entries, and Japanese and Russian when relevant, and ethnographical notes, etymologies" (letter dated July 11, 1994, published in LOSP 2, 1995: 231), Benedek Baráthosi Balogh's *Ajnu szójegyzék*, ajnu szövegek [Ainu vocabulary~~Ainu texts], Ajnu nyelvtani jegyzetek [Ainu grammatical notes], Batchelor ajnu szavainak folytatása [a continuation of Batchelor's Ainu words], A. J. von Krusenstern ajnu szójegyzéke [Adam Krusenstern's vocabulary], Kicédulázott ajnu szóanyag [Ainu card-vocabulary], Ajnu szótár német szóanyaga [Ainu words with German equivalents], Ainu szövegek fordításai [translations of Ainu texts], Szakhalini ajnu szövegek [Sakhalin Ainu texts], Ajnu néprajzi képek [Ainu ethnographic pictures~~sketches] (cf. Hoppál 2005: 48, fn. 22; also Galambos 2008). No effort should be spared to search for the original manuscript of Piłsudski's dictionary described in Section 4 above and promising seems the inspection (and posthumous publication?) of the initial version of Dettmer's Ainu grammar (footnote 1) and the unpublished legacy of the German missionary Rev. Gerhard Huber (1896-1978, "40 years in contact with the Ainu", especially texts on the Ainu language in English and German) as described by Dettmer (1997: 574–575 and 775).

Among interesting "unpublished" but in fact published with the meager means available in the pre-computer era materials one finds conference handouts distributed to huge audiences – some of them played an important role in the discipline and were extensively cited (e.g. Ikegami 1968) and eventually published (e.g. Murayama 1992a); somehow similar sources are intriguing hand-made "self-published" book-size studies by distinguished authors, here exemplified by the Slawik 1979 monograph on "the Emishi language". Finally, the reader's attention should be directed toward at least some of the so-far unpublished for wider distribution PhD dissertations focusing on the Ainu language or even "Ainu languages" (like e.g., Alonso de la Fuente 2012).

11 Conclusion

In order to avoid overdosing with redundant information in the present Handbook, left out of consideration in this chapter have been issues and domains treated extensively and in detail in other parts of the volume, although basic bibliographical data for a very limited number of carefully selected Western-language works and authors have been listed in the bibliography that follows. The omissions concern in the first place relatively abundant contributions on the glottogenesis and genetic affinity (with representative works available in facsimiles in EEWI 1-5) of Ainu, areal and typological studies on it, past and present geographical distribution and statistics of the Ainu language users, and Ainu dialects and sociolects, all of which are probably prevailing in quantity in Western-language literature. Necessary space limitations forced also considerable selection limitations on, or neglect of the majority of minor articles and papers in favor of extensive book-size publications and papers that substantially influenced linguistic research. Exceptionally, Japanese-language sources with a sufficient quantity of glosses in English to make their contents useful and accessible to scholars and other interested readers not versed well enough in Japanese (they are in desperate need of especially dictionaries and texts, hence Tamura 1996, Murasaki 1976 (cf. Dal Corso 2021), Hattori 1964, and volumes of AAF series) have been listed. Wherever possible or considered important, information on reprints and republications has also been provided.

Neglected also is material published on-line only.

Thus, the present survey, in spite of the limitations mentioned, still tends to be, to the best knowledge of its author, the most complete of all similar compilations existing in the field, which does not mean that it is complete ultimately. Western contributions to the study of the Ainu language prove to include hundreds of works printed or handwritten on thousands of pages and sheets of paper and, as we discover, recorded also on other data carriers like . . . wax cylinders. Fortunately, it continues. Therefore, a "complete" inventory of results of Western studies on Ainu, with their value and merit growing in view of the level of endangerment of the language, still awaits its compiler and publication.

Abbreviations for journal titles, publishers, publication places

Cultures Hokkaido University (Sapporo)]

AAF	Association for the Transmission and Maintenance of Ainu Intangible Culture
BJO	Bochumer Jahrbuch zur Ostasienforschung
COKM	Сахалинский государственный областной краеведческий музей [Sakhalin
	Regional Museum (YS)]
CUP	Cambridge University Press
CWBP	see References
EEWCR	see References
EEWCT	see References
EEWI	see References
EEWL	see References
ELPR	Endangered Languages of the Pacific Rim
FRPAC	The Foundation for Ainu Culture
HBK	Hoppō Bunka Kenkyū [Bulletin of the Institute for the Study of North Eurasian

HPPC	Hokkaidō Shuppan Kikaku Sentā [Hokkaido Publication Planning Center (Sapporo)]
IBPC-1-2-3	Proceedings of the consecutive (1–3) International Symposia on Bronisław Piłsudski
IINBP	Известия Института наследия Бронислава Пилсудского [Bulletin of Bronisław
	Piłsudski Heritage Institute (YS)]

KΒ Краеведческий бюллетень [Regional Bulletin (YS)]

ΙP Lingua Posnaniensis, Revue de Philologie Comparée et de Linguistique Générale

LOSP Linguistic and Oriental Studies from Poznań

MLC Memoirs of the Literature College, Tokyo Imperial University of Japan

MN Москва: Hayka [Moscow: Nauka]

OAG Mitteilungen der deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens 0E Oriens Extremus. Zeitschrift für Sprache, Kunst und Kultur der Länder des Fernen

Ostens (Wiesbaden)

PUAM Poznań: Adam Mickiewicz University

SAAF Zaidan Hōjin Ainu Mukei Bunka Denshō Hozonkai [Association for the Ainu Studies

(Sapporo)]

SKAW Sitzungsberichte der Kaiserlischen Akademie der Wissenschaften, Philosophisch-

historische Classe (Wien)

SBP [Murasaki Kyōko (ed.)] 1992. Saharin to B. Piusutsuki. B. Piusutsuki seitan 125

> shūnen kinen kokusai shinpojiumu hōkoku. Yujinosaharinsuku 1991.10.31 - 11.2 [Sakhalin and B. Piłsudski, International Conference, 125th anniversary of the birth of Bronislaw Piłsudski]. Sapporo: Piusutsuki o meguru Hoppō no Tabi Jikkō linkai.

SHU Sapporo: Hokkaido University

TASI Transactions of the Asiatic Society of Japan (Yokohama; reprint Tokyo: Yushodo

Booksellers Ltd)

VSM Вестник Сахалинского музея [A Bulletin of Sakhalin Museum (YS)]

WOH Wiesbaden: Otto Harrassowitz

YS Южно-Caxaлинск [Yuzhno-Sakhalinsk]

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5 The Ainu language through time

1 Introduction

When it comes to the research of the past stages of language isolates, several methodological considerations need to be addressed. As is only natural, the traditional comparative method cannot be applied. In such cases, we are left with three potential tools. The first two are internal reconstruction and the analysis of potential contact-induced changes. For Ainu, the first can be applied to the wealth of data provided by the many documented lects from Hokkaidō, Sakhalin, and the Kuriles, while the second should be concerned with the influence which the neighbouring languages, chiefly Japanese and Ghilyak on Sakhalin Island, have exerted on Ainu.

The most powerful tool is, by far, internal reconstruction, which in the particular case of language isolates seeks to account for all dialectal differences (whatever the ways in which they manifest synchronically, see, e.g., Nakagawa 1996). I know of no better description of internal reconstruction than that of Austerlitz (1986: 183), who profited from it in his work with Ghilyak (another language isolate from Northeast Asia):

Internal reconstruction is at its best and therefore at its most useful when applied to isolates – languages without congeners (related languages). The reason for this is obvious: there is no temptation and (leaving aside dialects for the moment) there is no mechanism for introducing the comparative method into reconstruction simply because, in the case of isolates, comparative evidence is not available. Internal reconstruction should therefore be ideally viewed as a tool primarily for recapturing the past history of isolates or of stages of languages which cannot be recaptured by means of the comparative procedure.

A typical exercise of internal reconstruction in Ainu can be readily seen in the debuccalization (Fallon 2002: 123–202) that takes place in Sakhalin Ainu, whereby the original place of articulation of the Proto-Ainu consonants */p t k/ moves to the glottis when in final position, that is, in that position these consonants are realized as [-p¹, -t¹, -k¹], e.g. PA *[tek¹] 'hand' > HA *tek* vs. SA *teh*, or *[sik¹] 'eye' > HA *sik* vs. SA *sis*, from *sih via regular h > s after /i/, cf. the affiliative (AFF) form *sik-i(hi) 'one's eye' > SA *sik-ihi*. This change also affects the flap /r/ after intermediary assimilation: [-r__C-] > [-C__C-] > [-hC-], e.g., *[or__ta] 'in, at' {place=Loc} > HA *otta* > SA *ohta* (for further details, see Alonso de la Fuente 2014).

The proper application of internal reconstruction proves useful in distinguishing between inherited material and language-contact induced features. As far as the latter type is concerned, the influence and extension of the Northern ($T\bar{o}hoku$) Japanese dialect substratum, which can be mainly characterized by the merger of /uu/ and /i/ and retention of prenasalized consonants (simplification in Standard Japanese led to the loss of the nasal component), is self-evident, in its latest stage going well beyond borrowings, e.g., Standard Japanese tsukegi 'matches' \rightarrow Saru Ainu cikenki

id., SJ azuki 'sweet beans' → Saru Ainu antuki, cf. (Southwestern Hokkaidō) Ainu $susam \rightarrow (Northern)$ Japanese shishamo 'smelt', or inherited eramuskare (Bihoro) \sim eramiskari (Saru) 'to ignore, not know'.

A third tool is typology, but it must be used with utmost caution (see, e.g., Austerlitz 1990). Parallels ("the reconstruction of the feature A in a protolanguage B is granted because it resembles C which occurs in the real language D") and implicationals ("if A co-occurs with B, then we must posit C too"), though interesting as heuristic exercises, have no probatory value. The uncritical application of typology may lead the specialist astray. We must not lose sight of the philological evidence and, if we resort to typology, we should label our hypotheses in the proper way.

In this chapter I will review one of the most important contributions about the prehistory of the Ainu language, namely, Alexander Vovin's monograph on Proto-Ainu (1993, henceforth abbreviated RPA). Proto-Ainu is the hypothetical parent language from which all documented lects have historically formed during the course of approximately a thousand years (shallow as it is, this is the time depth that the application of internal reconstruction allows us to suggest without going into wild speculation). Vovin's standard reconstruction of Proto-Ainu has been reviewed at least four times: Sidwell (1996), Abondolo (1997), Witczak (1999), and De Boer (2010: 259–325). The first three focus mainly on the consonantal reconstruction and agree that Vovin's reconstruction suffers from his assumption that Ainu is genetically related to the Austroasiatic languages (Sidwell 1996: 179, 183, Abondolo 1997: 190, Witczak 1999: 221-223). De Boer is concerned with the suprasegmental approach adopted by Vovin in his reconstruction of Proto-Ainu, and rightly so opts to ignore the Ainu-Austroasiatic issue. In the discussion below I will follow De Boer's suit and, in general, I will ignore all previous attempts at seeking relatives for the Ainu language.

Sections below will be devoted to the analysis of Vovin's reconstruction of PA phonology: vowels, consonants, and suprasegmentals. A brief presentation of the basic tenets of Vovin's reconstruction will be followed by some critical remarks and alternative suggestions for future consideration (these will be called simply "New" in the Tables below). Unless otherwise stated, reconstructions in the body of the text follow the new system, whereas those in the numbered exx. usually reproduced Vovin's reconstructions (pitch accent will only be noted if necessary). In the third section I will make some remarks on PA morphology, an area which Vovin left unexplored in his book. The fourth and last section is a tentative proposal of periodization which distinguishes at least three stages, namely, Pre-Proto-Ainu, Proto-Ainu, and Common Ainu, whose identification is based on the analysis of the available data performed in sections two and three.

¹ This chapter is a heavily modified version of the second chapter and fragments of the third chapter of my PhD thesis (Alonso de la Fuente 2012). I would like to express my acknowledgement to Anna Bugaeva, Juha Janhunen, and Alexander Vovin for the many conversations over the years on many issues of Ainu philology and linguistics.

2 Phonology

2.1 Vowels

All Ainu dialects, with no exception, have five vocalic phonemes: /a e i o u/, with allophonic vowel length in SA [a: e: i: o: u:] on stressed syllables. Early documentation shows the presence of voiceless vowels which developed under the influence of Japanese. There exists the possibility that /u/ and /i/ were realized [v] and [i] in absolute final position. This would explain the well-known inconsistencies in many pre-twentieth century sources where we find vacillations of the type $\langle i \sim e \rangle$ and $\langle o \sim u \rangle$, respectively. However, beyond philology there seems to be no independent evidence that would help to confirm (or reject) such a phonemic interpretation. The alternation may be caused by a combination of factors to be sought in the languages of those who documented the language back then.

Vovin assumes that Proto-Ainu had to have subtle phonological distinctions in the vowel inventory because of the strange combinatory distribution of the vowel in the affiliative and the "transitivizer" marker (*)-V. These markers can show any of the five yowels /a e i o u/, and they can appear in combination with any other yowel in the base. In reality, one can observe 15 possible combinations: *u-e*, *e-u*, *e-e*, *o-o*, *u-u*, o-e, a-a, a-e, a-i, a-o, i-u, i-e, i-i, u-i, o-i. Chiri Mashiho (1974, see RPA 43-51 for references and discussion) argued that the loss of vowel harmony (a phenomenon characteristic of languages like Turkish or Finnish) could be the reason why the distribution of these markers seem chaotic from a synchronic viewpoint.

But Vovin shows that the distribution is at best uneven. He reduces all combinations to two major variants: i_2 and u_2 (subscript "2" indicates second syllable). The remaining cases are, in his opinion, the result of regular assimilation. He proposes, instead, that i_2 and u_2 determined the front and back feature of the PA stem vowels without any reference to height or roundness (see summary in Table 1). Therefore, Vovin reconstructs stem vowels depending on the quality of the second vowel. His vowel inventory contains 17 vowels, 12 short and six long, which he writes as follows: i, ü, e, ö, E, a, ï, ë, A, O, o, u, and ii, uu, EE, OO, aa, AA. The phonemic features of these allophones are unrecoverable. They have left no trace of them in the oldest layer of loanwords, dating back to the Nara period, be that either from Ainu to Old Japanese, or from Old Japanese to Ainu.

It follows from Vovin's description that all these variants could be only allophones of the five basic vowels /a e i o u/ which can be observed today in historical lects.

It seems that that the situation could be improved if we understand better the origins of the affiliative and transitivizer markers (*)-V. The issue has been traditionally approached in purely phonological terms. In Vovin's view, the marker in question is selected depending on the (last) vowel of noun or verb base to which it is attached (Table 2):

Table 1: Allophonic variation of vowels in Vovin's PA reconstruction.

	RPA	Vovin's Rationale	New
(1)	*A	*u ₂	*a
(2)	*a	*i ₂	
(3)	*E	Trivial (Sōya & RA e) or *i2	*e
(4)	*e	Sōya & RA <i>i</i> (~ <i>e</i>) or *i ₂	
(5)	*ë	*u ₂	
(6)	*i	Trivial	*i
(7)	*ï	*u ₂	
(8)	*0	Trivial or *u ₂	*0
(9)	*ö	*i ₂	
(10)	*0	Sōya o	*u
(11)	*u	Trivial	
(12)	*ü	*i ₂	
(13)	*AA	*u ₂	*a
(14)	*aa	Trivial	
(15)	*EE	Trivial	*e
(16)	*ii	Trivial	*i
(17)	*00	Trivial	*0
(18)	*uu	Trivial	*u

Table 2: Phonologically-based distribution of the affiliative and transitivizer markers.

$\overline{V_1}$	V ₂
a aa e E EE i ii ö ü	i
A AA ëï o O OO u uu	и

Janhunen (2020) has recently proposed an alternative explanation which allows us to get rid of these phonological notions. Moreover, Janhunen's solution is in line with certain typological trends in North Eurasia. Janhunen suggests that the affiliative and transitivizer marker was originally *-x (where "x" represents an undefined final consonant). The synchronic marker -V originally corresponded to the second vowel of the (back then dominating) disyllabic structure of the parent language. It is the loss of this second vowel (henceforth ".V") in absolute final position that triggers the re-analysis of the same vowel as part of the affiliative marker in the affiliative (and "transitive" verb) formation:

*CVC.V# > CVC, but *CVC.Vx > CVC-Vx

Only at a later stage, the regular noun hi 'time, place, thing' fused with the affiliative form CVCVx yielding the current form -(V)hV, e.g., PA *tek.e 'hand' > HA tek 'hand' \rightarrow affiliative tek-ehe (with RA tek-ihi as result of analogical extension of the dominating variant -ihi), etc.

This ingenious explanation, which is nothing but a triumph of internal reconstructions,² accounts for the bewildering variety of vowels that synchronically seems to characterize the affiliative and transitivizer marker.

Another problem with Vovin's PA vowels is that some sound correspondences are not applied consequently. For instance, observe examples in (1-2) and the compare them with those in (3-4):

- (1) PA *pët.u 'to cut, split' > SA pet-u (SG), pet-pa (PL); AS pet-u, pet-pa id.;
- (2) PA *nöm.i 'to hold a festival, perform memorial duties' > Y, OB, B, AS, N i-nomi; HO nomi; SO kamuy nomi 'to worship'.
- (3) PA *Etu 'nose' > Y, HO, SA, OB, AS, SO *etu(-hu)*; B, N, RA *etu*;
- (4) PA *nOn 'saliva' > Y, HO, SA, OB, B non(-i); AS, N, SO non; RA non(-ihi); KD nono id.

According Vovin's system of sound correspondences, one would expect that (3–4) are reconstructed as *ëtu-hu, from on older *ët.u, and *nön.i, or vice versa, reconstruction (1–2) *pEt.u and *nOm.i, respectively.

The sound correspondences behind Vovin's *e and *o, cf. (4) and (10) below, can be explained alternatively with scenarios that do not involve the reconstruction of additional entities.

Vovin admits that the reconstruction of *e is very doubtful. In fact, it is based on two instances: *kem 'needle' > SO kim, RA kem-ihi, and *ker 'foot-wear' > SO kiro(-ho), RA kiro. In the first case, PA e > SO i might be explained as a mechanism to avoid confusion with kem 'blood' < Vovin's *kEm. This has been achieved in RA by retaining the original final vowel of the noun bases: kem-ehe 'blood' vs. kem-ihi 'needle' < *kem.e

² Janhunen's solution is superior to my proposal of an ancient three-way noun class distinction for which there is scanty evidence in the language (Alonso de la Fuente 2012: 80-81).

vs. *kem.i. No explanation comes to mind in the case of *ker 'foot-wear'. This noun goes back to *ker.i, while Soya and RA shows a different vocalism for *.V: *kir.u, with -u > -o after /r/. All in all, there seems to be no basis to reconstruct *e. These two cognates may be reassigned to Vovin's *E.

As far as *o is concerned, this sound correspondence is apparently based on Sōya (& sometimes RA) o vs. u in the rest of dialects.

- (5) PA *opas 'snow' > Y, HO, SA, OB, B, AS, Nupas; SO, RA opas; KT ubasu, ubashi id.;
- (6) PA *opsOr 'bosom' > Y, HO, SA, OB upsor(-o); B, AS, N ussor(-o); SO osor id.;
- (7) PA *koy 'urine' > Y kuy(-e) 'urine'; HO, OB o-kuy-ma 'urine; to urinate'; SA, N kuy-wakka 'urine'; AS, SO o-koy-ma 'urine; to urinate'; RA on-kuy; KD kuj; KV kuj id.;
- (8)PA *nom 'to suck, seep' > Y numnum; SA nunnum; OB, N nun; H, AS, RA nunnun; B num; SO nonnnon id.;
- (9) PA *top(-)sE 'to spit' > Y tupse; HO, SA, B e-topse; AS topse ~ e-topse; N, SO topse; RA e-tohpase id.;
- (10) PA *gop-nE 'narrow' > Y, HO, SA, OB hut-ne; B, AS, N hup-ne; SO o-hot-ne; RA o-hoh-ne id.

All instances include other labial/back sounds such as $p \sim m$ or $o \sim u$. Sōya and RA o in (5–6) may be the result of lowering after the influence the next $\frac{a}{a}$ or $\frac{p}{w}$, while (7) is a verbal form requiring always the presence of the locational prefix o- 'below' to which original *u could have assimilated. Note that in (7) Asahikawa also shows o. (8) involves an onomatopoeic word, therefore we should not get very worried about its apparent irregularities. We could treat (10) as a case of assimilation as (7) or (5–6, "p" assimilation).

In theory, it would be possible to reconstruct *upas^y, *ups^yor, *kuy, *num(num), *top-s^ye, and *sup=ne ~ *sut=ne, respectively.

Although resorting to vowel assimilations may seem a rather aprioristic solution, this seems to be most economical solution in these cases (see, e.g., RPA 62-63 or Chiri 1974: 224, point [11]).

In few instances, Yakumo preserves the original state of affairs. The conservatism of the Yakumo dialect can be observed in numerous lexical items, however, it is not always possible to explain the idiosyncrasies showed by this dialect, e.g., /u/ in [9] above vs. /o/ in the other dialects (unless we are dealing here with another sporadic case of labialization under the influence of the contiguous p/:

- (11) PA *etop > Y etóp vs. rest of Ainu *otop 'hair' (RPA 86, Hattori 1964: 2[2])
- (12) PA *neto > Y netó vs. rest of Ainu *noto 'calm' (RPA 113, Hattori 1964: 230[58])
- (13) Y sem ~ mosem vs. B mosom 'closet' (Hattori 1964: 101[17], cf. Saru or Chitose *sem* 'storeroom, shed')

I agree with Vovin that, at least in these cases, the most plausible solution is to assume that Yakumo retains the original shape of those words, with Sōya and RA going with the rest of Ainu.

From the foregoing discussion it may be concluded that Vovin's reconstructions of *e and *o are unwarranted. Cognates supporting his *e and *o can actually be reassigned to his *E and *u. But since the class hypothesis does not require *E, or *O for that matter, these can be reinterpreted simply as *e and *o. It seems that alternations such as i/e vs. u/o do not have any systematic motivation, be that phonological or morphological, in the parent language, as was once suspected by some reviewers (see, e.g., Abondolo 1997: 191).

2.2 Consonants

The table below (Table 3) contains the inventory of consonants which were reconstructed by Vovin and remain the standard view on this topic³ (RPA 10, I have replaced Vovin's $\langle q \rangle$ with ?):

Table 3:	Vovin's PA	consonant	inventory.
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p	t		k	?
	d		g	
m	n			
	S	у		h
				(H)
	ſ			

³ The only alternative reconstructions of PA phonology that I am aware of are due to Itabashi (2005: 7–13) and Austerlitz (1986: 30). Itabashi's presentation only covers */a e i o u; k t c s n/ and offers no discussion on polemic issues. As for Austerlitz, he mentioned only consonants: */p t k č s h r m n/, and he does not elaborate further either. It is obvious that both authors just (partially) transposed the synchronic inventory of a given Ainu dialect.

This system includes three stops *p, *t, *k, two voiced stops *d, *g, three sonorants (alveolar *n, flap *r and bilabial *m) and at least five fricatives, namely, *s, *?, *h, *H and *v, where *h represents the voiceless glottal fricative, whereas "H" represents an undefined voiced fricative. Although it is nowhere explicitly stated by Vovin, we will assume that stops /p t k/ are to be interpreted as half-voiced. Such a characterization would explain elegantly why data from pre-scientific sources (wordlists and other materials from the sixteenth through nineteenth centuries) show the spelling alternations $p \sim b$, $t \sim d$, $k \sim g$, $c \sim j$, as, e.g., Dixon's (1883: 49) (jabush) for *capus* 'lip'.

For the sake of illustration and historical reference, the table below (Table 4) shows the phonological inventory of the Hokkaidō dialect of Saru (see, e.g., Tamura 2000: 17):

р	t	с	k	[7]
m	n			
	S	у	w	h
	f			

The table below (Table 5) shows the sound correspondences on which Vovin based his reconstruction. This table will be used as a reference for the discussion below. Note that the table summarizes, under "New", the system which will be argued for in the present contribution:

Table 5: Vovin's PA sound correspondences vs. the new system.

	RPA	Н	N	RA	В	KD	KL	KK	New	Exx.
1	*d-	r-	t-	r-	r-	r-	_	r-	*l-	1-3
2	*r	r	r	r-	r	r	r	r	*r	4-6
3	*tr-	r-	t-	r-	r-	(t)r-	_	(t)r-	*t-	7-9
4	*g	h / s_i	h / s_i	h- & k- / s_i	h / s_i	h / s_i	_	Ø-, h- / s_i	(1) *w (2) *s	10-12
5	*hd-	w	w	w	w	V	⟨-gŭ/kŭ-⟩	w-, -γ-	(1) *k ^w (2) *w	13-15
6	*pr-	p-	c- / p-	c-	c-	c-	_	c-	*p ^y	28-30
7	*hr-	h-	h-	y-	h-	y-	_	у-	*h ^y	31-32
8	*t ^y	С	С	С	С	С	_	С	*t ^y	33-34
9	*t / c_i	t / c_i	t / c_i	t / c_i	t / c_i	t / c_i	_	t / c_i	*t / c_i	35
10	*h-	h-	Ø	h- / Ø	h-/Ø	Ø	Ø	Ø	*? -	19-21

Table 5 (continued)

	RPA	Н	N	RA	В	KD	KL	КК	New	Exx.
11	*-7-	Ø / -?-	Ø / -?-	ø	Ø	ø	ø	ø	*-7-	22-24
12	*s	S	S	S	S	S	S	S	(1) *s (2) *s ^y	16-18
13	*H-	Ø	Ø	Ø	h-	Ø	Ø	Ø	_	25-27

2.2.1 Proto-Ainu *l (Vovin's *d)

See sound correspondences (1–2) and the following set of cognates:

- (1) Y, HO, SA, AS, N, SO rarak, RA raarah(-k), NA taarak, KD rarak 'smooth';
- (2) Y, HO, SA, OB, B, AS, N, SO *rera*, RA *reera*, NA *teera*, KT *re'ra* ~ *reara*, KK *kieierà* (initial (k-) is probably a mistake), KD *rer*; KV *riera* 'wind';
- (3) Y, SA, OB, B rus(-i), HO, AS, N, SO rus, RA rus(-ihi), NA tus, KT rushi, KD rus 'skin; fur';
- (4) Y pen+ram(-u) 'breast', HO, SA, B ram(-u), N ram, SO ramuhu, RA ram(-uhu), NA ranka, KT iramkarubaru 'soul, heart, mind', KK ramutúr 'breast';
- (5) Y ramram(-u), HO, OB, N ramram, SA, AS ramram(-i), SO, RA ramram(-uhu) 'scale(s)';
- (6) Y, HO, SA, OB, B, AS, N, RA hura, SO hura(-ha) LH(L), KT hura ~ fura, KD ur '(to) smell', KV gurat-va '(it) stinks'.

Vovin's reconstruction lacks the lateral /l/. In Eurasia the absence of /l/ is restricted to Japanese and Ainu.⁴ From a historical viewpoint, however, it can be easily argued that Common Ainu was actually a language with both /r/ and /l/ phonemes and that, after intense contact with Japanese, both phonemes merged with /r/. One could go even one step further and claim that /r/ and /l/ merged with /r/ before the first contact with Japanese would have taken place.

⁴ In spite of the particular conditioning of its allophones [r] & [l] (see Martin 1992: 28 for a basic presentation of the descriptive facts), Korean /l/ phonemic status is a sure thing. Old Korean had /l/ and /r/. As for Chinese, Old Chinese *r- > Middle Chinese *l-, whereas Old Chinese *l- yielded various results (including merge with *r > *l in some contexts).

Vovin's bases his reconstruction of *d- in Nairo, the southernmost Sakhalin dialect, where we have t-. This testimony could be also valid in case someone would suggest *1-. Another piece of information comes from Ainu loanwords in Ghilyak (see Janhunen 2016: 4 fn. 1 on the use of Ghilyak instead of Nivkh, which only refers to the Amur dialect) where the sound correspondence (Proto-)Ghilyak $^{(*)}$ l-: PA *d- can be observed (RPA 160) e.g., Nairo teera < PA *lera HL 'wind', like taarak 'smooth' < *larak HL or *laarak^{??} 'smooth' ← PN *laglag id.⁵ Note that in these cases dissimilation cannot be rejected out of hand. However, if the assumption is made that Nairo reflects *r- > t-, it is worth mentioning that in the languages where such a sound change is attested, there exist a general tendency to initial fortition, a case in point being the Japanese dialect of Yonaguni, where */z- y- r-/ > /d-/ and */s/ > /c/, the latter going beyond the initial syllable. Nothing comparable can be observed in Ainu.

Taraika dialect, belonging to the Hokkaidō branch, also shows /t-/ where the rest of dialects have /r-/. As De Boer (2010: 265–266) has convincingly explained, there is no agreement between Nairo and Taraika words as to which lexeme appears with /t-/ and which lexemes appear with r-/. However, I cannot agree with her in attributing the confusion to "dialect mixing". This solution is at best descriptive, not explanatory. We still do not know where /t-/ comes from and, what is more important, what the original dialect from which /t-/ spread forward is. Since it seems a purely interpretative matter, it is possible to reverse De Boer's "dialect mixing" argument and claim instead that words where Taraika shows /t-/, but Nairo has /r-/ could be evidence of hypercorrection on Taraika speaker's behalf, then I consider still Nairo to be an archaic dialect preserving PA *l- and being the focus of the spread of this feature. Furthermore, De Boer does not discuss the evidence offered by Ghilyak loanwords. The correlation between Ghilyak loanwords and Nairo cannot be just fortuitous.

RPA works with a voiced stop *d, but Vovin suggested in the past a voiced fricative * \eth . The change * \eth > r is very common in North Eurasia (see, e.g., Fortescue 1998: 68). Vovin aptly described it in these terms: "[\dots] a typical North East Asian lenition" (RPA 17). On the other hand, the voiced fricative $\frac{\delta}{r}$ rarely occurs in initial position, so Ainu would be the exception to the general rule, as far as languages presenting that phoneme in initial position is concerned.

⁵ Vovin (RPA 18 n 5, 160) claims that this word was borrowed in Ghilyak, e.g., Amur Ghilyak *laqlaq* id. < PA *laklak via Sakhalin Ainu r-dialects. Long vowel in the Ainu base may a compensatory lengthening after the loss of Ghilyak *k, since clusters such as *kl are not allowed in Ainu. Otherwise, we would have to explain the origin of this segment in Ainu. Interactions with Proto-Ghilyak led some support to the reconstruction of PA, cf. PA *lu 'to melt', *lu-p 'ice' (lit. 'melted thing'), the latter borrowed in Proto-Ghilyak as *lu-t id. (RPA 18, 160, also 83 s.v. $du=p^{L}$).

Vovin claims that CAUSATIVE V^0 -re, $C^0[\mathfrak{c}]$ -e, and C^0 -te can be accounted for simply positing *-de, but *-le seems equally possible:

- a. PA *e-le^{HL} 'to make eat' > CA *e-re^{HL};
- b. PA *kar-le 'to make do' > *kar-re > CA *kar-e;
- c. PA *ahu.p-le 'to make enter' > CA *ahu.p-te.

In (1) Vovin assumes lenition, here we posit merger of *l and *r. But more important is that, as it can be inferred from previous instances, there is actually no need to reconstruct *-le, for *-re is also possible.

It is more economical to assume that Nairo t- (and Taraika in some cases) and Proto-Ghilyak borrowings witness a very old stage of PA branched off in CA *l > *t-, the only survivor being Nairo, and CA *r. It is worth noting that typological parallels reflecting the change *l > /D/, especially in initial position, are plenty, see among others Old Chinese or Tibetan.

Two pending questions. First of all, it is only fortuitous that the Nairo dialect (actually the idiolect of its last speaker) is to be found in Sakhalin. I do not think that this is a SA vs. HA feature, for it witnesses facts which had to take place before the Great Migration in the 13th century, when it is assumed that the Ainu reached Sakhalin and the Kuriles. Secondly, since there is no material possibility to reconstruct medial *-l-, one can argue that PA had, as Korean, only */l/, which was initially pronounced *[l-] and medially *[-r-] (rare, but not impossible), or just that the merge in *r has erased all traces of its existence. I shall endorse the latter option.

2.2.2 The consonant cluster *tr

See sound correspondence (3) and the following set of cognates:

- (7) Y, HO, SA, OB, B, AS, N, SO, KK, KD ru, RA ruu, NA tuu, D tru ~ ru, KT toiru ~ toiruu, KV tojru ~ tru 'road';
- (8) Y, HO, SA, OB, B rek(-i), AS rek(-ihi), N rek(-e), SO rek(-ehe), RA reh (rekihi), D triek ~ riek; KT, KD reki, KK triek, KV riek 'beard';
- (9) Y, HO, SA, OB rap(-u), B, AS, N, SO rap, RA rah (rapuhu), NA tap, D trap ~ rap, KD unkas+rap, KV trap 'wing(s), feather'.

The most intriguing of all reconstructions proposed by Vovin is PA *tr-. This cluster only appears in HA and KA sources. Two important remarks: (1) the correspondence Nairo t- vs. remaining lects *r- applies in some instances, and (2) Vovin mentions that / tr-/ is a particular way of pronouncing /r-/ among the Sakhalin Ainu, at least as noted

by M. Dobrotvorskij and B. Piłsudski, researchers engaged in Ainu linguistics at the end of the twentieth century. However, as Vovin states, "[i]t is unclear whether it is a variant within one dialect, or whether [tr] and [r] are variants in different dialects". Vovin reconstructs *tr- when a word has (tr- ~ -r) in Dobrotvorskij's dictionary and in at least one Kuril source. Note that this orthographic practice is not restricted to the Kuril dialects. Dixon, in his description of Ainu, writes (r/w) with (dr), even in medial position, e.g., (artrus) (Dixon 1883: 41) for attus 'garment'.6

The only reviewer who comments upon Vovin's *tr- is Witczak (1999: 221–223). He also contributes very valuable information based on Piłsudski's SA text materials and other authors, as shown in the table below (Table 6: unless otherwise stated, Kuril sources are reproduced as in RPA, or in this case, Witczak's review of it). While Vovin also acknowledges this, he does not seem to elaborate further on the question.

Table 6: Cognates on which Vovin's *tr- is based vs. retroflex interpretation.

Nairo	SA (= Piłsudski)	KA	Other sources	New	RPA
[ran-ka]	tamhu ~ ramhu 'soul, thought, spirit' (T22)	†ram	(tram, tranka) (Dobrotvorskij)	*tam.u	*ram, -u
_	tara ~ rara 'eyebrown' (T52 = R68)	†rar	(tara) (La Pérouse)	*tar.u	*rar, -u
[teh, -e]	texni ~ rexni 'drumstick' < tek+nii 'wood' (T78 = R79)	†tek	(tréki) (Dobrotvorskij)	*tek.e	*tek, -e
tuu	tuhe ~ ruhe 'path, way' (R140)	KV (tru)	_	*tuuh.e	*truu
_	tuhe 'footprint' (R140)	KT (ruwepe)	_	*tuy.i	*ru (*du?)
			ru(y)e = \langle truè, truvè\rangle 'thick, large' (Dobrotvorskij)		
tus	tuś(i) ~ ruśi (T258 = R160)	†rus	(trus(à)) (Dobrotvorskij)	*tus	*dus

⁶ It is highly unlikely that we are dealing here with an epenthetic element (Campbell 1999: 34–5, Blevins 2008) like in English stream < Proto-Indo-European *srew- 'to flow' > Ved. srávati 'it flows', Old Irish sruth, sruaim 'river', Greek ἀνδρός 'man' < */anrós/ >, French il va 'he goes' vs. va-t-il 'is he going', glouglou 'noise in pipe' vs. glouglouter 'to make such noise', Common Slavic *sesr-a > *sestra 'sister', or Old Church Slavonic iz rouki vs. izdrouky 'thus, together', etc.

Voyin seems to be unaware of the fact that in the idiolect of Ginosuke Kikuchi, a speaker of the Bihoro dialect, the voiced retroflex plosive [d] could be still heard by the time Hattori's team collected data for the comparative dictionary of Ainu dialects (Hattori 1964: 34, the identification of spellings such as (dr ~ tr) with this sound is explicitly stated in, e.g., Bugaeva and Satō 2021). It is my understanding that the philological evidence points to a retroflex sound which could be the voiceless plosive /t/ (this sound is spelled (tr) in Southern Vietnamese) or the voiced retroflex trill /t/, or even perhaps a cluster involving two retroflex sounds, e.g., /tr/.7 I will use here /t/ because of the dental reflex of this sound in the historical languages, the evidence of loanwords from or in Ghilyak, and the merge in Nairo of *1 and *t with /t/. Note, however, that sometimes Nairo *t*- and KA & SA *tr*- do not correlate as assumed.

2.2.3 Vovin's *g, *hd, *s and the stop subsystem

See sound correspondences (4–5, 12) and the following set of cognates:

- (10) Y, HO, SA, OB, B, N, SO oha, RA oha-ris=ne 'to be empty';
- (11) Y, HO, SA, OB, AS, N ahu-n (SG), ahu-p (PL), B agun; SO ahu-n, RA ahu-n, ahu-h(-p);⁸
- (12) Y, HO, SA *ay*(-*e*), OB, B, N, SA, RA *ay*, KT *ai*; KK *akhi* 'arrow';
- (13) Y, HO, SA, OB, B, AS, N, SO, KT wakka, RA wahka 'water';
- (14) Y, OB, B, AS, N, SA, RA kuwa, HO, SA kuwa(-ha) 'cudgel, club, walking stick';
- (15) Y, HO, SA, OB, B, AS, N, SO, RA, KT wen 'to be bad', KK siruGen 'rain' (lit. 'weather [is] bad), KD, KV vyn+kamuj 'devil' (lit. 'bad god'), vyn 'bad';
- (16) Y, HO, SA, OB, B sar(-a), AS, SO sar(-aha), N sar, RA sarakuh(-pihi) 'tail';

⁷ Elsewhere I have suggested other possibilities: the alveolar trill [r] or the unvoiced alveolar (fricative) trill, i.e., [r] or [f] (Alonso de la Fuente 2021: 36–37, item [31]). However, these are less likely than the retroflex interpretation. It is well known that r-clusters (either /rC/ or /Cr/) yield retroflex consonants in some languages. Accordingly, it would seem feasible that the Bihoro retroflex consonant continues an original *tr-cluster. However, I prefer the reconstruction of the retroflex over the cluster on economic grounds: the retroflex solution is backed by solid evidence, whereas the sole evidence for the cluster reconstruction are spelling practices of ambiguous interpretation.

⁸ Vovin, following AHJ 243[56], includes here KT aune, but Anna Bugaeva (p.c.) rightly identifies it with aw-ne {near.to-COP} 'be next to, nearby' and, therefore, it should be best removed from this list of cognates.

- (17) Y, HO, SA, OB, AS, N sik(-i), SO sik(-ihi), RA sis (sikihi), KT shik; KK, KD, KV sik 'eve';
- (18) Y, HO, SA, OB, B, AS, N, KD, KV mos, SO mossi, RA toomus(-ihi) 'a fly'.

One possible way to approach the analysis of these two very conflicting correspondences, which are reflected in exx. (10-12) and (13-14), is introducing typological information. Below I will present two hypothetical scenarios. The discussion illustrates the rather questionable nature of typological comparisons (implicational assumptions, selection of languages partly based on "confirmation bias", etc.):

A. α. **Proto-Ainu** *w (sound correspondence 4): The absence of the labial glide /w/ from Vovin's reconstruction is remarkable (Sidwell 1996: 180).9

Ainu material allows us to reconstruct /w/ straightforwardly (Sidwell 1996: 180-181). The sound correspondence (4) postulated by Vovin justifying the reconstruction of a voiced velar fricative *g seems to be the best candidate. Since we have concluded that Vovin's *d- could be *l-, the voiced stop *g would stand alone among the voiced stops, something extremely odd from a typological point of view. We propose to change Voyin's *g for *w. Thus, PA */w/ underwent the same evolution that resulted in the Greek spiritus asper, i.e., the old F, so-called "Fau", like for example in Proto-Indo-European */wesper-o-s/ > Greek ἕσπερος [hes-], Latin vesper 'evening' (Sihler 1995: 182– 187), or Common Slavic */vydra/ > Lower Sorbian wudra > hudra 'otter' or ulica > wulica > hulica 'street' or */ješče/ > hyšći 'still', */iti/ > hyš 'to go', etc. (Carlton 1991: 107–108).

The alternation /h/ vs. /s/ after the front vowel /i/ found in Ainu is not problematic and it can be likewise explained as a result of the prehistoric change PA *w->*h-, with palatalization of /h/ as in the Slavic 2nd and 3rd palatalizations, e.g., Proto-Slavic */doux-oi/ 'soul (LOC.SG)' > Common Slavic */duxě/ > Croatian dùsi, Old Russian dusě, Czech duše (= 2nd Palatalization) or [PS */vĭxŭ/ 'all' >] CS */vьх'ъ/ > Slovene vès, Russian ves', Old Polish wszy (= 3rd Palatalization).¹⁰

If *s > h, then it is necessary to reconsider SA rule h > s / i, since it has been traditionally described as affecting h's from */p t k/.

B. **Proto-Ainu** $*k^w$ (sound correspondence 5): The sound correspondence offered in (5) is probably a classical handbook case to reconstruct */k^w/. However, Vovin opted for the cluster */hd/, given the lack of */w/. But since the absence of */w/ has been solved, the reconstruction of */kw/ phoneme is perfectly possible. Such a sound corre-

⁹ It is very important not to confuse these prehistoric phonemes with the synchronically predictable glides that are inserted to avoid sequences of two vowels (glide insertion and glide formation), e.g., */sioka/ \rightarrow [si-y-oka] 'behind oneself' or */uekapan/ \rightarrow [u-w-ekap-an] 'we saluted each other', specially before the affiliative marker, e.g., $/\text{ni+e}/ \rightarrow [\text{ni-y-e}]$ 'his/the tree' or $/\text{ku+e}/ \rightarrow [\text{ku-w-e}]$ 'his/the bow' (see, e.g., Bugaeva 2004: 16-19, Refsing 1986: 72-73 or Satō 2003 for an elemental description). **10** See, e.g., Carlton (1991: 120–6, 130–5).

spondence points undoubtedly to /kw/, the historical testimonies being very similar to what is known to have happened in some Indo-European languages, see, e.g., Gothic /w/ and Latin (qu). The Latin grapheme is a very interesting match for the orthographical device (gŭ/kŭ) used by Klaproth in his monumental work (Klaproth 1823: 300-315), the clearest cases being the following: (īgǔǎh) 'sulphur' (Klaproth 1823: 312) = PA *ihdagu 'id.' (RPA 96), (ihgŭæhn) 'six' (Klaproth 1823: 315) = PA *ii=hdan= 'id.' (RPA 96), and (synnäkuěh) 'guest' (Klaproth 1823: 306) = Saru sinéwe kur, Yakumo sinewékur, Horobetsu sinéwekur 'id.' (Hattori 1964: 47[68]). Also, compare dialectal Japanese 硫黄 iō 'sulphur' and Chinese 黄 huáng 'vellow' in 硫磺 liúhuáng 'sulphur' (the first component 硫 liú means 'sulphur'). Since Klaproth (or Steller, according to Murayama's theory about the last origin of Klaproth's materials) was able to distinguish successfully the vowel length, it turns out almost unbelievable that the same person would confuse the pronunciation $/k^w \sim g^w/$ and /w/.

On the other hand, words like (kŭĭtūp) '(wild) goose' = Saru kúytop etc. (Hattori 1964: 190[82]), reflect /kuy/, not **/kwi/, and they are written with the same grapheme (kŭ). Additionally, orthography is not phonology. We should keep in mind that even knowing with safety what phoneme is hidden behind Klaproth-Steller's grapheme, that does not imply that we also know what phoneme has to be reconstructed, for the change $*/k^w/>/w/$ and $*/w/>/g^w/$ are very common, and both options then seem to be equally available unless an external piece of information is brought into discussion.

As for KK materials, they show (-w-) and (-y-), that is, totally expected correspondences to */w/ (whatever the origin of this glide may be, i.e., */w/ or */kw/). Only one instance provokes knitting one's brows, i.e., (sirugèn) vs. Klaproth(-Steller) (šỹrǔyhn) 'rain' vs. HA sir wen 'bad weather' (Hattori 1964: 226[30]) and KT shiriwin 'rain' (Hattori 1964: 227[36]). Needless to say, clerical errors cannot be rejected out of hand.

All in all, the reconstruction of *kw and the assumption about the phonetic value of a rather inconsistent spelling practice by Klaproth would go against the typology of the Euroasian zone, where the occurrence of this phoneme is rare. 12

y. Proto-Ainu *s (sound correspondence 12). This would be a trivial sound correspondence requiring no further comment.

¹¹ In this case it cannot be interpreted that the segment (-kuěh) corresponds actually to kur 'person; man' because the word appears elsewhere in Klaproth's glossary as (kŭr). In addition, Saru dialect shows that the word /sinewe^{LHL}/ is autonomous (the accent retraction in Yakumo is secondary). One wonders whether other words could be also added, e.g., (āhkǔŭnǎh) 'ashes' = Batchelor's (au, awe), affiliative (awe-he) 'branch' < PA */akwe/ 'branch, fork' + PA */unaHL/ 'ash(es)' (cf. RPA 153 s.v. *uu(y) na id.). Of course, this depends on the reliability of my own etymological interpretation.

¹² No examples in the sample prepared by Austerlitz (1986). It should be emphasized, however, that "typological uncommon" does not always equate with "inappropriateness" or "impossible".

B. α. **Proto-Ainu** *s (sound correspondence 4). PA *s would be preserved only after /i/, in whose case is realized [\wp]. In the rest of contexts *s > h. The resulting sound change would be the exact opposite of Vovin's rule *h > s / i.

RA (and in some sources of Kuril Ainu) k < *h- are typical examples of the (sporadic) fortition of continuants, in initial position when followed by voiceless/fortis consonantal segments, or in absolute final position.

β. **Proto-Ainu** *w > †-gw- (sound correspondence 5). If we decide to ignore the grapheme used by Klaproth and consequently we interpret sound correspondence (5) as *w, this enables us to propose a second system, more economic (after all, the reconstruction of *k^w is counterintuitive from an Eurasian perspective) and equally probable. To begin with, Klaproth's grapheme could reflect /kw/, but even if that would be the case, PA could have had still *w, for the historical derivation of the former from the latter is pretty common. For instance, according to traditional and more recent descriptions, Chamorro $gw < P[roto-]M[alayo-]P[olynesian] */w/ (< \emptyset), e.g., gwaha 'have, there is, there exists'$ < */wada/, lagwet 'catch with a hook' < */lawit/ 'hook', pugwa 'bettel nut' < */buwaq/</p> < PMP */buaq/ 'id', but chago 'far, distant' < */zawuq/ < PMP */zauq/, gwafak 'mat' < */ wafak/ < PMP */apak/, but gugat 'vein, muscle, tendon' < */uRat/ (Blust 2000: 97–98). From here it follows that /gw/ arose after fortition from the sequences /uC/ > /guC/ and / uV/ > /wV/ > /g^wV/. Thus, for those who prefer to ignore Klaproth-Steller's orthographic conventions, it is still possible to argue that similar sound changes as in Chamorro might have taken place in the "Kamchatkan" Ainu dialect, e.g., PA *iwan^{LH} 'six' (my reconstruction) > "Kamchatkan" Ainu †igwan- 'id.'. The supporters of this option have to provide still an explanation for Klaproth-Steller's orthographic opposition (gŭ/kŭ) vs. (w).

y. **Proto-Ainu** *sy (sound correspondence 12). If we accept that the sound correspondence (4) should reflect */s and (5) must then be $*/k^w$, the logical question is: what should we assume as regards the sound correspondence (12)? From a diachronic typological point of view, it is uncommon that /s^y/ yields /h/. Such behavior is proper of plain /s/. Thus, what is usually regarded as */s/ could be just the depalatalized evolution of $*/s^y$ / after the collapse of the entire palatalized series. Note Latin & Greek *-ss- > -s-, Latin *-s- > -r-, but Greek *-s- > -h-, etc.

These two scenarios are summarized in Table 7:

Table 7: Summary of the two alternative scenarios to account for Vovin's PA *hd, *g, *s.

RPA	*hd	*g	*s
Scenario 1	*k ^w	*w	*s
Scenario 2	*w	*s	*s ^y

The problematic reconstruction of sound correspondence (4) led Vovin to consider a radical reconfiguration of the PA subsystem of stops (RPA 25): *g would be replaced with *kh, ¹³ *t with *th, and *d with *t. This new proposal found the support from Sidwell (1996: 180-181). This system would require too many assumptions and a big departure from what the historical Ainu records offer us as evidence. Additionally, the presence of /w/:/y/ and /r/:/l/, while not especially spread in Eurasia, is common (Austerlitz 1986: 29-30).

2.2.4 Proto-Ainu *h (Vovin's *[h--q-])

See sound correspondences (10–11) and the following set of cognates:

- (19) Y, HO, SA, SO, KT heroki, OB, B, AS, N eroki, RA herokki; KT heroki 'herring';
- (20) Y, HO, SA, B haram, AS aram, N omarrap (< *aram+ap?), SO homarurap (< *horamurap?) 'lizard';
- (21) Y, HO, SA, SO horak, OB, AS, N orak, RA horah 'to fall';
- (22) Y ye(-he), HO, SA, SO ye, OB, AS ige, B iye, N ige(-he), RA yee 'pus';
- (23) Y, RA ciw, SA ciw(-e), B cuy; KV tiu 'waves';
- (24) Y, HO, SA, OB, B, AS, SO cup, RA cuh, KT chup, chiup, KK chuppu, KD cup, chup; KV chuppu 'sun, moon'.

The voiceless fricative [h-] only occurs initially, whereas the glottal stop [-?-] (Vovin's original spelling (q)) would appear only internally. There is room to speculate that this distribution seems complementary.

It has been traditionally assumed (see, e.g., Hattori 1964) that no word in Ainu begins with V, but a glottal stop is inserted automatically in this context. The glottal

¹³ On the other hand, Witczak (1999: 223) comments that the reflexes of Vovin's *g may be influenced by the way (Middle) Japanese /h/ was realized at that time, i.e. [6] before /i/, [f] before /u/ and [h] before /a o e/. Witczak uses as an illustrative source De Angelis' list, where one can observe (Faibò) for haBo 'mother'. Though Witczak is right in underlining the potential influence of Japanese in Ainu, his argument rather works against that hypothesis: De Angelis may have taken those words from an informant who just applied Japanese pronunciation to Ainu, as in the case of (Fottzu) for hot '20', where the last segment reflects the automatic insertion of a paragogic /u/ and latter palatalization of /t/ so typical of Japanese. See RPA (26) where Vovin deals with this topic extensively (Vovin uses Strahlenberg's materials, which are based on De Angelis' list, see Majewicz, Chapter 4, this volume).

stop surfaces too to break up clusters of two (identical) vowels. Shiraishi (1999) has rightly argued that this element has no phonemic status because it has no lexical function whatsoever and it takes no part in morphonological processes. Shiraishi suggests that it may have been used as epenthetic element. If so, in most HA dialects the results of *s and *? could have converged in the laryngeal h, at least in initial position. In other Ainu varieties (both SA and HA), *?- was just lost.

Therefore, apparently diverse results such as Horobetsu ve, Nairo i/e, Bihoro ive, Raiciska vee < CA *i?e (cf. RPA 97 s.v. *igEE^{LHL}) actually reflect each of the expected results. Competing solutions naturally arise, e.g., Bihoro ive (= it preserves both original vowels) vs. Horobetsu ye (with initial semiconsonant).14

2.2.5 Prothetic /h-/ in Bihoro (= Vovin's PA *H)

See sound correspondence (13) and the following set of cognates:

- (25)Y, HO, SA, OB, N, SO aspa, B haspa 'deaf';
- (26) Y, HO, SA, OB am(-i), B ham, AS, SO, RA am(-ihi), N am 'claw';
- (27) Y, SA, OB, AS, N, SO urar, B hurar, RA uurara, KT urarube 'fog', KK uurar 'clouds'.

Initial stressed syllables (< PHA high pitch accent) triggered the rising of a prothetic /h-/ in Bihoro words (Sidwell 1996: 180), whereas initial non-stressed syllables (< PHA low pitch accent) did not generate it. Vovin (RPA 30-31, 94) argues that Bihoro preserves a putative sound lost in the remaining lects.

However, the insertion of an initial /h/ follows a very well-known universal tendency according to which $\#V \to hV$ / v (see Blevins 2008), as in English, e.g., vehicle [viəkl] vs. vehicular [vēlhikyələr]. Since this process is very common, it might have occurred individually in Bihoro. Cases like Bihoro hese 'to comply with, consent to' vs. ese in the remaining dialects, may be true archaisms: stress falls on the second syllable in words of the shape CV.CV, but prothetic *h*- in Bihoro requires it to fall on the

¹⁴ A very interesting Eurasian parallel can be found in the history of the Mongolic languages: whatever the origin of that phoneme was, the laryngeal, commonly written $\langle h \rangle$, is preserved in initial position in Dagur, Monguor, and in Middle Mongolian, but internally was progressively lost, with the very famous hiatus in Middle Mongolian as a (philological) testimony of its evolution towards total loss (Janhunen 1999: 126), e.g., Proto-Mongolic */xalaka.n/ 'palm(s) of the hand' > halaqan and */exüden/ 'door' > e'üden (both attested in Middle Mongolian), in Khalkha alga and üüd(en), respectively. Thus, in Middle Mongolian /h/ underwent a transitory stage where it surfaced according to the following distribution: [h-] in initial position, and [-?-] in medial position (see Rybatzki 2003: 64).

first syllable (and so we find Saru Ainu ése, etc.). This can be a remnant of the trochaic stage posited by Shiraishi (2017) for Common Ainu.

In certain cases, the prothetic h- has been used to disambiguate what regularly are homophonous terms or meanings. For instance, the following two words (Table 8) are most likely semantic specializations of the same etymon (pitch accent, while not phonemic in Ainu, is used for this purpose in a couple of instances):

Table 8: Bihoro h- vs. Ø in the other Ainu lects.

CA	SA (= RA)	Bihoro	HA (= Saru)	Gloss
*am	am	ham	am (H)	claw
		am		(finger)nail

As is commonplace, the pressure of the system or hyper-characterization might have led to the emergence of forms with non-etymological initial /h/. We can assume that Bihoro's instances containing non-etymological initial /h/ may be the result of such a tendency.

The existence of the prothetic *h*- is not limited to Bihoro. Table 9 shows data from two pre-scientific sources of Kuril Ainu (Vereshagin, ca. 1779, from Lanyon-Orgill 1979: 222-226, Pinart, ca. 1872, from Asai 1974: 101-136). These bear witness to the existence of the prothetic h- in Kuril Ainu dialects. Curiously enough, prothetic hoccurred along the loss of original *h*- for which there is no ready explanation as of yet.

Table 9: Loss of original h-vs. prothetic h- in Kuril Ainu.

Kuril (Vereshagin)	Hokkaidō	Proto-Ainu	remarks
abo	hapo	*hápo 'mother'	loss
ankoo	hanku	*hánku 'navel'	loss, cf. Torii <i>hanko</i>
aw	haw	*háw, -é 'voice'	loss
honumman	onuman	*onúman 'evening'	prothetic
hottenna	ottena	*ótténa 'chief'	prothetic
oni	honi	*hón, -í 'belly'	loss
uyeheye	huyehe	*húy, -é 'cheek(s)'	loss
Kuril (Pinart)			
hār ('áp) 'sarana; wild lily'	?	?	?
hērgos (э́р-гос)	(h)erkus	*érkús 'cod fish'	prothetic

2.2.6 Proto-Ainu *py and other palatalized consonants

See sound correspondences (6–9, and the instances presented above for 12) and the following set of cognates:

- (28) Y, HO, SA par(-o), OB, B car(-o), AS paroho, N caro, SO caro(-ho), RA caru, KT charu, charo, KK, KV char, KD car 'mouth';
- (29) Y, HO, SA pan, OB, B, SO can 'sweet', RA can 'light, thin, insipid';
- (30) B, RA cas, KT chashi, chase, KD chasi, KV chash, BA chash ~ pash 'to run';
- (31) Y, HO, SA, OB ham(-u), B, SO ham, RA yam(-uhu), KT yam, KV iam 'leaf of tree';
- (32) Y, HO, SA, OB, B, AS, N hup(-i), RA ya+yuh (yayupihi) 'white fir', KT hup'silver fir, white fire', KV up 'fir';
- (33) Y, HO, SA, OB, B, AS, N, SO cuk, RA cuk-iita, KT chuk-am, KD chuk-an '(in the) fall';
- (34) Y, HO, SA, OB, B, AS, N, RA kucan 'female bear';
- (35) Y, HO, SA, OB, B, AS, N, SO mat (maci), RA mah (macihi) 'wife', KT, KV mat, KV mat 'woman' ~ kmadzhi 'wife' (= ku-maci 'my woman').

Cognates in (28–30) showing $p \sim c$ could be tentatively treated as expressive palatalizations (Kochetov and Alderete 2011). This phenomenon, however, is related to children language and usually brings semantic nuances (diminutive, emphasis) which cannot be observed in the Ainu items above. Out of desperation, we could suggest tabooistic restrictions of unknown origin or motivation, rather than children language.

There is room to propose the reconstruction of a complete series of palatal(ized) consonants. This working hypothesis is based on two facts: the reconstruction of PA *tyV in opposition to *ti > *ci is a rather trivial matter, 15 and palatalized consonants are common in North Eurasia (most notably in Yeniseian, see Fortescue 1998: 72).

¹⁵ Future research on PA loanwords should confirm if there was actually a linguistic stage in which *ti was realized without the modern, automatic palatalization. For the time being, instances like Yakumo ciku-ni^{LLH}, Horobetsu ciku-ni^{LHL} (AHJ 196[3]) < CA *ciku-nii < PA *tiku-nii 'wood; wooden' → Proto-Ghilyak *tik-t 'tree' (RPA 160 s.v. *tiku= 'tree') seem to lend some support to such an assumption.

Vovin's *pr- could actually be *py- (already noted by Sidwell 1996: 182). 16 As for *k^y, all traces of it may have been lost because it is very common that results from this and from *t^y merge in */c/. Therefore, in theory one would have to posit both reconstructions for the same etyma. Only external evidence could confirm which one is the correct. Vovin's *hr- would nicely correspond to *hy-. Unlike *ty vs. *ky, both *hy and *sy would be kept distinguishable thanks to the Sakhalin evidence (Table 10). 17

Table 10: Historical reflexes of some initials in PA in SA vs. HA.

PA	SA (= RA)	НА	
*?a- > *ha-	ha-	ha-	
*h ^y a-	уа-	ha-	
*s ^y a-	sa-	sa-	
*sa-	ha-	ha-	

Proto-Ainu stops could have theoretically had palatalized consonants. Where have all of them gone? There is no direct evidence for all of them in the historical Ainu dialects. Ainu could resemble the case of Spanish, a language that during centuries exhibited a consonant inventory as rich as in Polish (Penny 1993: 94), but that with the course of the years lost many phonemes as a result of massive merging (Table 11). As a parallel hypothetical scenario, let us imagine that a researcher would like to reconstruct the consonant inventory of Primitive Spanish without the testimony of (Medieval) Latin. In such a hypothetic circumstance, many facts would remain hidden.

Table 11: Latin-to-Spanish evolution of the palatalized series.

Medieval Latin	m ^y	n ^y	Įy	s ^y	p ^y	r ^y	у	t ^y	k ^y
Northern (& Central) Spanish	m	ń	$\mathbb{Q} \lambda$	S	č	r	у	θ	
Southern & American Spanish	m	ń	у	S	č, c, š	r	у	S	

¹⁶ Kirikae (1994: 107) claims that there is only one word ('mouth') that shows the sound correspondence /p-/ ~ /c-/ and argues that the phenomenon is lexical rather than phonological. De Boer (2010: 323–325) assumes the validity of at least two etyma.

¹⁷ Additionally, this sort of sound change is unheard of in Eurasia, but pretty common in languages where such a series of palatalized consonants is present, e.g., Greek second palatalization, which yields /y/ in the end, e.g., Greek ναίω 'dwell' < *nahyō < *nasyō, cf. Aorist ἔνασσα, or ἀλήθεια 'truth' <*alēt^hehya, cf. PL ἀληθής (Sihler 1995: 192–196).

Had the researcher access only to Southern and American Spanish variants, he would be unable to recover almost any of the original palatalized series. By the same token, implicationals would favor the reconstruction *m^y or *n^y for Pre-PA.¹⁸ In fact, the lack of * \hat{n} is most notable. For this gap I have no explanation.

2.2.7 Geminates and other consonant clusters

Abondolo (1997: 190–191) notes that Vovin does not comment upon geminates which are not the result of assimilation, 19 e.g., *wakka 'water' or *kokka 'knee' (even if they can be segmented *kwak-ka and *kok-ka, there is still no reason to assume that assimilation took place). This may be so because the sound correspondences and reconstructions are trivial. The rest of consonant clusters proposed by Vovin (RPA 32–41), i.e., *-nr-, *-rn-, *-rt-, *-tk-, *-pn-, and *-ns- are self-evident.

Abondolo (1997: 191) incorrectly points out that the reconstruction of *hk instead of *sk is incorrect, because the rule h > s / i of SA applies only after branching off, and it involves h's which goes back to */p t k/. Itabashi (2005: 11) also reconstructs *sk, e.g., *iska 'to steal' (RPA 96 s.v. *ihka), from which Sakhalin *ikka > [ihka] > iska. As we have seen, *s & *sy > h & s, hence PA *asyke 'hand' > HA+KA+SA aske vs. PA *iska > CA *ihka from which we must assume assimilation in HA *ikka, SA zigzag evolution in SA iska with $h > s / i_{-}$, and "irregular" retention of PA *s before consonant in KA and Bihoro iska (note that Bihoro faces northeast to the Kuril Islands) Another possibility is that this term was borrowed by Proto-Northern HA and Proto-KA dialects from Proto-SA before the branching of Ainu dialects. There seems to be no additional examples supporting this hypothesis. Note that *iska is the only word in Vovin's etymological lexicon containing the cluster *sk.

¹⁸ Vovin actually proposes *m[r]ak 'to open' (RPA 111–112). The only language with a palatalized result is RA cak-ke id. (AEJ 60a chaka = cak-a {to.open-TR} may be the same Sakhalin form), but it could just belong to another set of words. Vovin also agrees that Unus testis, nullus testis.

¹⁹ We have to keep in mind that sandhi rules account for many "geminates". Sandhi phenomena are still productive in modern Ainu (in fact, some Ainu speakers apply them even when speaking Japanese, hence [seyse] for sensei 'teacher'), and include the following changes (for the sake of clarity I do not star these forms, but it should be clear that sandhi was active already in the parent language): /-n w-/ > /-nm-/ or /-mm-/, /-n s-/ > /-ys-/, /-n r-/ > /-yr-/ or /-rr-/, /-n y-/ > /-yy-/, /-r t-/ > /-tt-/, /-r c-/ > /-tc-/ and /-r r-/ > /-n r-/. In some HA dialects, *n*-sandhi is sensitive to major syntactical boundaries, but r-sandhi can take place between sentences. See Shiraishi (2001) and Shiraishi (Chapter 13: this volume) for further details.

2.3 Suprasegmentals

Previous attempts to reconstruct the original suprasegmentals of the parent language revolve around the status of two features: vowel length and pitch accent. Table 12 below summarizes the distribution of these features in relevant Ainu lects: SA and KA (at least as reflected in KD and KK) have vowel length, though lack of pitch accent is only instrumentally confirmed for SA, whereas HA has pitch accent instead of vowel length.

Table 12: Distribution of pitch accent and vowel length in Ainu lects.

	SA (= RA)	КА	Bihoro	HA (= Saru)
Pitch accent	_	?	_	+
Vowel length	+	(+)	-	_

Three generalizations can be made after quick inspection of the available data:

- (1) SA and KA have noun and verb bases (= stems) distinguishing short and long vowels: /a aa e ee i ii o oo u uu/. Long vowels only appear in open syllables, otherwise the vowel is short.
- (2) SA & KA long vowel corresponds to high pitch in HA. This was acknowledged for the first time by Hattori (1967).
- (3) There are some instances where SA & KA long vowel corresponds to low pitch in HA and vice versa, SA & KA short vowel corresponding to high pitch in HA. The latter is what one expects if the stem or first member of a compound is a closed syllable, e.g., SA suhki vs. HA súpki 'a k. of reed' < CA *sup+ki < PA *syup ki, but SA heese vs. HA hése 'to breathe' < CA *hé-se < PA *hé s^ye (suffix -se derives onomatopoeic verbs).

There are three possible scenarios to account for these facts:

- (4a) Hattori (1967) thinks PA had vowel length, but no pitch accent. HA developed the latter when it came into contact with Japanese. De Boer (2010) agrees with Hattori;
- (4b) Vovin (RPA 65–78), Itabashi (2004), and Shimabukuro (2004) claim that PA had vowel length and pitch accent. Itabashi thinks that Proto-SA had both features, but lost pitch accent when it came into contact with other Amur-Sakhalin languages.
- (4c) Satō (2015, 2016) argues for the existence of pitch accent and no vowel length.

Vovin, Hattori, and De Boer's hypotheses on PA suprasegmentals have created problems which do not exist in the contemporary Ainu languages. For example, to the best of my knowledge, there are no exceptions to (1), i.e., SA or KA words where a long vowel can be found in the second syllable. De Boer (2010: 266-267) says that words such as *emiina* 'to laugh at' or *konuu* 'to ask someone' reflect a "sporadic" long vowel in the second syllable. She also acknowledges the presence of prefixes, in this case they both are applicatives, i.e., e-miina and ko-nuu. These two verbal bases are attested also in isolation: miina and nuu. Therefore, it is possible to conclude that the long vowel is paradigmatically retained in the base (or the first component of a compound) even after the addition of prefixes. Obvious as this fact may seem, De Boer claims that long yowel in these words is secondary.

The source of all problems seems to be the general assumption that Ainu is a mora-counting language (RPA 68). This leads Vovin to reconstruct PA *nee-LH > HA né-p 'what' or né-n 'who' vs. SA naa-ta 'who' or nee.ra-an 'what kind of' (Dettmer 1989: §81[2.1] 306), despite the fact that SA long vowel correlates with HA high pitch as expected.

As far as point (3) above is concerned, let us keep in mind that SA (and apparently KA) vowel length is clearly phonetic: long vowels occur in the stem if this is an open syllable. Vowels not belonging to the stem are always short, e.g., RA nuu, Saru nú & RA i-nuu, Saru i-nú id. First vowels in SA sapa 'head', hoku 'husband', etu 'nose', or *hura* 'smell' are short, when one would expect them to be long according to the mora-counting system, cf. HA sapá, hokú (& Bihoro oku), etú, and hurá (but Asahikawa hóku, Sōya étu & húra). Though SA sapa is actually a noun compound involving two old terms referring to head, i.e., sa & pa, we can assume syllable boundary reinterpretation as in Sōya sake, -he \leftarrow sake. Put differently, all these forms are originally monosyllables with a closed syllable, e.g. hoku, $-hu \leftarrow *hok.u$, hence PA *hok.u (closed syllable, therefore no long vowel is expected), etc. 20 Sōya may have preserved a very archaic stage, one before all HA dialects would have the accent moved rightwards.21

There is little evidence supporting vowel length as phonemic in SA. Instances involving SA long vowel corresponding to HA low pitch, e.g., HA nocíw vs. SA noociw id. and HA niséw vs. SA niisew id., lend support to the recent proposal by Satō (2015, 2016, cf. Shiraishi 2017) that in the past Ainu was a trochaic language. Over time, accent spread rightwards and Ainu became a typical iambic language. In this scenario, SA words like *noociw* and *niisew* are archaisms holding the key to understand the suprasegmentals of the parent language.

²⁰ Ochiho Sakhalin ruuraha rah 'to smell (a smell)' is obviously secondary, the result of applying the accentual rule of vowel length in root open syllable.

²¹ This tendency is most obvious in Yakumo, the HA southernmost dialect. In words of three or more syllables that do not have the accent on the first syllable the accent will fall on the third syllable instead of the second, unless the second syllable is closed. In that case the accent will fall on the second syllable just as in the other HA dialects, e.g., Saru sapá 'head' → sapáha (AFF) vs. Yakumo sapá, sapahá, but Saru hosípi 'to go home', hosíppa (ITE) vs. Yakumo hosípi, hosíppa id.

The reconstruction of items containing unambiguous long vowels is very complicated.²² For instance, RA nii 'tree' has long vowel when it appears in isolation. However, in noun compounds such as tun-ni 'oak', it has short vowel as expected, since it is the second component in a compound. It is also obvious that HA pitch accent patterns have been regularized to adjust to the new assignation rules.

De Boer (2010: 277) wonders "[...] how do we know that it was the pitch distinction that developed out of the vowel length distinction and not the other way around?". De Boer (2010) considers that Hattori's proposal of a PA with vowel length finds some support in the fact that Japanese word lists from the 17th–18th cc., containing Middle Hokkaidō Ainu data, show vowel length, 23 unlike the contemporary Hokkaidō dialects, where there is no trace of vowel length.²⁴ De Boer assumes that vowel length was preserved in Sakhalin Ainu, whereas it was progressively lost in the Hokkaidō dialects.

This fact alone cannot be considered positive evidence due to its ambiguous nature. Table 13 below shows a parallel example based on data from Postcolonial Nahuatl and Spanish. The interpretation of vowel length in the Japanese word list is a very trivial mechanism of adaptation by the Japanese, rather than a phonemic distinction in (Old or Middle) Hokkaidō Ainu.

The presence of Nahuatl long vowels in Spanish loanwords is one of the various strategies employed to naturalize new foreign lexicon (Lockhart 2001: 118-121). The phonological systems of the donor and the source languages were almost identical, the most remarkable difference being the presence or absence of (phonemic) vowel length. Nahuatl speakers interpreted that Spanish accent is best rendered in their language by long vowels.²⁵ It would be unprecedented to postulate that Spanish actually had long vowels on the basis of Nahuatl borrowings. By the same token, there should be no basis to argue that Hokkaidō Ainu dialects had vowel length if the evidence comes only from Japanese sources.

²² Hattori already proposed at least the reconstruction of a disyllabic word with two long vowels, the second in a closed syllable: *karip^{LH?} 'ring, wheel' > RA *kaaris* (< /kaarih/) vs. HA *karip*.

²³ There is something contradictory in De Boer (2010: 274–276) claiming that these and other dubious sources (see her treatment of long vs. short vowels in Tasuke Yamamoto's data) are positive evidence of the existence of vowel length in Proto-Ainu, while, at the same time, she dismisses other sources, such as Klaproth or Krašeninnikov's word lists, where there is no trace of vowel length (and therefore contradict De Boer's idea that Middle Hokkaidō Ainu still had vowel length). The scientific rationale behind such a decision remains unclear to me.

²⁴ The term Middle Hokkaidō Ainu refers to the language preserved in such well-known Japanese works as Matsumae no kotoba (ca. 1626), Moshiogusa (1792), or Ezo kotoba irohabiki (1848), which are described in Satō (Chapter 3, this volume). Itabashi uses the label Middle Ainu (中期アイヌ語 *Chūki* Ainu-go), with no dialectal distinction.

²⁵ This tendency can be observed even today. Japanese vowel length is used very frequently to render the vowel length of English, but it is also used to mark the position of the original accent, e.g., in Portuguese loanwords (Portuguese has no vowel length distinction).

(Postcolonial) Nahuatl		Spanish	Japanese		НА
-Dynamic stress -Fixed stress on penultimate syllable -Vowel length ²⁶		-Dynamic stress -Free stress -No vowel length	-Pitch accent -Focus on high mora after low mora -Vowel length		-Pitch accent -Focus on high mora before low mora -No vowel length
(cahuāllô) /ka¹wa:llo?/	←	(caballo) 'horse' /ka ^ι βαλο/	reera	←	<i>réra</i> 'wind'
(gobernadōr) /gober ^l nado:r/	←	(gobernador) 'gubernator' /goβerna ^l ðor/	etuu	←	etú 'nose'
(yēhuâ) /¹ye:wa?/	←	(yégüa) 'mare' /¹jegwa/	kunuu	←	ku-nú 'I listen'

Table 13: Nahuatl < Spanish vs. Japanese < Hokkaidō Ainu loan phonology (prosody).

Be as it may, the most economical solution is the one suggested by Satō (2015, 2016). Further research will be required in the nearest future so that we can avoid circulatory reasoning in the assignation of vowel length and pitch accent to PA reconstructions.

2.4 Conclusion

As an alternative model to Vovin's PA reconstruction, two different consonant inventories can be suggested (Table 14) without getting into much typological speculation. Enclosed between curly brackets are those reconstructions to which I arrived via typological considerations without solid philological evidence backing them up.

The main difference between one and the other is the presence of */kw/ in Scenario 1 (without $*/s^y$) and $*/s^y$ / in Scenario 2 (without $*/k^w$ /), and the theoretical implications this implies as discussed in §2.2.3. The question this system must answer is the following: which of these scenarios better accounts for the data? Can we solve any problem in the historical dialects? A possible answer to the last question would be the opposition pa/ca, which according to the new system would be a remnant of the old palatal series. The cost, in terms of economy, is minimal. However, alternative explanations exist (e.g., expressive palatalization) that would not demand the reconstruction of the palatal series.

From a typological perspective, the new reconstruction offers interesting insights on the diversity of the (North) Eurasiatic area. Initial *r- and *l- as well as the series

²⁶ See, e.g., Carochi (2001[1645]: 22-25, §2).

Table 14: Scenarios 1 and 2 as alternatives for Vovin's
PA consonant inventory.

Sce	nario	1							
р	p ^y	t	t ^y		k	{ky}	k ^w	?	
m		n							
		S		у	w			[h]	[h ^y]
		r/l	t						
Sce	nario	2							
p	p ^y	t	t ^y			k	{k ^y }	?	
m		n						,	
		S	{s ^y }		у	w		[h]	[h ^y]
		r/l		t					

of palatalized consonants would be the most aberrant features (see, e.g., Austerlitz 1986: 30). If we stick to Austerlitz's typology (1986: 38–42), Proto-Ainu could be seen as a kind of mixed Southwest-Northeast language (palatalized consonants, /s/ vs. /s^y/, three distinct vowel heights) which acquired some of the features more characteristic of Southeast languages (one /s/, only /p t k/, merge of /r/ and /l/) as result of language contact.

As for the vowel system, the situation in the historical languages can be easily accounted for with the reconstruction of five short and long vowel phonemes (see Table 1 under "New"). Hattori was right when he suggested that Proto-Ainu had only vowel length, and no pitch accent. The introduction of pitch accent may be the result of language contact, most likely after Japanese influence. Sakhalin Ainu vowel length is not phonemic, but only surfaced in open syllables. Hokkaidō Ainu gave up vowel length, and pitch accent become phonemic (as in nína 'collect firewood' vs. niná 'crush', etc.).

Table 15 shows all the PA structures and prosodic sequences with their historical continuation in Sakhalin and Hokkaidō. Correspondence (2) should be understood as base (three syllables with no clear etymological analysis, likely loanwords), whereas correspondence (3) reads affix + base (there are no examples of long vowel in second syllable), counting also those cases of petrified forms. In Bihoro, correspondences (6-9) apply when the base-stem has the shape /#VC(-)/. Note that for (8) we must assume innovation in RA and Bihoro (these are most likely independent developments via analogy with forms resulting from old dominating pitch classes, that is, those of [6, 7, 9]). As explained in §2.3, and following the lead of Sato's work, I assume that Proto-Ainu had pitch accent but no vowel length.

	RA (= SA)	PA > CA	PHA	(e.g., Saru)	Bihoro
(1)	CVCV	*CVCV ^{LH}	*CVCV ^{LH}	CVCV	CVCV
(2)	CVCVCV	*CVCVCVLHL	*CVCVCV ^{LHL}	CVCV CV	CVCVCV
(3)	CV[-]CVVCV	*CV[-]CVCVLHL	*CV-CVCV ^{LHL}	CV[-]CV CV	CV[-]CVCV
(4)	CVCVC	*CVCVC ^{LH}	*CVCVC ^{LH}	CVCV C	CVCVC
(5)	CVCVS	*CVCVS ^{LH}	*CVCVS ^{LH}	CVCV S	CVCVS
(6)	CVVCV	*CVCV ^{HL}	*CVCV ^{HL}	CV CV	hVCV
(7)	CVVCVC	*CVCVC ^{HL}	*CVCVC ^{HL}	CV CVC	hVCVC
(8)	CVVCV	*CVCV ^{LH?}	*CVCV ^{LH?}	CVCV	hVCV
(9)	CVVCVS	*CVCVS ^{HH}	*CVCVS ^{HH}	CVCV S	hVCVS

Table 15: Suprasegmental correspondences in PA (and CA) and various Ainu lects.

3 Some remarks on morphology

It is a well-known fact that sharp differences exist not only between HA and SA Ainu, but also within many lects within HA and SA. Most of them seem to be the result of internal developments. Unfortunately, due to space constraints I cannot go into details about the historical morphosyntax of Proto-Ainu (and, perhaps more interestingly, Pre-Proto-Ainu). Below I will focus on two aspects of PA reconstruction that lend themselves to be studied from a typological viewpoint. On one hand, grammaticalization shows the benefits of applying typology in a reasonable fashion. The postulate of classifiers for an earlier stage of the PA language, on the other hand, illustrates the dangers of wishing to see too much in the data without being able to formulate testable claims.

3.1 Grammaticalization

Grammaticalization is the most common descriptive tool to be invoked. When it comes to functional words and some of the TAM formatives, the etymology is still transparent and cross-linguistically verifiable, e.g., Pan-Ainu a (sg.) / rok (pl.) 'to sit down' > DURATIVE or PERFECTIVE, ani 'to hold' > 'with; by' INSTRUMENTAL, hon+tom 'belly+middle' > 'in the middle of', kusu 'reason' > 'because; due to', ne ANAPHORIC PRONOUN > ne COPULA, etc. Derivative and inflectional affixes offer a challenge that require a far more fine-tuned analysis, for which sometimes we simply lack enough documentation, like in the particular case of the history of verb agreement affixes.²⁷

The table below shows some typical grammaticalizations of derivational suffixes:

Table 16: Unambiguous examples of grammaticalization in Ainu.

Suffix	Function (example)	Lexical source	Dettmer 1989
-an	'become NOUN', e.g., cuk 'autumn' → cuk.an 'to become autumn'	an 'to be (SG)'	§171
-as	no-agentive verbs, e.g., ruyanpe 'rain' → ruyanpe.as 'it rains'	as 'to stand'	§172
-kar	action verbs, e.g. sake 'wine' → sake.kar 'to brew sake'	kar 'to make'	§174
-kor	"possessive" verbs, e.g., hon 'stomach' → hon.kor 'to be pregnant'	kor 'to have'	§175
-ne	dynamic verbs, e.g., soy 'outside' $\rightarrow soy.ne$ 'to go outside'	ne 'to be'	§176
-sak ~ -nak ²⁸	absence verbs, e.g., tum 'strength' → tum.sak 'to be weak'	sak 'to lack'	§§201–202
-se	onomatopoeic verbs, e.g., e 'yes' $\rightarrow e.se$ 'to agree, consent'	cf. Saru sewri 'throat'	§179

Contact with Japanese and local languages on Sakhalin Island (where, as is slowly becoming clearer, there was a genuine *Sprachbund* in which SA actively participated) has resulted in many structural calques which, generally speaking, can be identified effortlessly.

3.2 Classifiers?

Ainu shares with Japanese the presence of counters (numeral classifiers), with the notable difference that the number of such elements is overwhelmingly higher in Jap-

²⁷ Although ingenious and in some aspects perhaps even correct, there is little to none evidence supporting the various stages of evolution through which the verb agreement system has gone over time according to Itabashi (2005: 14, 2008: 284-285).

²⁸ The nak-variant, which is documented only in a handful of expressions, results from either dissimilation or assimilation, e.g., sik 'eye' $\rightarrow siksak$ (in the Yakumo and Horobetsu dialects, see Hattori 1964: 4[19]) along siknak '(be) blind' (dissimilation), but mo 'peace, silence' → *mo.sak > monak 'restless, unease; be awake' (assimilation). In the latter case there might have been contamination with mos 'to awaken, wake up', hence moynak < *mos.nak (rather than from *mos.sak) in the Bihoro dialect.

anese. Ainu numbers may appear along with two suffixes: THINGS $V^{\circ}-p \sim C^{\circ}-pe$ (from pe 'thing') and HUMAN BEINGS V° - $n \sim C^{\circ}$ -iw (from aynu 'human being'), ²⁹ and two word-classifiers: to for 'X days' and suy for 'X times'.

Remnants of an old, more elaborate system of noun classifiers (class terms) might have survived in Ainu. Class terms are morphemes which occur as the head of a number of noun compounds which are exemplars of the category labeled by the class terms. Class terms share the classifying function with classifiers, but contrary to the latter, they show a very restricted range of uses. Languages such as Thai have rich systems of both class terms and classifiers. The case of Ainu *ni is better described in such terms. Thus, the main difference between typical tree-names like PA *tunni 'oak' (Hattori 1964: 201[44]) and PA *atni 'Mulus laciniata' (Hattori 1964: 201[41], but in Sōya át ní!), and some tree-related words like PHA *nitek 'branch' (Hattori 1964: 196[9]) and PHA *nihom 'knot' (Hattori 1964: 196[10]) is the relative position of the element PA *nii 'tree; wood': in the latter two examples it occupies the expected position of a modifier, but in the former it takes the last position. There are not many examples illustrating the latter type, whereas good examples of the former type can still be found, see, e.g., PHA *sarki ~ PA *supki (> Raiciska, Yakumo, and Saru) 'reed', PA *munki 'wheat' or PH *antuki 'red bean' (Hattori 1964: 202[48], 203[60], 204[65]), all of them containing *ki 'reed' (cf. Old Japanese *mugi* and *aduki*, respectively).

Unfortunately, even if we would be open to accept that *ni or *ki are the last remnants of an old system of class terms (perhaps along with other generic nouns like utar 'people', kur 'man', uske 'place' or hi 'thing, place, time'), there are some features that, holistically speaking, characterize languages with class terms and classifiers which Proto-Ainu lacks altogether: instances of classifiers which never function either as a noun or as a part of a noun compound, e.g., Thai duan occurs as a class term and a classifier for round objects and sources of light, and *lêm* is a classifier for blades, books, etc., but they do not occur independently as nouns, as is the case with the Ainu words referred above, which always require a modifier.³⁰

The table below (Table 17) shows a collection of words which presumably share semantics and the last segment. This last segment could correspond to what Austerlitz called "classifiers". It is important to note that both Kyōsuke Kindaichi and Mashiho Chiri already discussed some of these (see, e.g., Kindaichi and Chiri 1974[1936]: 146–147 §221), though they did not venture beyond mere record.

²⁹ The HUMAN BEING counter form, however, still allows some variance, both appositional and adnominal sequences being possible, e.g., aki tu-n and tu-n aki 'two younger brothers'. I think this is a direct reflect of the intermediate stage between the ultimate origin of the HUMAN BEING counter, namely *tu aynu aki, and its progressive grammaticalization, mainly driven by analogy to the THING counter form.

³⁰ It goes without saying that one could speculate that noun compounds containing a component which we cannot identify any more as independent nouns, could have belonged to this system, but that would be wild speculation, so I shall not pursue that line of research any further.

Table 17: Potential list of classifiers and lexical items preserving them.

*k body part, round, long, internal object	*tek 'hand' *imak 'teeth' *itak 'tongue' (and *imok 'earthworm'?) *sik 'eye' *nok 'testicle, egg' *pok 'vulva'
*t rolling / long object	*not 'chin, jaw' *kut 'belt' *at 'string, cord' *nit 'handle' *pet 'river' *(+)rit 'root' *s ^y et 'nest' *ut 'rib'
*m long & small	*kem 'needle' *am(+am) 'rice' *yam 'chestnut' *h ^y am 'leaf' *am '(finger)nail' *ram(+ram) 'scales' *haram 'lizard' (?)
*r elongated, round object (?) (somehow related to *ri 'up, high')	*ker 'footwear' *kikir 'insect' *or 'place in(side)' *p ^y ar 'mouth' *sirar 'rock' *tikir 'foot, leg' *kar.i-p 'wheel'
*n body part & plain object (?)	*mon 'hand' *kan(+kan) 'intestines' *san-pe 'heart' *tin 'waist' *nan 'face' *s ^y on 'stomach'

The lexical item that originates in these classifiers is very apparent in some cases, e.g., *k < *ke, an obsolete word for 'place' (this element is apparently attached to pa and sa, the regular words for head, yielding pake and sake).

The plausibility of the segmentation depends on our capacity to explain the entire word. In most cases, there are clear etymologies: *pe 'liquid, moisture' for *pet, *mo 'peace, silence' (as in *mo.sir 'world, universe' {calm atmosphere} or, perhaps, *mo+s^yem 'closet', cf. Yakumo sem 'closet', Saru sem 'shed, storehouse', etc.) for

*imok and *mon, *nu 'field' for *nupuri, etc. In other cases, it is necessary to resort to more drastic speculations. There is a group of terms which seem to have a very general, vague meaning on which "classifiers" are added to get more specific words, e.g., *ke 'direction towards the end', as in *ker 'footwear', *kes 'end', *okere 'to finish, to complete', *kes^yup 'heel', or *tu 'long and thin object, long period of time', as in *tus^y 'rope', *tuntu 'pillar', *turi 'pole', *tuy 'intestines', *tur-i 'to lengthen' or even *tuyma 'to be far' or *tunni 'oak'. Note that the last element may have been at the same time the origin of the "classifier" *t.

4 Periodization

The periodization of Ainu can be modeled after other well established language families. For the sake of illustration, in Table 18 below the various (pre)historical stages of Ainu and Slavic are compared (no identification in terms of time depth is intended). In this framework, Pre-Proto-Ainu is the earliest stage of Ainu that can be reached by means of the comparative method and internal reconstruction. The label "Proto-Ainu" refers to a stage, not a period, a punctual notion, not a linear one (for this general notion, see, e.g., Andersen 1986, 1996: 183–184). The only real date of significance is the thirteenth century, when SA and KA emerged as the result of the Great Migration. Therefore, "Common Ainu" refers to the language used immediately before the Great Migration took place.

There is one obvious difference setting Ainu and Slavic apart. Pre-Proto-Ainu and Proto-Ainu are the result of applying internal reconstruction ad nauseam, whereas the comparative method is still running at full power in the case of Proto-Indo-European and Proto-Slavic. The latter label encapsulates all innovations distinguishing Slavic from other Indo-European languages. We lack such a luxury when we deal with language isolates.

The most telling feature of Common Ainu is the collapse of the palatalized consonant series (with merging of *sy and *s after *i), the merger of the hypothetical lateral *l with the flap *r (only at a later stage will the retroflex sound */tˌ ~ rˌ ~ tr/ merged with it too, cf. Nairo t- < *1 & *t, but r < *t), and, most likely, the replacement of the original trochaic foot by the iambic dominating in historical lects (Table 19).

³¹ A. Vovin (p.c.) rightly points out that trying to equalize the diachronic deepness of Ainu and Slavic may turn out a bit far-fetched, therefore he instead suggests that we could name those stages in an alternative fashion as follows: "Pre-Proto-Ainu" would be "Proto-Ainu", while "Proto-Ainu" would be "Common Ainu".

Table 18: Ainu periodization vs. Slavic periodization.

Pre-PA	*ti=(?)e	pe		Proto-Indo- European	*/g ^w enéh ₂ / '\	woman'	
PA	lit. 'the	*/ti-?e-p/ 'fish', it. 'the thing eaten (by everyone)' {RES-eat-NML} ³²		Proto-Slavic */genā/			
CA	*/ciʔep	1		Common Slavic	*/žena/		
Ainu	Hokkaid	lō	Sakhalin	n Slavic	West	East	
(dialects)	cep (Saru)	<i>ciʔep</i> (Horobetsu)	<i>ceh</i> (Raiciska)	(dialects)	żona 'wife' (Polish)	жена́ 'woman' (Russian)	etc.

Table 19: Proto-Ainu innovations leading to Common Ainu.

Proto-Ainu	*l	*r	*s ^y		*s	*h	*t ^y	*p ^y
Common Ainu	*	r	*s	*[ɕi]	*	h	*	`c

Pre-Proto-Ainu can be defined only in terms of morphology. In this stage, the affiliative marker is still CVCVx (where "x" is an undetermined consonant), the grammaticalizations briefly mentioned in the third section above have not been completed yet, and classifiers (if any) were a productive and distinct feature of the language.

Conventions and symbols

The following is a list of conventions adopted in this paper: (=) for clitics and reduplications, $\langle \cdot \rangle$ for affixes, $\langle \cdot \rangle$ for epenthetic sounds (if prefixed), the affiliative form (if suffixed) or the boundary between lexical components in complex formations (as long as they are transparent), $\{\{\}\}$ for the segmentation and identification of morphemes. In Sakhalin Ainu, $\langle h \rangle$ represents /x/(i.e., [ax], [ic], [uf], etc.). Other symbols: H = high pitch, L = low pitch, = stress, C = consonant, S = semiconsonant /y w/, V = vowel, = = (vowel [V] or consonant [C]-ending) base.

³² The alternative and more traditional analysis is as follows: ci-Ø-e-p {1PL.A-3SG.O-eat-NMLZ} 'the thing we eat', is most likely the result of folk etymology.

KA

Abbreviations (repeated for convenience)

Α Ainu

AS Asahikawa

В Bihoro

Common . . . НΑ Hokkaidō Ainu НО Horobetsu

Kuril Ainu

KD Kuril Ainu (Dybovski, as cited in RPA)

ΚK Kuril Ainu (Krašeninnikov, as cited in RPA)

KL Klaproth's Kuril Ainu materials (as cited in RPA)

Kuril Ainu (Torii Ryūzō, as cited in RPA) ΚT K۷ Kuril Ainu (Voznesenskij, as cited in RPA)

N Nayoro NA Nairo ОВ Obihiro Ρ... Proto-... RA Raiciska SA Sakhalin Ainu **S**0 Sōya

Υ Yakumo

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6 Ainu elements in early Japonic

1 Introduction

Although modern Ainu is inundated by loanwords from Japanese, there is no comprehensive study of them, except an old and short article by the author of the present chapter (Vovin 1990). The goal of this chapter is nevertheless different: to demonstrate the existence of Ainu loans not only in Japanese, but possibly in Japonic.

It is silently assumed that there are no Ainu loanwords in Japanese. The sheer possibility of such a directionality of borrowing seems to be unthinkable, so it has been always passed in silence. Meanwhile, nothing can be farther from the truth. Although the major portion of this chapter is dedicated to Ainu loans found in Japanese texts of the Nara (710–794 AD) and the early Heian (794–1192 AD) periods, let me start from an example in modern Japanese that simply cries out to our face, once we give it some thought and assemble all the data.

Modern Japanese iruka 'dolphin' (actually attested already in Western Old Japanese: 入鹿魚 (KJK II: 54b.2-3), 入鹿 (IF 140¹)), does not have any cognates in Ryukyuan, where the word is reconstructed as PR *peto, a possible cognate of WOJ pîtuⁿzi 'lamb'. ² Hokkaido Ainu has the word húnpe 'whale', which is clearly an innovation: 'pe 'thing' that produces hún sound', but we also have Saru Ainu riká and Kuril Ainu (Torii Ryūzō's materials) rika 'whale meat'. Hattori Shirō also gives Sakhalin Ainu 'irika 'dolphin' with a question mark (Hattori 1964: 187). Torii also gives Kuril Ainu rika 'whale', and Chiri notes that in Hokkaido and Sakhalin rika means 'white fat under the skin of a whale' (Chiri 1976: 176). Ōtsuka et al. (2008: 144) confirm Sakhalin Ainu rika as meaning 'white fat under the skin of a whale'. rika 'white fat under the skin of a whale' also occurs in the Sōya dialect of Hokkaido Ainu (Tezuka 2007: 72). Other Kuril materials include Krasheninnikov rika and Dybowski rik 'whale' (Murayama 1971: 207), as well as tigga 'id.' from Voznesenskii's materials (Vovin 1993: 209), which probably represents [rika] with the flap [r] misheard and mistranscribed as [t]. Since whales and dolphins belong to the same zoological class, it is almost certain that Japanese iruka is a loan from Ainu, especially given the fact that the Japanese word is isolated in Japonic and Ainu demonstrates quite a bit of various semantic changes. Unless Sakhalin Ainu 'irika 'dolphin' can be confirmed by other sources, it is likely that Japanese initial i- is a prothetic vowel, used before foreign r-, cf. Rossiya 'Russia' => Japanese *Orosi(y)a*.

¹ Pages are given according to Akimoto (1958) edition of the Fudoki.

² The cognacy is tentative because $-^nzi$ in $p\hat{\imath}tu^nzi$ is an unaccounted for segment.

2 Ainu loans in Eastern Old Japanese of Man'yōshū books fourteen and twenty

The Man'yōshū, consisting of a total of 20 books, is the oldest extant collection of Japanese waka poetry written in Old Japanese [OJ]. Here I present all Ainu loans that can be found in books fourteen and twenty of the *Man'yōshū*, both in place names and as independent words or suffixes. All cases of place names of Ainu origin are indicated below as (p.n.). The absence of such a reference indicates that a loan is attested as an independent word or suffix, and not as a place name. The reader should be aware that, due to the fact that Ainu is a polysynthetic language, many Ainu loan words in Eastern Old Japanese [EOJ] are in fact compounds or complex morphological derivations in Ainu. Also, the reader is advised to look at the more detailed explanation of etymologies in the commentary to the first poem where a given Ainu loanword is attested.

Akîna (p.n.) < Ainu *ay-kina* 'arrow grass'. Attested in: MYS 14.3431.

Aⁿdikama (p.n.) < Ainu: anci 'obsidian' + kama 'flat rock, rock'. Attested in: MYS 14. 3551, 3553,

aⁿzu 'crumbling cliff' < ? Ainu *-as- 'to split' + so 'rocky shore', 'hidden rocks in the sea'. Attested in: MYS 14,3539, 14,3541.

Asikaⁿga (p.n.) < Ainu askan(-ne) '(be) beautiful' + kat 'view, appearance'. Attested in: MYS 20.4379.3

 $Asi^{\eta}gara \sim Asi^{\eta}gari$ (p.n.) < Ainu *askar-i* 'clear place'. Attested in: MYS 14.3361, 14.3363, 14.3364, 14.3364a, 14.3367, 14.3368, 14.3369, 14.3370, 14. 3371, 14.3431, 14.3432.

atu- 'sea' < Ainu atuy 'id.' Attested in: MYS 14.3503.

i-, nominal prefix 'thing-' < Ainu *i*- 'id.' Attested in: MYS 20.4428.

i-, indirect object prefix < Ainu *e*- 'id.' Attested in: MYS 20.4430.

ka 'top' < Ainu ka 'id.' Attested in: MYS 14.3409, 14.3503, 14.3518.

ka 'voice' < Ainu háw 'id.' Attested in: MYS 20.4430.

ka, focus particle < Ainu ka, id. Attested in: MYS 14.3361⁴, 20.4386.

Kakê (p.n.) < Ainu ka-kes 'upper end'. Attested in: MYS 14.3553.

Kanipa (p.n.) < Ainu ka-ne-pa 'upper bank' [top-COP-bank]. Attested in MYS 20.4456. This place name occurs in a poem written in Western Old Japanese.

Kaⁿdusika (p.n.) < Ainu *ka-n-toska* < *ka-ne-toska [top-COP-low.cliffs] 'low cliffs that are above'. Attested in: MYS 14.3349, 14.3350, 14.3353, 14.3384, 14.3385, 14.3386, 14.3387.

kari^mba 'sakura' < Ainu karinpa 'sakura [bark]'. Attested in: MYS 14.3399.

³ It would be ironic if the family name of the Ashikaga shoguns might be also of Ainu provenance.

⁴ Disregard the commentary to 14.3361 and refer to the commentary to 20.4430.

Inasa (p.n.) < Ainu inaw-san 'the place where inaw [are offered]'. Attested in: MYS 14.3429.

Kî^mbë (p.n.) < Ainu kimpe 'bear' (< kim-pe 'mountain thing'). Attested in: MYS 14.3353, 14.3354.

köndök- 'to bless with words' < Ainu ko-itak 'to speak to, to address words to' (normally contracted to kovtak). Attested in: MYS 14.3506.

Kuⁿzi (p.n.) < Ainu *kus* 'to overflow'. Attested in: MYS 20.4368.

mak-î 'back-POSS' < Ainu mak 'back' + 3rd person possessive suffix -i. Attested in: MYS 20.4413.

ma 'wife' < Ainu mat 'woman, wife'. Attested in: MYS 14.3502.

matô 'girl' < Ainu mat-po 'girl' (< mat 'woman, wife', po 'child'). Attested in: MYS

Muⁿza (p.n.) < Ainu *mun* 'unedible grass' + sa 'shore, plain'. Attested in: MYS 20.4355. See also Muⁿzasi.

 Mu^n zasi (p.n.) < Ainu *mun* 'unedible grass' + sa 'shore, plain' + -hi third person singular possessive. i.e., 'grass plain' or 'grass shore'. Attested in: MYS 14.3362a, 14.3374, 14.3375, 14.3376, 14.3376a, 14.3377, 14.3379. See also Muⁿza.

na 'river' < Ainu nay 'id.' Attested in: MYS 14.3401.

Nipë (p.n.) < Ainu *nipet* 'wood river' (*ni* 'tree, wood' + *pet* 'river'). Attested in MYS 20.4324.

Nipu (p.n.) < Ainu place name Nipu 'storage in the forest on the riverbank for storing frozen salmon' (< ni 'tree' + pu 'storage'). Attested in: MYS 14.3560.

o-, locative prefix < Ainu o-, id. Attested in MYS 14.3473.

or-ö 'its place' < Ainu or-o 'place-POSS'. Attested in: MYS 20.4363.

pa 'year' < Ainu pa 'id.' Attested in: MYS 20.4378.

pa 'to find' < Ainu pa 'id.' Attested in: MYS 14.3499.

paka 'rumor, gossip' < Ainu páhaw 'id.' Attested in: MYS 14.3385.

pîrö 'oak' < Ainu pero or pero-ni 'id.' Attested in: MYS 14.3538.

pîⁿzi 'sandbank' < Ainu *pis* 'shore', *pis-i* 'its shore'. Attested in: MYS 14.3448.

Pîta (p.n.) < Ainu *pitar* 'stone field' < *pit-tar* 'pebbles-continue one after another'. Attested in: MYS 14.3563.

 $Pu^n zi (p,n.) < Ainu pun-'to raise' + sir' ground, place, mountain'. Attested in: MYS$ 14.3355, 14.3356, 14.3357, 14.3358, 14.3358b.⁶

Sinanu (p.n.) < Ainu sinam (< sir-nam) 'to be cold' + nup 'mountain field'. Attested in: MYS 14.3352, 14.3399, 14.3400.

 $si^n da$ 'time, when' < Ainu hi 'time, occasion' + ta, locative case marker. Attested in: MYS 14.3363, 14.3461, 14.3478, 14.3515, 14.3520, 14.3533, 20.4367, 20.4407.

⁵ Ainu strictly differentiates between two types of grass: kina 'edible grass' and mun 'unedible grass'. 6 This etymology for Mt. Fuji (OJ puNsi) was provided in the introduction to book fourteen (Vovin 2012: 12). However, now I think that there is a better EOJ etymology: EOJ pu 'fire' (20.4419) + -Nsi < -nusi 'master', i.e., 'master of the fire'. The details of argumentation are published in Vovin (2018).

Sirupa (p.n.) < Ainu sirpa 'cape' (sir 'land' + pa 'head'). Attested in: MYS 20.4324. sömö 'not' < Ainu somo 'id.'. Attested in: MYS 14.3382.

su 'again' < Ainu suy 'id.' Attested in: MYS 14.3363, 14.3487, 14.3564.

suⁿgu 'to grow old' < Ainu sukup 'id.' Attested in: MYS 20.4378.

ta 'here' < Ainu ta 'this, here'. Attested in: MYS 20.4386.

Tayupî (p.n.) < Ainu tay-vûpe 'dead shark' (tay^7 'die' + vûpe 'shark'). Attested in: MYS 14.3549.

 $te^{\eta}g\hat{o}$ 'maiden, beloved' < Ainu tek 'hand, arm' + o 'take in, embrace'. Attested in: MYS 14.3384, 14.3385, 14.3398, 14.3442, 14.3477, 14.3485, 14.3540.

tôra 'together' < Ainu tura 'id.' Attested in: MYS 14.3409, 14.3561.

Töya (p.n.) < Ainu to-ya 'lake shore' (to 'lake' + ya 'shore, dry land'). Attested in: MYS 14.3529.

Tukupa (p.n.) < Ainu tuk 'small mountain' + pa 'head, top'. Attested in: MYS 14.3350, 14.3351, 14.3388, 14.3389, 14.3390, 14.3391, 14.3392, 14.3393, 14.3394, 14.3395, 14.3396, 20.4367, 20.4369, 20.4371.

Tumu (p.n.) < Ainu tum 'middle (of water, land, or grassy area'). Attested in: MYS 14.3438.

-y-, indefinite direct object prefix < Ainu i-, id. Attested in: MYS 14.3526, 20.4427. ya 'shore' < Ainu ya 'shore, dry land'. Attested in: MYS 14.3562.

Yupuma (p.n.) < Ainu *yup(u) 'strong' + maw 'wind', i.e., '[the mountain of] strong winds'. Attested in: MYS 14.3475.

Below I provide examples of the actual textual usage of some words listed above.

- (1) 和我世古乎(2) 夜麻登敝夜利弖(3) 麻都之太須(4) 安思我良夜麻乃(5) 須疑 乃木能末可
- (1) wa-ⁿga se-kô-wo (2) Yamatö-pê yar-i-te (3) mat-u **siⁿda su** (4) Asiⁿgara yama-nö
- (5) suⁿgï-nö KÖ-nö ma ka
- (1) 1SG-POSS beloved-DIM-ACC (2) Yamatö-DIR send-INF-SUB (3) wait-ATTR time again (4) Asiⁿgara mountain-GEN (5) cryptomeria-GEN tree-GEN space IP
- '(1/2) Having sent my beloved to Yamato, (3/5) **when** [I] wait for [him], [I think]: "Will [he] come **again** through the cryptomeria trees (4) on Mt. Asigara?" (MYS 14.3363, Saⁿgamu)
- (1) 中麻奈尔 (2) 宇伎乎流布祢能 (3) 許藝弖奈婆 (4) 安布許等可多思 (5) 家布尔
- (1) Tiⁿguma-**na**-ni (2) uk-î-wor-u pune-nö (3) köⁿg-î-[i]ⁿde-Npa (4) ap-u kötö kata-si
- (5) kêpu n-i si ar-aⁿz-u pa

⁷ *tay* is a Sakhalin Ainu form corresponding to *ray* in Hokkaidō Ainu. Both reflect PA *δay.

- (1) TiNkuma-river-LOC (2) float-INF-exist-ATTR boat-GEN (3) row-INF-exit-COND
- (4) meet-ATTR matter difficult-FIN (5) today DV-INF EP exist-NEG-INF TOP
- '(1) If (2) the boat that is floating (1) in Tiⁿguma **river** (3) would row out, (4) it will be difficult to meet, (5) if [it] is not today.' (MYS 14.3401, Sinanu)
- (1) 可美都氣努 (2) 麻具波思麻度尔 (3) 安佐日左指 (4) 麻伎良波之母奈 (5) 安利都追見礼婆
- (1) Kamîtukënô (2) ma-ⁿgupasi **matô**-ni (3) asa PÎ sas-i (4) makîrapasi-mö na (5) ar-i-tutu MÎ-re-^mba
- (1) Kamîtukënô (2) INT-beautiful **girl**-LOC (3) morning sun shine-INF (4) be.blinding-EXCL EMPH (5) exist-INF-COOR look-EV-CONJCT
- '(3) The morning sun shines (2) at the truly beautiful girl (1) [of] Kamîtukënô. (4) How blinding [your beauty] is (5) when [I] constantly look at [you]!' (MYS 14.3407, Kamîtukënô)

3 Ainu in Kyūshū

The traces of the Ainu language can be discovered not only in Tōhoku and Kantō, but also far to the west in Northern Kyūshū. We have only one poem in the Kyūshū variety of Japonic, but it contains the word si^nda 'time, when' < Ainu hi ta that we have already seen in Eastern Old Japanese.

- (1) 志努波羅能 (2) 意登比賣能古素 (3) 佐比登由母 (4) 爲禰弖牟志太夜 (5) 伊幣爾久太佐牟
- (1) sinôpara-nö (2) otöpîmê n-ö kô sô (3) sa-pîtö yu mö (4) wi ne-te-m-u **siⁿda** ya (5) ipê-ni kuⁿdas-am-u
- (1) Sinôpara-GEN (2) Otöpîmê DV-ATTR girl FOC (3) PF-one night FOC (4) bring (INF) sleep (INF)-PERF-TENT-ATTR **time** EP (5) home-LOC lower-TENT-ATTR
- '(1/2) Oh, Otopime of Sinopara! (3/4) **When** [I] want to sleep with [you] one more night, (5) [I] will bring [you] down to [my] home!' (HF, poem 11)

In the description of the county Takaku (高来郡) in the province of Hizen (肥前) we find also the following passage:

土齒池俗言岸爲比遲波

'Pond Pîtipa. Local people call 'bank' *pîtipa*' (Hizen Fudoki 410.3)

The Ainu origin of this place name is beyond any doubt, cf. Ainu *pétpa ~ pétca* 'bank, shore' < PA ***petpya**. Ainu *pét* 'river' + *pa* 'bank, shore, edge'

4 An enigmatic poem from the *Ise Monogatari*, dan XIV: What happened to a rooster?

Practically in any tradition, from West to East, many ancient and medieval texts have sections that are resistant to our reading and understanding, although texts themselves that contain these enigmatic portions are well understood. Premodern Japanese literature texts are by no means an exception to this rule, and the further back we go in time, the more mysteries are awaiting us: thus, for example, many of the Man'yōshū texts are really enigmatic, but even much better understood texts from the Heian period still present multiple puzzles. Some of those probably can be never solved, but others can be, if we take an approach that still respects the long Japanese native traditions of commentaries but is not completely dependent on them. In this vein, a recent article by Bjarke Frellesvig (2006), offering a new (and a correct in my opinion) explanation of the enigmatic phrase いうなる /iu naru/ in the *Hōjōki* as 'haunted' rather than the traditional 'elegant' on the basis of a careful analysis of the text itself as well as of Chinese characters that could possibly underlie いう /iu/ is a major break-through. I trust that there are two lessons to be learned from Frellesvig's superb presentation. First, unless we succumb to the myth of the unique Japanese language ruling supreme over the islands from times immemorial, we should pay much more attention to the foreign elements in Japanese. Second, we should learn to think more carefully about these foreign elements, and especially so in the cases where a traditional interpretation does not make sense or is riddled with problems.

I attempt to address now the reading of a specific poem in the *Ise Monogatari*, dan XIV along the same lines. The reading and the understanding of the whole dan XIV is unproblematic, but one of the poems in it apparently caused problems to its commentators from as early as the mid-twelfth century.

Before proceeding to any discussion, we should look at the text of *Ise monoga*tari XIV in its entirety. Although, as Ōtsu and Tsukishima (1957: 95) remarked, the reconstruction of the Ur-text of the *Ise monogatari* is impossible, I have attempted to reconstruct an approximation to the original text of the dan XIV on the basis of three KamakuramanuscriptsthatIamabletoconsultnow:Tameie-bon(為家本),⁸ Sen'yō-bon (千葉本), and Bunryaku-bon (文曆本).9 The preference was given to phonographic text over logographic if it could be confirmed by two manuscripts out of three.

⁸ Attributed to Fujiwara-no Tameie (藤原為家, 1198-1275), second son of Fujiwara-no Teika, and the founder of the Nijō poetic school.

⁹ Attributed to Fujiwara-no Tamesuke (藤原為相, 1263–1328), also known as Reizei Tamesuke (令泉 為相), son of Fujiwara-no Tameie, and Abutsu-ni, and the founder of the Reizei poetic school. The name Bunryaku-bon is puzzling, because the Bunryaku years are 1234–1235, almost thirty years before Fujiwara-no Tamesuke was born.

むかしおとこみちのくにゝすゝろにゆきいたりにけりそこなる女京の人はめ つらかにやおぼえけむせちにおもへるこころなんありけるさてかの女

なかなかにこひにしなすはくはこにそなるへかりけるたまのをはかり うたさへそひなひたりけるさすかにあはれとやおもひけんいきてねにけりよ ふかくいてにければ女

夜もあけはきつにはめなてくたかけのまたきになきてせなをやりつる といへるにおとこ京へなんまかるとて

くりはらのあねはのまつの人ならは宮このつとにいさといはましといへりけれはょろこひておもひけらしとそいひをりける

The standard translation by Helen McCullough of this dan is:

Once a man found himself in Michinoku in the course of his wanderings. A girl of the province, who was probably unaccustomed to meeting people from the capital, fell head over heels in love with him and sent him a poem as countrified as she was:

Far better it were to turn into a silkworm, even for a while, than to be tortured to death by a foolish passion

He must have pitied her in spite of her crudity, because he went to her house and slept with her. He left in the middle of the night, whereupon she sent him this:

When daybreak arrives,
I'll toss him into the cistern –
that pesky rooster
who raises his voice too soon
and drives my lover away.

Presently, the man sent word that he was returning to the capital. His poem:

Were it but human – the pine tree of Anefa¹⁰ at Kurifara – I would tell it, "Come and be my keepsake in the city."

The girl was overjoyed. "I am sure he is in love with me," she said (McCullough 1990: 45–46).

It is the second poem in this *dan* that interests us here:

夜もあけはきつにはめなてくたかけのまたきになきてせなをやりつる

When daybreak arrives, I'll toss him into the cistern – that pecky rooster who raises his voice too soon and drives my lover away.

¹⁰ I replaced McCullough's -h- by -f-.

Before we go on, several general observations are in order:

- (1) It is the second line of this poem that has baffled commentators of the *Ise* monogatari from twelfth century on: きつにはめなて, and to a lesser extent, the word $\langle t \rangle$ in the beginning of the third line. Two interpretations were offered for the second line: kitu ni famenade 'I will feed him to a fox', an explanation offered by Fujiwara-no Kiyosuke (藤原清輔) in his Ōgishō (奥義抄, 1144?), and 'I will toss him into a water tank', offered by Kobayashi Yoshiaki in the last century, which eventually has become almost universally accepted, and which is also followed by McCullough in her translation as we saw above. Both are riddled with numerous problems as the reader will see below.
- (2) A quick look at the poem in question reveals that it is written not quite in the standard Japanese of the capital, even if we disregard the mysterious second line. Thus, se-na 'male beloved' (with typical Eastern Old Japanese diminutive suffix -na) in the fifth line is clearly an Eastern dialectal word, amply attested in Azuma and Sakimori poems of the *Man'yōshū*. In standard Japanese of the time se-ko would be expected instead of se-na. Note, however, that this poem is not defined as countrified in the text of the dan XIV, contrary to the previous poem that receives such a definition.¹¹
- (3) McCullough translation has to be corrected on three occasions that are pertinent to the present discussion. First, McCullough translates うたさへそひなひたりけ ਠ uta safe zo finabitarikeru as "He must have pitied her in spite of her crudity". But this phrase speaks not about the crudity of the girl, but of the rustic nature of her poem, and should be translated as "Even though her poem was so rustic". Second, the first line, 夜もあけば yo mo akeba is translated by McCullough as 'when the daybreak arrives', but this surely will be 夜あくれば yo akureba, as akeba can be only a conditional phrase 'if [it] dawns', unless a tentative verbal form is found further down in the sentence, which is not the case in this poem. Also, the focus particle *mo* is completely ignored in McCullough's translation. Given the fact that 夜もあけば yo mo akeba can be either irrealis condition, or realis condition, we have to translate the first line as either 'even if the daybreak would arrive' or 'even if the daybreak arrives'. Third, といへるにおとこ 京へなんまかるとて to iferu-ni otoko miyako-fe nan makaru tote is rendered by McCullough as '... she sent him this: ... Presently, the man sent word that he was returning to the capital.' In her translation an important, and close enough temporal connection 'when, as' indicated by the case marker -ni after rentaikei is not only lost, but it is replaced by the word 'presently' that is nowhere to be

¹¹ Incidentally, the first poem is a variant or a honkadori (本歌取り) of the MYS 12.3086: 中々二人 跡不在者桑子尔毛成益物乎玉之緒許 NAKA-NAKA ni PÎTÖ tö araⁿzu pa KUPAKÔ ni mo NARAmasi MONOwo TAMA NÖ WO ^mBAKARI 'If I was not a human being, I would like to become a silkworm just for a short time'. This is the only poem in the whole *Man'yōshū*, where *kupakô* 'silkworm' occurs. Thus, possibly that it is the mention of the silkworm that makes the poem so countrified.

found in the original text. Thus, this translation should be corrected as: 'when/ as she sent him this, the man announced that he would be going to the capital.' These corrections might seem like nit-picking to the reader, but their importance will be clear below for the correct understanding of the poem in the context.

(4) In modern editions of the *Ise monogatari*, the text is usually rendered into *kana*kanji majiribun with addition of the dakuon (濁音) signs in the following way:

```
夜も明けばきつにはめなてくだかけのまだきに鳴きてせなをやりつる
                                             (Takeoka 1987: 313)
で

を

も明けばきつにはめなでくたかけのまだきに鳴きてせなをやりつる
                                      (Ōtsu and Tsukishima 1957: 120)
·k

夜も明けばきつにはめなでくだかけのまだきに鳴きてせなをやりつる
                                               (Fukui 1976: 146)
```

Certainly, on the basis of grammar, the verbal form あけは can be only read as akeba [ake^mba]. In other cases, the additions of dakuon in these editions should be taken with a grain of salt: in contrast to man'yōgana, early Heian kana did not differentiate between voiceless and voiced (actually prenasalized voiced) kana letters, although we might have some evidence for voiced kana in はめなで and くだ dating back to Kamakura times, based on Tameie-bon that occasionally marks pitch accent on some words. As it happens, almost all of the enigmatic second line is marked, as well as the first word in the third line:12

Thus, the modern *kana* transliteration should be written as:

```
きつにはめなでくだ
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The question, of course, still remains as to what extent these accent notations can be trusted. After all, they first appeared in the Ruiju Myōgishō (類聚名義抄, 1081), which is separated by almost two centuries from the compilation of the Ise monogatari. In particular, accent marks on きつ LH are suspiciously reminiscent of the pitch accent of kitune LHH 'fox' (Mochizuki 1974: 181), which as was mentioned above is a part of Fujiwara-no Kiyosuke's explanation of the second line of the poem.

Finally, after these preliminary observations, we will proceed now to the explanation of the second line of the poem. We will start from the critical evaluation of Fujiwara-no Kiyosuke and Kobayashi Yoshiaki's alternative readings.

¹² The pitch accent marks are the same as used in the Ruiju Myōgishō (類聚名義抄, 1081): in contrast with the modern dakuon they are placed to the left of a syllable, and altogether four different symbols are employed: elevated single dot. (high pitch on a syllable with voiceless initial consonant), lowered single dot. (low pitch on a syllable with voiceless initial consonant), two elevated dots " (high pitch on a syllable with voiced initial consonant), two lowered dots .. (low pitch on a syllable with voiceless initial consonant).

4.1 Fox hypothesis (Fujiwara-no Kiyosuke)

This hypothesis explains the second line as kitu ni famenade '[I] will feed [him] to the fox', taking kitu for kitune 'fox'. The word kitune 'fox' is trisyllabic, which makes it a perfect candidate for a compound, but there is no evidence how to analyze this word morphologically, and certainly there is no evidence to segment a suffix -ne in this word. The word is attested throughout the history of the Japanese language starting from WOJ kîtune 'fox' appearing for the first time in Kegon ongi shiki (華厳音義私記) (Omodaka et al. 1967: 242-243). In MJ kitune 'fox' is attested ten times in the Genji monogatari, and among the post-MI texts eight times in the Tsure-zure-gusa (Miyajima 1970: 97). There is a tendency in old commentaries to read the character 狐 as KÎTU and not KÎTUNE, because the line otherwise becomes hypermetric in the following poem from the *Man'vōshū*:

```
(1) 刺名倍尔(2) 湯和可世子等(3) 櫟津乃(4) 檜橋従来許武(5) 狐尔安牟佐武
```

- (1) さしなべ₂に (2) ゆわかせこ₁ど₂も₂ (3) いちひ₁つの₂ (4) ひ₁ばしょりこ₂む (5) きつねにあむ
- (1) SAS-I-na^mbë-ni (2) YU wakas-e KÔ-ⁿDÖMÖ (3) ITIPÎTU-nö (4) PÎ-^m-BASI-YÔRI KÖ(kö)-m-u (5) **KÎTU[NE]**-ni amus-am-u

'Boil the hot water children in the pointed pot! [We] will pour [it] on the fox that comes over the cypress bridge in Itipîtu' (MYS 16.3824)

However, since the spelling is logographic in this case, as Omodaka et al. (1967: 243) point out, the later gloss in the *Man'yōshū* might have been influenced by the poem in question from the *Ise monogatari* as well. The same might be applicable to the poem by Fujiwara-no Norinaga (藤原教長, 1109–1180 AD) in his *Bindōshū* (貧道集), where kitu appears in the text of the poem, but in the preceding kotobagaki we have kitune:

```
暁にきつねの鳴くを聞きてよめる
```

Akatuki-ni kitune-no naku-wo kikite vomeru

'[I] heard fox barking at the dawn and composed:'

```
聞く人の栄ゆと言へば夜を寒み鳴くなるきつをあはれとぞ聞く
```

Kiku fito-no sakayu to ifeba yo-wo samumi nakunaru kitu-wo afare to zo kiku

'As they say that the people who hear [it] overflow with joy, because the night is cold, I am listening with admiration to a fox who is barking.'

Since Fujiwara-no Norinaga lived at the same age as Fujiwara-no Kiyosuke and was close to the latter, it is again likely that he was influenced by Fujiwara-no Kiyosuke and used kitu as a kind of a poetic word (Omodaka et al. 1967: 243). In modern dialects kitsu instead of kitsune is attested in Miyajima county (宮島郡) of Niigata prefecture and in Higashi Kasugai county (東春日井郡) of Aichi prefecture. There is also kyatsu 'fox' attested in Chita county (知多郡) of Aichi prefecture (Satō et al. 2004: 440). Note that none of the attestations is found in Tōhoku, where the dan XIV takes place. In addition, given the limited distribution of kitsu ~ kyatsu (all attestations are confined to the Chūbu region), and lack of earlier reliable forms, they may actually represent later truncations.

The second difficulty is concerned with the word famenade that is sometimes 'corrected' by commentators to famenan and is interpreted as '[I] will feed [him]'. The first problem is that, while there is a consonantal verb fam- (WOJ pam-) 'to eat', the vowel verb fame- 'to feed' does not present itself. Fame- means 'to insert, to throw in, to make submerge' (Nakada, Wada and Kitahara 1983: 1354). The second problem is that while -na- from famenade can be analyzed as desiderative suffix -(a)na-, already extremely rare in the Heian period, -de can be taken only as a negative gerund -(a)de. If we take it as such, *famenade* of course will mean 'I will not feed [him], and . . . ', which would not make any sense. In addition, *-(a)na-(a)de is an impossible sequence of suffixes, as -(a)de cannot follow mood markers. Thus, the 'fox hypothesis' of Fujiwara-no Kiyosuke is better abandoned.

4.2 Water tank hypothesis (Kobayashi Yoshiaki)

This hypothesis explains the second line as kitu ni famenade '[I] will throw [him] into the water tank.' The verb *fame-* 'to insert, to throw in, to make submerge', already discussed above fits much better than the non-existing *fame- 'to feed'. However, the remaining part of the verbal form -nade fares no better than above. One can find no equivalents for it, not only in WOJ, but also in EOJ. The word kitu is interpreted as 'water tank', a word found in modern Tōhoku dialects of Tsugaru, Akita, Iwate, and northern Niigata prefectures, where depending on a place it appears in different forms that also vary in meaning: kitu 'chest for rice' (Tsugaru, Akita, and Niigata prefectures), 'chest for clothes' (Ibaraki prefecture), kisu 'tank for keeping live fish', 'kitchen water tank' (Gamahara region in Niigata prefecture), kisi 'chest for keeping rice and other grains' (Shiwa county (紫波郡) in Iwate prefecture), kiti 'wooden chest', 'wooden storage' (Tsugaru, Hiraka county (平鹿郡) in Akita prefecture), *kitti* 'chest, wooden storage' (Miyagi prefecture), 'horse trough made out of a hollowed log' (Nobe region (野辺地) in Aomori prefecture), 'water tank' (Iwate prefecture, Senboku county (仙北郡) in Akita prefecture), 'rice chest' (Aomori prefecture, Esashi county (江刺郡) in Iwate prefecture), kittu 'rice storage' (Sendai), 'wooden storage' (Akita, Iwate, and Miyagi prefectures), 'wooden chest' (Aomori and Akita prefectures, Taga county (多 賀郡) in Ibaraki prefecture), 'rice chest' (Waga county (和賀郡) in Iwate prefecture, Miyagi prefecture, Fukushima prefecture), 'wooden money box' (Aizu Wakamatu) (Tōjō 1951: 235, 238, 241-244).

Unfortunately, Tōjō's entries are all in kana script, therefore it is impossible to determine the vowel values from this transcription, and this is important, as many Tōhoku dialects have vocalic systems very different from the standard Japanese language. There are also unexplained phenomena concerning the second consonant that shows variation between /-t-/ (or /-c-/?) and lenited /-s-/ as well as fortified /-tt-/. Unlike the Ryukyuan dialectology, where IPA and other Roman-based transcriptions are widely used nowadays, mainland Japanese dialectology still lags behind, mostly relying on *kana* transcriptions. Unless *kana* symbols are supplied with various diacritic marks, their value for figuring out the actual phonetics or phonemics of a given dialect is close to nil. To the best of my knowledge, there is only one exception to this rule: a fundamental dictionary of Kesen, a dialect spoken in the south-eastern corner of Iwate prefecture (Yamaura 2000.1-2). In Kesen, we find *kitti* [kïttuɪ] 'rice chest' (Yamaura 2000.1: 1086). This form can go back to a tentative PJ *kiC[V]tu or *keC[V]tu. Meanwhile, the expected reflex of MJ *kitu* that is found in the poem would be Kesen *kidi [kïduɪ] that is not attested. Consequently, this raises significant doubts whether the alleged MJ *kitu* 'water tank' has any connection at all with the Kesen dialect word. If these doubts are justified, the 'water tank' hypothesis fares no better than the 'fox' hypothesis.

4.3 A new hypothesis

Let me start with the word kuta or kuda found in the third line. Practically all modern commentaries interpret it as 'rotten', 'stinky' applied as a slur towards the rooster. But the problem is that there is no such word in any historical form of Japanese or in dialects. Some apparently try to connect it to kuti 'rotten' (Ōtsu and Tsukishima 1957: 192), but the vowel shift i > a remains unexplained. Meanwhile, there are interlinear commentaries in both Tameie-bon and Bunryaku-bon that actually explain the meaning of this word:

東國ノ習家ヲクタト云

'In the Eastern provinces [their] custom is to call 'house' *kuta*'

(Tameie-bon 12b)

東國之習家ヲくたと云家雞也

'In the Eastern provinces [their] custom is to call 'house' *kuta.* [*Kuta kake*] is a house rooster' (Bunryaku-bon 47b)

Thus, we can arrive at the undeniable conclusion that kuta (or kuda, if one trusts the accent marks in Tameie-bon) means 'house'. But, again, we hit the wall within the domain of Japanese: there is not any historical or geographical form of Japanese or even Japonic that has $kuta \sim kuda$ 'house'. However, there is Ainu kotan 'village, settlement'. One must keep in mind that EOJ dialects underwent the raising of PJ *o > u in the first syllable, and that any syllable-final and word-final consonants in words borrowed from Ainu would be either most likely lost, or more rarely provided with echo-vowels. Thus, Ainu kotan > EOJ kuta is unproblematic phonetically. The semantic side of the comparison might seem more puzzling, since the word kotan in modern Ainu dialects means 'village, settlement', but not 'house'. However, actually, the semantic shifts house > village or village > house do occur. For example, cf. Greek oikog 'house', Latin vicus 'village', Sanskrit $v\bar{e}cas$ 'house', Old Church Slavonic bbcb

'village', and Gothic *weihs* 'village'. Cf. also Gothic *haims* 'village', originally 'house', and *village* itself is from *villa!* (Stefan Georg, p.c.).

Once we have established that *kuta* ~ *kuda* in this poem is an Ainu word, it is not unreasonable to have a suspicion that the enigmatic second line might actually be in Ainu, and not in Japanese. My analysis of this line is:

```
きつにはめなて
k-ituni wa mena-te
1SG.A-hate and be.awake-CAUS
'I hate (the rooster), (it) made (him) awake'
```

The underlying Ainu should be:

```
k-etunne wa monak-te
1SG.A-hate and be.awake-CAUS
'I hate (the rooster), (it) made (him) awake'
```

Several observations are in order:

- 1) Similar to the raising of PJ *o > u, EOJ has also raised PJ *e > i in non-final syllables. Thus, *k-etune wa* > *k-ituni-wa*, but *monak-te* > *mena-te*.
- 2) We could expect *monak-te* becoming **muna-te*, but Ainu /o/ is a phonetically non-labialized vowel [x] or [ə] in most dialects and the shift of PJ *ə > e after labials (especially after /m/) and velars in EOJ is well documented: Töpotapumî > Töpëtapomî, name of a province (MYS 20.4324), *tatamî-kömö > tatamî-këmë* 'rice straw mats and reed mats' (MYS 20.4338), *omö > omë* 'face' (MYS 20.4342), *omop-ë-ndo > omëp-o-ndo* 'think-EV-CONC' (MYS 20.4343), *möt-i > mët-i* 'hold-INF' (MYS 20.4343), *mö > më*, focus particle (MYS 20.4345), etc.
- 3) The verb *etune* 'to hate it', 'not want to', 'be annoying', 'to dislike it' (Ōtuka et al. 2008: 43), (Kayano 1996: 145), (Batchelor 1938: 139), (Kubodera 1992: 71).
- 4) The Ainu verb *monak* 'to be awake' is attested both as Hokkaido Ainu *monak*, Sakhalin Ainu *moonah* (Hattori 1964: 25), and Sakhalin Ainu *monax* (Ōtuka et al. 2008: 103). While I am not aware of any causative forms *monak-te* attested in Hokkaido Ainu, there is Sakhalin Ainu *yay-monax-te* self-be.awake-CAUS 'to keep oneself awake' (Ōtuka et al. 2008: 199).

The whole enigmatic poem then turns out to be a macaronic Ainu-Japanese poem and it can be interpreted in the following way with Ainu part marked in bold:

```
夜もあけはきつにはめなてくたかけのまたきになきてせなをやりつる
```

Yo mo ake-^mba **k-ituni wa mena-te kuta** kake-no madaki n-i nak-i-te se-na-wo yar-i-t-uru Night FOC dawn-COND **1SG.A-hate and be.awake-CAUS house** rooster-GEN too.early DV-INF cry-INF-SUB beloved-DIM-ACC send-INF-PERF-ATTR

'Even if the daybreak would arrive, **I would hate it, as the house** rooster **made [him] awake** crying too early and sending my beloved away.'

This is a literal translation which is awkward due to the fact that pronominal references in the text precede the nouns they refer to. To make it less literal and more palatable:

'Even if the daybreak would arrive, I would hate the house rooster, as it made my beloved awake crying too early, and sent him away.'

To answer the question: "What happened to a rooster?", I can say: "Nothing" - the poor creature was not eaten by a fox or drowned in a water tank. But to turn to more serious issues, several puzzling pieces of this dan in the Ise monogatari seem to find better explanation with the newly proposed interpretation of this enigmatic poem.

First, it becomes clear why this poem does not receive the same evaluation of being 'rustic' as the first poem by the girl. Apparently, for a refined courtier from Heian society it was beyond the pale of imagination to receive a poem partially written in Ainu, and beyond power of words to evaluate such an outrage.

Second, it explains so much better the cruel and mocking poem sent in response that essentially tells the girl that she is not human. This is quite the same attitude that is found in the Kojiki and the Nihonshoki where the ancestors of modern Ainu are called *tuti-kumo* 'earth spiders'.

Most importantly, however, besides the ideological attitudes, this poem tells us a significant amount about the ethnolinguistic reality in Michinoku province. The composition of such a poem would be completely impossible if Japanese and Ainu did not still live side by side and actually intermarried, and if Ainu was not still a living language. The author of this poem most likely was a mestizo from such a mixed marriage, most likely a daughter of a provincial Japanese aristocrat and a high-positioned local Ainu woman.

5 Ainu loans in Western Old Japanese

Although Ainu loans in Western Old Japanese [WOJ] are far and between in comparison with Eastern Old Japanese, they do exist:

WOJ Sira nup-î 'permanent epithet for Tukusi' 'Kyūshū' < WOJ sira 'white' + Ainu nup-i 'its-field'

- (3) 斯良農比(4) 筑紫國尔(5) 泣子那須(6) 斯多比枳摩斯提
- (3) sira **nup-î** (4) TUKUSI-NÖ KUNI-ni (5) NAK-U KÔ-nasu (6) sitap-î k-î-mas-i-te
- (3) white **field**-POSS (4) Tukusi-GEN land-LOC (5) cry-ATTR child-COMP (6) long-INF come-INF-HON-INF-SUB

'(6) [She] came longing (5) like a crying baby (4) to the land of Tukusi, (3) the western **field**' (MYS 5.794)

WOJ ma 'after' < Ainu mak 'behind, inside'

- (1) 奴婆多麻乃 (2) 欲流見之君乎 (3) 安久流安之多 (4) 安波受麻尔之弖 (5) 伊麻 曽久夜思吉
- (1) nu^mba tama-nö (2) yôru MÎ-si KÎMÎ-wo (3) ak-uru asita (4) ap-aⁿz-u **ma** n-i s-i-te (5) ima sö kuyasi-kî
- (1) pitch-black jade-COMP (2) night see(INF)-PST/ATTR lord-ACC (3) dawn-ATTR morning (4) meet-NEG-INF **after** DV-INF do-INF-SUB (5) now PT be.regrettable-ATTR
- '(4/5) **Later on**, now [it] is regrettable (3) that at the dawning morning (4) [I] did not meet (2) [my] lord whom [I] saw in the night (1) [dark] as pitch-black jade' (MYS 15.3769)

The greatest number of Ainu elements in Western Old Japanese are attested in books seventeen and nineteen of the $Man'y\bar{o}sh\bar{u}$. Immediately below is the list from book seventeen:

kî 'mountain' < Ainu kim 'id.' Attested in MYS 17.3969 and 17.3981.

- *kë*ⁿ*da* 'star' < Ainu *keta* [keda] 'id.'. Attested as a name of the shrine in the preface to MYS 17.4025. See also Vovin (2009: 7–10).
- Nötö (p.n.) < Ainu *not* 'cape, promontory'. Attested in the preface to MYS 17.4026–4027 and in 17.4026. See also Vovin (2009: 6).
- Puse (p.n.) lake. Puse is meaningless in Japonic and certainly has no connection to OJ puse- 'to make lie down'. Meanwhile *purse* 'to reach gently the bottom with a pole' occurs in Ainu place names (Chiri 1956: 103). We would expect Ainu *-rs-* cluster to simplify just to *-s-* in WOJ. Attested in the preface to the poems MYS 17.3991–3992, 17.3991, 17.3992, the preface to the poems 17.3993–3994, and 17.3993.
- Mêpî (p.n.) district, river and field are written as (婦負) for district and (賈比) for river and field. The first of these spelling are apparent *ateji* (当て字), and the second is phonographic. Again, there is no reasonable Japonic etymology. Cf. Ainu *mep* 'the spring of clear water' occurring in place names (Chiri 1956: 59). Attested in MYS 17.4016, the preface to 17.4022, and 17.4023.
- Ikuri (p.n.) < Ainu *ikure* '[the place of] being made drunk' < Ainu *ikure* 'to make someone drink sake' < *i*-, object prefix + *ku* 'drink' + -*re*, causative, with an expected raising of *e > i in the final syllable in non-WOJ dialects. Attested in MYS 17.3952.

A textual example:

- (1) 安之比奇能 (2) 夜麻伎敝奈里氐 (3) 等保家騰母 (4) 許己呂之遊氣婆 (5) 伊米尔美要家利
- (1) asi pîkï n-ö (2) yama **kî** pênar-i-te (3) töpo-kê-ⁿdömö (4) kökörö si yuk-ë-^mba
- (5) imë-ni mî-ye-kêr-i
- (1) foot low DV-ATTR (2) mountain **mountain** be.separated-INF-SUB (3) be.far-EV-CONC (4) heart EMPH go-EV-CONJCT (5) dream-LOC see-PASS(INF)-RETR-FIN
- '(2) [We] are separated by **mountains** (1) with low feet, and (3) although [it] is far, (4) because [my] heart goes [to you], (5) [it] turned out that [you] appeared in [my] dreams' (MYS 17.3981).
- WOJ *pînemôsu* 'all day' < WOJ *pî* 'day' + Ainu *ne*, locative-instrumental, and *mos* 'to be awake'.
- (1) 乎敷乃佐吉(2) 許藝多母等保里(3) 比祢毛須尔(4) 美等母安久倍伎(5) 宇良尔安良奈久尔
- (1) Wopu-nö sakî (2) kö^ŋg-î-ta-mötöpor-i (3) **pînemôsu** n-i (4) mî tömö ak-u^mbë-kî (5) ura n-i ar-an-aku n-i
- (1) Wopu-GEN cape (2) row-INF-PF-go.around-INF (3) **all.day** DV-INF (4) look(FIN) CONJCT lose.interest-DEB-ATTR (5) bay DV-INF exist-NEG-NMLZ DV-INF
- '(2) Rowing around (1) cape Wopu, (5) it is not a bay (4) that [I] could lose interest [in looking at] even if [I] look (3) **all day**' (MYS 18.4307)

The list of Ainu elements from book nineteen:

- WOJ *Sakîta-nö kapa* (辟田乃河) 'Sakîta river'. There is no cogent Japanese etymology for this place name; possibly it is from a hypothetic Ainu *sat-ki-ta-an* 'the one in dry miscanthus', lit. [dry-miscanthus-LOC-exist.SG]. Attested in MYS 19.4156.
- On the postposition *pa* 'every' see (Vovin 2009: 1298–1299). Since this postposition occurs exclusively after *tösi* 'year', I wonder whether *pa* is historically not 'every', but a borrowing from Ainu *pa* 'year'. It is unclear to me how this could work syntactically, but the limitation to the usage of *pa* only to the position after *tösi* 'year' and the lack of any cogent Japonic etymology for *pa* as 'every' cries for an explanation. Attested in MYS 5.833, 6.908, 10.1857, 10.1881, 16.3787, 17.3925, 17.3991, 17.3992, 17.4000, 18.4125, 19.4158, 19.4168, 19.4187, 19.4229, 19.4230, 19.4267, 19.4284, 20.4303, 20.4421, and 20.4516.

- WOJ titi 'titi tree', probably the same as MJ and MdJ toti 'horse-chestnut tree'. It is possible to conjecture that WOJ form *titi* is derived from *toti or *təti by regressive vowel assimilation, therefore MJ form is more archaic than the WOJ one, although we cannot tell whether the Japonic archetype was *toti or *təti. As far as I can tell, this word is not attested in Ryukyuan languages. There is certainly a connection with Horobetsu Ainu toci-ni 'horse-chestnut tree', toci 'fruit of a horse chestnut tree' (Chiri 1976: 92), also recorded by Batchelor (1938) as tochi-ni 'horse-chestnut tree' with a note that it 'means sticky or dirty tree' (Batchelor 1938: 500) < PA *toti. Although it is impossible to tell who borrowed this word from whom because of the limited distribution in both Japanese and Ainu, one consideration can be given in favor of the directionality Ainu > Japanese rather than the opposite. Namely, I know of no other examples of tree names borrowed by Ainu from Japanese, while there is at least one other tree name borrowed by Japanese from Ainu: EOJ kari^mba (14.3399), WOJ *kani^mba* 'sakura' < Ainu *karinpa* 'sakura, sakura bark'. Attested in MYS 19.4164 and 20.4408.
- Nipu (p. n.) may be of Japonic pedigree: OJ ni 'red earth, red pigment' + pu 'thicket, spot' or of Ainu origin: cf. Ainu ni-pu 'wooden storehouse' (ni 'tree, wood' + pu 'storehouse'), variously used either for keeping driftwood or dry salmon. It occurs as a place name in Bihoro (Chiri 1956: 66). Attested in MYS 19.4178.
- The name of Sikura in Sikura river (叔羅河) is meaningless in Japonic. Possibly it has an Ainu etymology: *sik-korar 'plentifully giving'. The OJ -k- in early Ainu loanwords should reflect Ainu -kk-, because Ainu -k- [-g-] is reflected as OJ $-^{\eta}g$. The loan must also precede the raising of *o > u in OJ. The loss of final -r in OJ is expected. For the imagery of a river as a provider of provisions see MYS 1.38. Attested in MYS 19.4189 and 19.4190.
- It is highly unlikely that Takô bay on Puse lake was 'Octopus bay', 'Callus bay', or 'Kite bay'. But with these three choices the search for the Japonic origin of the name Takô seems to be pretty much exhausted. It is much more likely that we are dealing here with another place name of Ainu pedigree: Ainu takkop 'field/plain where the reeds or grass grows' looks like a perfect candidate, both for the phonetic reasons (Ainu takkop > OJ takô is a perfect match, because we expect Ainu -kk- to be reflected as -k- in OJ, and the final -p should be lost without any trace in OJ), and for the fact that that takkop is actually attested as a place name in Ainu (Chiri 1956: 127). Attested in MYS 17.4011, 18.4051, 19.4199 (preface), 19.4200 and 19.4201.
- Tinu (血沼, 知努) is the old name of Iⁿdumî province that corresponds to the coastal part of present-day Ōsaka prefecture stretching from Sakai city (Sakai-shi, 堺市) to Kishiwada city (Kishiwada-shi, 岸和田市) (Nakanishi 1985: 462–463). The spelling 血沼 seems to be phonographic *kungana*, as it is unlikely that 'bloody swamp' was really meant here. If this is the case, then the likely origin is Ainu *cin* < *tin 'cliff bottom, cliff foot' (Chiri 1956: 18). The

- final vowel -u is either an echo vowel, or a dialect variation of a possessive form in -i that this word has in Hokkaido Ainu (Chiri 1956: 18). Attested in MYS 6.999, 9.1809, 9.1811 and 19.4211.
- Unapî (字奈比) is a district in Tu (MdJ Settsu) province corresponding to the coastal area below the Mt. Rokkō (Rokkō-san, 六甲山) in present day eastern ward of Kōbe city and Ashiya city (Ashiya-shi, 芦屋市) (Nakanishi 1985: 429–430). There is no apparent Japanese etymology for this place name. Ainu *úna* 'volcanic ash' + *pi* 'pebble' (Chiri 1956: 94, 136) might be tempting, but the fly in the ointment is that Mt. Rokkō is not a volcano. Attested in MYS 9.1801, 9.1802, 9.1809, 9.1810 and 19.4211.
- WOJ porö 'big, great' < Ainu poro 'big, great'. Attested in MYS 19.4235.
- WOJ *pumî* 'to lift, to raise' < PA *pum-i 'id., SG' > Ainu *pun-i* 'id., SG'. Attested in MYS 19.4235.
- WOJ at-as-i 'go.out-CAUS-INF' < Ainu at 'to go out'. Attested in MYS 19.4235.
- Anô (安努) does not look like a family name of the Japonic origin. Possibly Ainu *anun* 'stranger, guest' underlies it. Note that in the modern Ainu languages the sequence /no/ occurs only at the morphemic boundaries, i.e., it is always /n-o/. Attested in the preface to MYS 19.4251.
- WOJ *katakaⁿgô* (堅香子, MdJ *katakuri* 片栗) 'dogtooth violet' ? < Ainu *hantakor* 'black lily'. Attested in MYS 19.4143.
- Nötö (p.n.): Ainu *not* 'cape, promontory'. Nötö peninsula is attested in the preface to MYS 17.4026–4027 and in 17.4026. A different place name Nötö for a river is attested in MYS 19.4279.
- WOJ *sikï sima-nö* is used as a permanent epithet (*makura-kotoba*, 枕詞) for Yamatö. There is no uncontroversial Japonic etymology for *sikï*. Possibly Ainu *siki* 'to be full'. Attested in MYS 19.4280.
- There is also a very important cultural and semantic parallel between Old Japanese and Ainu. While OJ $ip\hat{e}$ 'house' indicates spiritual aspect of a dwelling, $ya^nd\hat{o}$ 'house' points to an actual physical structure (Aoki 1997: 79). This is highly reminiscent of a very similar dichotomy found in the Ainu language, where uni indicates a 'house as a place of habitat', while cise is a 'house as an actual building' (Nakagawa and Nakamoto 1997: 110).

A textual example:

- (1) 天雲乎 (2) **富呂尔布美安太**之 (3) 鳴神毛 (4) 今日尔益而 (5) 可之古家米也母
 - (1) AMA-KUMÔ-wo (2) **porö** n-i **pum-î** at-as-i (3) NAR-U KAMÏ mô (4) KÊPU-ni MASAR-I-TE (5) kasikô-kêm-ë ya mö

(1) sky-cloud-ACC (2) big DV-INF raise-TR.SG go.out-CAUS-INF (3) sound-ATTR deity FOC (4) today-LOC increase-INF-SUB (5) be.fearful-ATTR/TENT-EVID IP **EMPH**

'(4/5) Should [I] be increasingly fearful today (3) [of] the Thunder Deity (2) as [he] raises and makes go out in big numbers (1) clouds in the sky? [- Certainly, I should not!]' (MYS 19.4235)

6 The Ainu language in Sakishima?

So far, I have demonstrated that early Japanese borrowed quite extensively from Ainu. But there might be also evidence that Ainu was also spoken once in Ryukyus. The evidence comes from Sakishima, and more exactly from Miyako. Archeologists believe that Sakishima was populated first by a population from the South (exact source unknown, but then in 2000 BC this population died out (or moved out), and Sakishima might have remained unpopulated until it was colonized from Okinawa in 12th c. AD or so, although there is also some evidence to the contrary (Pearson 2013: 71–81). Thus, linguistics and archeology contradict each other, but I strongly believe that languages must speak for themselves.

I think that certain Ainu elements can be detected in refrains to the Miyako folk songs. Here are the examples.

Ni:manuśu:

The lord of Nima

ni:manu – ju – śu:gajo sa:sa: nu:ra m'u:ni héjarugahé śu:numa – ju – iga jo: nu:ra m'u:ni jo

ho:n'aho:e héiarugahé

'The lord of Nima Is going to board his boat héjarugahé The handsome lord of Nima Is going to board his boat ho:n'aho:e héjarugahé' (Nevskij 1978: 101)

So, what are ho:n'aho:e héjarugahé? These words cannot be analyzed on the basis of the Miyako language. I believe that they can be explained through Ainu, namely:

héjarugahé < Ainu he-ya-ru-ka-he [DIR-dry.land-way-top-POSS] 'on his way to the dry land'

ho:n'aho:e < *haunewahaue < Ainu *haw-ne wa hawe* [voice-COP and REP.EVID] 'they say that the rumor is that . . . '

Another example:

asanna miśin tukurujumai mmanna miśin tukurujumai **joi** vvann'ar'adu naksï – naksïtu akimiśu:z **jo:i**

'This is the place that I have not Shown even to my father This is the place that I have not Shown even to my mother **joi** Only to you, Crying I will open it and show **jo:**' (Nevskij 1978: 153)

Again, *joi ~ jo:i* cannot be explained on the basis of Miyako Ryukyuan. We might have a *hayashikotoba* (囃子言葉), a utterance added to keep the rhythm, but more likely there is a play on words here. Cf. Ainu *yomai* 'vulva, vagina' < *i-oma-i* 'ANTIP-insert-place'. But Ainu *ma* in *oma* 'to insert' is the extension of *o* 'to insert'. Thus, *i-o-i (> *yoi*) will have the same meaning.

7 Conclusion

We have seen that Ainu elements are found in early Japanese texts from Kantō and Tōhoku in the east to Kyūshū in the west. Therefore, one can conjecture with a high degree of probability that once the Ainu language was spread all along the Japanese archipelago, like Japonic in later times. As John Whitman (2014, p.c.) once noted, Ainu could not be the only Jōmon language, as the sheer length of the Jōmon period over 10,000 years would result in a great linguistic variation. However, we cannot find any reliable traces of other Jōmon languages in Japan. This fact leads us to a reasonable hypothesis that probably sometime in late Jōmon, Ainu played the same role as Japonic within the last fifteen hundred years, simply obliterating all previous linguistic variety either by linguistic assimilation, or by genocide, or both at the same time. Looking at the obliteration of Okhotsk culture by Ainu-based Satsumon culture on Hokkaido that took place much more recently after Ainu migrated from Tōhoku

to Hokkaido under increasing Japanese pressure around twelfth century AD, we can easily discern the same pattern.

There remains one problem: why cannot we detect the same Ainu loans that existed in eighth – tenth centuries AD in modern Kantō Japanese dialects. The partial answer is that these modern dialects are descendants of Central Japanese like Western Old Japanese. Although there are occasional Ainu loans in Western Old Japanese as well, they are few and far between compared to the loans in Eastern Old Japanese, because Yamato was under the firm control of the Central government centuries earlier than Kantō and especially Tōhoku, which doubtlessly led to earlier and more thorough obliteration of any Ainu presence and cultural and/or linguistic traces. Thus, Ainu loans are more likely to be discovered in the Hachijō language, the sole descendant of Eastern Old Japanese today. This kind of research has yet to be undertaken. But the other part of the answer is that many of these "loans", especially of the type found in the macaronic Eastern Old Japanese – Ainu poem from the dan XIV of the *Ise monogatari* are actually not the loans but drops that are typical for the situation of bilingualism. Once the bilingualism is gone, so are the drops. Thus, it is highly likely that there was a Japanese-Ainu bilingualism in Tōhoku and Kantō as late as late ninth – early tenth century, and quite possibly later.

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IM Ise monogatari (伊勢物語), late 9th or early 10th c. AD

HF Hizen Fudoki (肥前風土記), ca. 750 AD

KJK Kojiki (古事記), 712 AD

MYS Man'yōshū (萬葉集), ca. 759-785 AD

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7 Language contact in the north

1 Introduction

This chapter examines the sociolinguistic situation (the circumstances of language use) on the island of Sakhalin, which served as the primary stage for language contact in the northern part of the Ainu language area, with particular attention to the state of language contact among the ethnic groups residing there. Much of previous research on language contact among ethnic groups on Sakhalin depends on so-called ethnographies left by ethnologists who studied Sakhalin between the latter half of the 19th and the beginning of the 20th centuries and on statistical materials from administrative agencies. However, descriptions of language use in contact situations can be traced back to an earlier time than that. For example, from the end of the 18th century until the middle of the 19th century many Japanese, in particular, representatives of the Tokugawa Shogunate and others connected to it, made survey visits to Sakhalin and recorded the circumstances of language use in interethnic contact (Appendix 2). In this chapter, we will make use of such descriptions by Japanese visitors as one set of materials and examine the sociolinguistic situation on Sakhalin before the period when ethnographies flourished, focusing on contacts between the Ainu language and other languages of the northern regions (Section 2). The results of this investigation show that, at least in the records of Japanese who investigated the area in the period from the end of the 18th century through the middle of the 19th century, there is no evidence to affirmatively support the hypothesis proposed by some previous studies that there was a lingua franca or wide-spread multilingualism practiced on Sakhalin. Rather, they suggest the possibility that the multilingualism that can be found in such descriptions was extremely limited and localized in nature.

In Section 3, loan words (lexical borrowings) that can be found among the languages of the ethnic groups resident on Sakhalin are taken up and the actual state of such borrowing relations is clarified. On Sakhalin, three genealogically different languages, Ainu (language isolate), Nivkh (language isolate), and Uilta (Tungusic)

Acknowledgments: The authors would like to thank Anna Bugaeva (Tokyo University of Science), Miki Mizushima (Hokkaido Museum), Azuma Shunsuke (Hokkaido Museum), Yoshiko Yamada (Hokkaido Museum of Northern Peoples) and an anonymous reviewer for providing us with helpful feedback. This research was supported by the following grants afforded by JSPS (Japan Society for the Promotion of Science): Kakenhi (Category B) project no. 15401012 led by Prof. Hiroshi Nakagawa (Chiba University), Study on Language Contacts among Northern Peoples to Japan centering on Ainu from the Viewpoint of their Mingu, 2003–2006 and Kakenhi (Category C) project no. 26370456 led by Hidetoshi Shiraishi, Linguistic Atlas of Sakhalin and the Lower Amur region, 2014–2016.

came into contact through social and economic activities. As a result, similarities among the three languages do not stop with lexical borrowings, but a number of linguistic characteristics not found in the dialects of other regions or in sister languages can be found in which they resemble each other (Kindaichi 1944; Yamada 2008, 2010; Kazama 2009; Pevnov 2009; Gusev 2015, and others). Whether these characteristics are the result of the language contact that took place on Sakhalin and whether they are of a scale that allows recognition of the island of Sakhalin as a setting for a Sprachbund are questions left for future research. This chapter focuses on lexical borrowing and, examining the scale and direction of borrowings that developed among multiple languages, considers how consistent the results of this investigation are with the language contact situation described in the first half of this chapter.

2 Language contact on Sakhalin: Previous descriptions

In order to examine the contact between Ainu and the other languages of the northern territories, it is necessary to confirm the circumstances of language use on the island of Sakhalin in the past, since Sakhalin was the main stage of such language contact as reported in literature. It was on Sakhalin that the Ainu resided with other ethnic groups (Schrenck 1883–1903; Shternberg 1933; Ohnuki-Tierney 1974; Smoliak 1975), as exemplified by some settlements which had names in two languages, e.g., Poro kotan and Pile vo, meaning 'big settlement' in Ainu and Nivkh, respectively. Linguistically speaking, among the dialects of Ainu, it is the Sakhalin dialect which mostly exhibits characteristics common to Nivkh and Uilta (Kindaichi 1944; see further Section 3 of this chapter).

That Sakhalin was the main stage of language contact for Ainu can be concluded from the extremely limited distribution of Ainu loan words in languages on the continent as well. Ikegami (2004: 222) states, "Of the Ainu words that were borrowed into other languages of Karafuto [Sakhalin], not many were transmitted to the continent." There are reports of some Nivkh and Tungusic clans on the continent having Ainu ancestors (Shternberg 1933; Smoliak 1975), but the linguistic influence these Ainu left on other languages is unknown, and there is no record of Ainu being spoken on the continent.

¹ Other ethnic groups living on Sakhalin also appear in statistical records from the end of the 19th into the 20th century (e.g., Voennyi Gubernator Ostrova Sakhalina 1898; Karafutochō 1931). Since, compared to the Ainu, Nivkh, and Uilta, their residence on Sakhalin was recent, they are not taken up in this chapter.

The circumstances of language use on Sakhalin differ greatly depending on the period.² For example, Gruzdeva gives the following description of the situation at the turn of the 20th century.

In the entire language situation on Sakhalin at the turn of the century, a characteristic feature was active multilingualism for which various sociocultural reasons were responsible (speakers of different languages living together in the same place, common forms of economic activities, mixed marriages, etc.) (Gruzdeva 1996: 1008)

The "active multilingualism" envisioned here is of the form of interethnic contact in trade and common living areas in which languages other than that of one's own ethnic group were used. However, it is impossible to tell from this description what language was used in what kinds of situations in contacts with other ethnic groups.

Concerning the language that was used on Sakhalin in cases of contact between ethnic groups, Burykin (1996: 993) states, "In their area, the Nivkhs turned out to be the numerically strongest nationality, as a result of which the Nivkh language was utilized as instrument of interethnic communication both on Sakhalin, and on the lower course of the Amur River". As evidence for this, Burykin offers the existence of Nivkh loan words found in the surrounding Tungusic (Uilta, in particular) and Ainu languages. On the other hand, Gruzdeva (1996: 1008) and Taksami and Kosarev (1990: 251) state that, in interactions with other ethnic groups, Ainu played the principal role.³ The citation for this is the following description in the yearbook Sakhalinskii kalendar' published by the Russian military authorities in Russian-governed Sakhalin.

[After referring to Tungus (Evenki) and Yakut: S&T] Other indigenous peoples do not pay any national taxes and do not have any social duties. Both groups (Evenki and Yakut: S&T) are mainly Orthodox Christians; they speak almost the same language. However, they also know Ainu well. On the Sakhalin Island, Ainu is a language for general purposes which is used by nearly all the indigenous peoples when they communicate with each other, with the local administration, and with Japanese fishermen/fishery managers. (Voennyi Gubernator Ostrova Sakhalina 1898: 81)

² Because this chapter deals with the contact between Ainu and other languages of the northern territories, the sociolinguistic situation in post-World War II Sakhalin when the majority of Sakhalin Ainu had migrated to Hokkaido will not be covered here. Regarding the large-scale language shift to Russian experienced by the native ethnic society in that period and the sociolinguistic situation of the time, see the following references: Eremin, Taksami, and Zolototrubov (1988), de Graaf (1991), Roon (1996), Yamada (2010), and Shiraishi and Botma (2015).

³ Ainu was sometimes used in negotiations between Japan and Russia. For example, when roughly 70 Russian military officers and soldiers stayed in Kusunkotan in the southern part of Sakhalin from August 1853 to May 1854, they negotiated with the Japanese side (the Matsumae-clan) using a Cossack named D'iachkov (Kichi in Japanese records) who understood Ainu (Busse 2003; Azuma 2005). Lack of anyone who could understand Ainu caused great difficulties in negotiations, as was the case in 1858 when the Russians landed at Kusunnai (Azuma 2005: 29).

Based on descriptions like this, there are studies that say that, although Nivkh may have been the lingua franca in Sakhalin in earlier times, it had lost its importance by the beginning of the twentieth century and that Ainu has been the lingua franca in the 19th century (Wurm 1996: 981). On the other hand, it has been pointed out that the latter half of the 19th century was a time when political tensions between Russia and Japan were rising so neither Russian nor Japanese could become a lingua franca and thus Ainu simply came to be adopted as a compromise solution (S. Sasaki 1996: 246). Accordingly, in order to ascertain the actual multilinguistic language situation among Sakhalin resident ethnic groups, it is necessary to confirm the state of language use in ethnic societies before the later part of the 19th century, when Japan and Russia began serious advances into the region.4

The first part of this chapter, then, will be limited to the following two points:

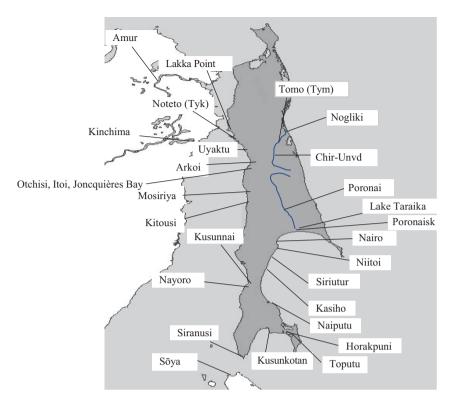
- the actual state of multilingualism in the ethnic communities on Sakhalin up to the middle of the 19th century, and
- ii) the languages that served as lingua franca on Sakhalin up to the middle of the 19th century.

In our consideration of the above two points, we will draw heavily on descriptions by explorers who conducted on-site investigations before the middle of the 19th century. In particular, we will focus on records of language use by the ethnic groups of Sakhalin (also called Karafuto or Kita-Ezochi in Japanese) made by Japanese investigators that have not been made much use of hitherto from a sociolinguistic perspective.

2.1 Ethnic groups of Sakhalin: Language use

Old examples in which descriptions are gathered in quantity from which one can confirm the languages residents of Sakhalin used are records left by Japanese who visited the region between the end of the 18th century and the middle of the 19th century. This was in a period when trading activity between the lower reaches of the Amur River, Sakhalin, and Ezochi (Hokkaido), known in Japan as the "Santan trade" was at its peak (Harrison 1954; Takakura 1966; S. Sasaki 1996), and was also the period when the Edo Shogunate grew alarmed at the southern expansion of Russia. It was against this background that many Japanese, especially officials of the Shogunate, traveled to Sakhalin in this period and investigated its geography and ethnicities (Map 1).

⁴ See Appendix 2 for an overview of the exploration and settlement of Sakhalin by the Russians and the Japanese.



Map 1: Sakhalin Island.

The ethnic groups resident in Sakhalin appearing in the records from Japanese of the period are not divided up into the same categories as are used today. Takeshirō Matsuura, who visited Sakhalin in 1846 and 1856, reports the following names appear for ethnic groups resident in Sakhalin in addition to Ezojin (Ainu): Sumerenkur (or Sumerengur), Nikbun, Rumou (or Romou), Orokko (or Oroko), and Taraika. In the records of Denjūrō Matsuda, who surveyed the west coast of the island as far as Lakka Point in 1808, there appears an ethnic group called Sirunkur (or, perhaps, Sirungur, Sirun Aino, or Sirun Utare). Matching up the names of ethnic groups appearing in the above records with the current taxonomy gives Table 1 below. The names of these ethnic groups are those given them by the Ainu resident in the southern part of Sakhalin that the Japanese were in contact with and, thus, some are derived from Ainu (e.g. -kur, meaning 'people' in Ainu).

Below we will look at these ethnic groups that are described in primary sources as being in linguistic contact with Ainu.

Ethnic groups	Ethnic groups in current taxonomy⁵
Orokko	Uilta living along the Poronai River.
Repun Orokko	Uilta living around Lake Taraika.
Taraika	Ainu living near Lake Taraika.
Sumerenkur	Nivkh living on the west coast of Sakhalin.
Rumou	Nivkh living in the Tym River basin in the interior of Sakhalin. ⁶
Nikbun	Nivkh living near the mouth of the Tym River.
Sirunkur	An ethnic group living in the region where the Ainu and Nivkh areas of residence are in contact on the west coast of Sakhalin.

Table 1: Ethnic groups in Sakhalin in the 19th century literature.

2.2 Languages used at contact areas between Ainu and other ethnicities: West coast

The Japanese records report the existence of two ethnic groups in the northern border areas of Ainu namely, Sirunkur and Taraika. A Shogunate official Denjūrō Matsuda, who visited the region in 1808, reported that the west coast regions of Otchisi and Arkoi were occupied by Sirunkur and Sumerenkur. According to Matsuda (1988: 194), the Sirunkur were a group that had originally been Ainu but whose customs had become Santan-ized (Tungus-ized or perhaps Nivkh-ized). Matsuda's colleague Rinzō

⁵ The areas of residence for ethnicities living on the east coast follow the records of a survey conducted in 1857 by Tahei Kuriyama (Azuma 2006, 2015). According to him, the ethnicities living in the span between Kasiho and the northern edge of Lake Taraika and their respective populations are as follows: Ainu 69, Orokko 86, Repun Orokko 96. In addition, 43 Romou and Nikbun stayed for some period in Nairo to build boats.

⁶ This division follows that of Tahei Kuriyama, who performed a survey of the region in 1858 (Azuma 2006: 64). The Tym River was called the Tomo River in Ainu (Piłsudski 1998) and appears in Japanese records as the Tomoo River (Mamiya 1988b) or as the Tomou River (T. Matsuura 1978). As described in Section 3, since in general [t] corresponds to original [r] in borrowings into Ainu from Nivkh (e.g. motas (SN), mohrasi (SA) 'sled runner'), it is possible that the Ainu form was something like romo.

⁷ The term Santan appears frequently in the Japanese records from the 18th century on. Mamiya reports that this is not the name of a single ethnicity but includes multiple ethnic groups living in the lower Amur river basin (Mamiya 1988c). The ethnicities thought to be included in those referred to by the term Santan are, in the modern taxonomy, the Ulcha, Amur Nivkh, and Nanai (Ikegami 1988; Kojima 1989; S. Sasaki 1996). Ikegami reports that the major proportion of the words given as Santan in the records by Japanese of the time are Ulcha lexical items (Ikegami 1988). The term Santan itself is reported to be a Sakhalin Ainu pronunciation of the Nivkh word canta meaning 'Ulcha' (Mamiya 1988c). When referring more narrowly to the Amur Nivkh among the groups referred to as Santan, the term Unenkur was used (Nakamura 1982: 630; Kojima 1989: 35).

Mamiya reports that between Kitousi (latitude 50°10'N) and Itoi (the Nivkh name for Otchisi), "The Sumerenkur and Sirunkur mingle and have no dislike of marriage between them" (Mamiya 1988b: 95). A similar description can be seen in the records of Bunpei (Kansuke) Okamoto, who explored this region in 1865. Regarding the residents of the region, Okamoto (1867: 12) reports, "The residents here are all Ainu and they have Sumeren wives. Their lifestyle is that of the Sumeren, but they were originally Ainu."

However, there are not many descriptions other than those described above that show intermarriage between the Ainu and the Nivkh. For example, Koichirō Nakamura, who surveyed the southern part of the east coast of Sakhalin in 1801, heard from Ainu in Horakpuni, "There is intermarriage between the Uilta and the Nikbun. Sakhalin Ainu, including Taraika, do not marry Uilta or Nikbun" (Nakamura 1982: 634).8

Furthermore, Shternberg, who stayed in Sakhalin from 1889 to 1897 investigating the lives of the Nivkh and other ethnic groups reported, "Up to the present time, intermarriage between the Gilyak [Nivkh-S&T] and the Ainu has been very rare" (Shternberg 1999: 37). According to Shternberg (1999: 37–38), an obstacle here was the difference in the clan system – while the Nivkh and other Tungus groups had a patrilinear system, that of Ainu was matrilinear. On the other hand, Piłsudski (1998: 96–102) says that, in the so-called "Battle of Taraika" that appears in the oral literature of the Sakhalin Ainu he recorded, peace was reached with the Uilta taking Ainu women as wives. However, this should be seen as a symbolic act taken to put an end to the extraordinary situation of an armed conflict between the two ethnic groups, and, if intermarriage between the Ainu and the Uilta were an everyday occurrence, such a marriage alone should not have been capable of being made to carry such a role.¹⁰ Accordingly, we should be cautious in accepting the content of this oral literature alone as showing that the Ainu and the Uilta had an intermarriage relation.

What can be gained from the records above is that intermarriage possibly took place between the Ainu and the Nivkh in a limited fashion on one part of the west coast of Sakhalin. The residents of that region are called Sirunkur in Japanese records and

⁸ Koichirō Nakamura left Sōya (Hokkaido) in 1801, passed through Siranusi going north along the east coast and surveyed as far as Naiputu.

⁹ The Battle of Taraika was an armed conflict (retaliatory conflict) that arose between the Uilta and Ainu. In the version that Piłsudski recorded from the Sakhalin Ainu, the conflict began when an Ainu who had been invited to a Uilta home was served a dish made of reindeer stomach. Disliking that, the Ainu killed all the Uilta family. Piłsudski (1998: 102) writes, "... one essential feature is that the war sprang from a misunderstanding on the subject of the treatment of a guest . . . This misunderstanding of tribal customs was the cause of a cruel war."

¹⁰ In the version Austerlitz (1992) recorded from his informant Chiyo Nakamura, there was no part about making peace by means of a marriage. There are many other versions recorded that do not include a part about making peace by means of a marriage, including Murasaki (1976) and Ikegami (2002).

their lifestyles are said to have been Tungus-ized or Niykh-ized. Mamiya (1988b: 38) says regarding the Sirunkur, "As one proceeds toward the interior (north), the visages of the people are slightly different from the Ainu who live in the south, and their customs naturally change to that of a different ethnic group. Accordingly, given that in the winter they wear clothes made of dog skins, wear foot coverings made of seal skins, and cover themselves with bear skins, they are often recognized as a people with customs different from those of the Ainu."

Since there are only fragmentary description of the language spoken by the Sirunkur, it is difficult to be definitive. Ikegami (2004) says that the Sirunkur used both Ainu and Nivkh but hypothesizes that the use of Ainu is older. One piece of evidence in support of this hypothesis on the use of the two languages is the record of Matsuda (1944). In 1808 when Matsuda and the Ainu accompanying him approached Otchisi in a boat, they were met by 30 to 40 residents carrying bows and drawn spears lined up along the shore and threatening them. Seeing this, the Ainu accompanying him were very much afraid, but when they forced their way to shore, they were surrounded by the residents who shouted at them in words that they could not understand at all. One of the residents spoke to them in Ainu. Since this person could understand Ainu, they were able to persuade the other residents through him and they then hired this person, whose name they recorded as Pokono, as an interpreter.

What is clear from this description is that, although the Sirunkur of Otchisi may have formerly been Ainu, linguistically they had already been considerably Nivkhized at the time of Matsuda's visit in 1808. The fact that one of the residents spoke Ainu can be hypothesized as being due to the fact that the particular individual Pokono had through some circumstances come to acquire Ainu. As will be described below, such a thing was possible at the time.

Immediately before visiting Otchisi, Matsuda met a Sirunkur named Toyottono living in Mosiriya. Matsuda could not understand the language Toyottono spoke (most likely Nivkh), but, since Toyottono could speak some Ainu, they were able to converse. We can hypothesize from the interchange between Matsuda and Toyottono that, even for individuals like this who could speak some Ainu, at least in the area where Matsuda visited, Nivkh had become dominant. Taking the information above all together, it is highly likely that the dual use of Ainu and Nivkh by the Sirunkur that Ikegami points out was in fact not true of all the Sirunkur. 11

Regarding the variety of Ainu that the Sirunkur spoke, Ikegami (1995: 233) surmises, "That Ainu was close to the Taraika dialect in the east coast". This is supported by the fact that an Ainu word used by Toyottono (recorded by Matsuda) sinjitsu 'origin' is closer to the Taraika dialect sincit [find;it] 'root' than to the sinris of the Raichiska

¹¹ A French missionary Furet (see Majewicz (Chapter 4, this volume)), who visited Joncquières Bay (now Aleksandrovsk-Sakhalinskii) in 1856, recorded 96 words and one sentence of the local residents. Those have almost all been identified as Nivkh (Watanabe 2000).

dialect found on west coast, see Tangiku (Chapter 9, this volume) for the details of Sakhalin Ainu dialects.

After visiting Otchisi, Matsuda passed through Uyaktu on his way to visit the Nivkh village of Noteto (Tyk). When he arrived in Noteto, he was unable to understand the language spoken, but someone who spoke a little Ainu pointed to a house saying, "nisippa cise arki" meaning 'master house come' (Matsuda 1944: 169). The next day Matsuda interviewed the village chief, but since that was done using the interpreter Pokono we can surmise that Ainu language use by the Nivkh residing in Noteto at the time was limited to a few people who spoke a few halting words.

2.3 Languages used at contact areas between Ainu and other ethnicities: East coast

As on the west coast, on the east coast as well there was an Ainu group living in the area where the Nivkh, Uilta, and Ainu were in contact whose customs and way of living were different from the Ainu in the south. In the Japanese records, these people are referred to as Taraika. The descriptions of the areas in which the Taraika lived differ somewhat depending on the period, but according to what Nakamura (1982) heard from the Horakpuni Ainu chief Rikuka, Siriutur seemed to have been the border as people south of it followed Ainu customs. T. Matsuura (1978) reports that the clothing worn by Ainu up to Kasiho was Japanese used clothing and that further north was used clothing that came from the continent. However, given that Nakamura (1982) reports that after the Ainu went to Sōya (Hokkaido) for omsha, a meeting with the Japanese officials, their customs became Ainu-ized, the customs of the residents of this region should not be regarded as being fixed. ¹² Concerning the Taraika, T. Matsuura (1978) reports that, besides skillfully creating clothing from seal skins and fish skins like the Nivkh, the accessories and bows the women made were superior to those of the Ainu.

As far as their language is concerned, Nakamura (1982: 638) reports it to be close to Ainu and totally different from Uilta. He reported hearing from Rikuka that, since it was an Ainu-like language, it was easy to comprehend.¹³ Also, since there is nothing in the Japanese records of having difficulty communicating with the Taraika, it can be thought that they were able to communicate satisfactorily using the Ainu spoken

¹² Omsha (or umsa) was a ceremony in which the Japanese officials called the Ainu together and treated them to a celebratory banquet and gave them gifts. It was developed as a means of caring for and controlling the Ainu (Takakura 1966: 260).

¹³ This can also be taken as evidence that Rikuka, who was a resident of the southern part of Sakhalin, was aware that, although the Taraika Ainu language was close to the Ainu of the southern part of Sakhalin, they were not identical.

in the southern part of Sakhalin. From these descriptions, we may surmise that the language spoken by the Taraika was the Taraika dialect of Sakhalin Ainu.

Concerning the language used between the ethnic groups in contact on the east coast, especially in the area around Lake Taraika, Nakamura (1982: 637) reports the following. Uilta was similar to the Santan language and very different from Ainu. The Taraika had regular intercourse with the Uilta and with the Ainu living in the southern part of Sakhalin, but they did not go to the west coast or to the continent. When the Uilta visited the Ainu the Uilta spoke Ainu so they were easy to comprehend. On the other hand, he mentioned the name of Kanchakuru from Toputu as an Ainu who spoke Uilta (Nakamura 1982). From this description we can conclude the following: i) In contact situations it was Uilta who spoke Ainu, and ii) there were among the Ainu those who did understand Uilta.

The area around Lake Taraika on the east coast was an area in which not only were there Ainu and Taraika living, but it was also a place where Uilta and Nivkh visited or stayed for a certain period of time for the purposes of fishing, trade, or boat making (cf. Section 3). According to T. Matsuura (1978) such Nivkh men all used Uilta. This is also supported by a later report by Shternberg, who arrived in Sakhalin in 1889 and reported that "Almost every Gilyak speaks a Tungusic language" (Shternberg 1999: 38). On the other hand, Mamiya (1988a) reports that when he visited Taraika in 1808, he was completely unable to communicate in Ainu with the Nivkh who had come there and had to ask a Uilta to translate.

Nevertheless, according to T. Matsuura (1978), there were also times when Nivkh used the Taraika language. If so, how much Ainu was it? T. Matsuura (1978: 176) tried talking with a Nivkh who had come to Nayoro for boat building, 14 but he reports that communication was quite difficult commenting, "The sound comes from the chest through the throat and is therefore hard to discern," characterizing it as "very difficult to understand," and adding, "the vowels are pronounced with a heavy accent and therefore difficult to understand." T. Matsuura's facility in Ainu was quite high, but, considering that he had quite a hard time communicating with the Nivkh, we can surmise that, as in the case of the west coast described earlier, the ability of the Nivkh of the time in Ainu was not of a level such that they could communicate freely. Following this, T. Matsuura went up the Poronai River to where the Uilta lived. Regarding the Uilta language, he said, "The vowels are sounded close to the lips" (probably compared to Nivkh), and said, "Most of them understand and use Ainu" (T. Matsuura 1978: 182), with no description of inconvenience in communication. From these descriptions, we can surmise that the Uilta were more proficient in Ainu than the Nivkh.

¹⁴ The Nivkh made dugout canoes at Nairo and traded them with the Uilta for seal skins (T. Matsuura 1978).

2.4 Multilinguals

Putting the above descriptions together, we can confirm the following two points regarding multilingualism on Sakhalin from the end of the 18th century to the middle of the 19th century. i) Multilingualism was limited and local and can not necessarily be said to have been established throughout the island of Sakhalin. The limitations were not merely geographic; judging from T. Matsuura's (1978: 176) statement, "It was the Nivkh men who spoke Uilta" there were also gender limitations. ii) Language use in situations of language contact between ethnic groups resident on Sakhalin was not necessarily bidirectional. In particular, there are few descriptions of Ainu (other than the Sirunkur) speaking another language. Granted, there were a certain number of individuals or groups that, for reasons of mixed residence, economic activities (including trade), or intermarriage, came into contact with other ethnic groups and were able to handle multiple languages. However, looking at the descriptions from the time in more detail, mixed residence was limited to a part of the region on both the west and east coasts and the scope of intermarriage had both geographic and ethnic limitations.15

What should be noted is the frequent appearance in Japanese records of specific individuals as interpreters able to handle multiple languages. ¹⁶ Such individuals were especially notable on the west coast of Sakhalin. Pokono from Otchisi, who was Matsuda's interpreter, was selected because of his proficiency in the Ainu language. Why Pokono had been able to acquire Ainu compared to other residents is not described and thus remains unknown.

However, there are descriptions of cases in which a particular individual gained proficiency in a language other than his native language. One such individual who appears repeatedly in Japanese records was Kariyasin (Matsuda 1944; Nakamura 1982). Nakamura met Kariyasin, who had come on the trading vessel of a Santan merchant in 1801 in Siranusi. Kariyasin was about 40 years old at the time, but he had been born in Sōya, Hokkaido and had been taken to the continent by a Santan merchant when he was 13 or 14 and had become a servant to someone named Buyanko in Kinchima. For the next 24 or 25 years, he had traveled back and forth between the continent and Sakhalin on trading vessels as an interpreter and had a wife and a child back in Kinchima. Also, there are records showing that when Sakhalin Ainu traveled to the continent, they also employed such interpreters at their destinations. For example, when the village chief of Nairo, Yaenkur-aino, crossed to the continent, he employed an Ainu named Ciou who was used to translating for Manchurians (Habuto 1978). Furthermore, when Takeshirō Matsuura and Tahei Kuriyama performed their

¹⁵ Intermarriage was practiced primarily in border areas with other ethnicities (Shternberg 1933; Smoliak 1975).

¹⁶ Records of Japanese Ainu language interpreters (Ezo tsūji) go back as far as 1593, see T. Sasaki (1989: 49) and Satō (Chapter 3, this volume).

survey of Sakhalin, they brought along an Ainu from Kusunkotan named Cikuniw (Japanese name: Denbei) as a Santan interpreter (Azuma 2015).

At the time it was a frequent occurrence for Sakhalin Ainu to be dragged off to the continent as Kariyasin was. Trading between the Santan and the Ainu at that time was done on credit and so it was not unusual for an Ainu to be taken along as a guarantee for the debt (Takakura 1966; Mogami 1972; Mamiya 1988b; S. Sasaki 1996). That person became a servant like Kariyasin and was pressed into service as an interpreter in trading ventures. The circumstances under which Ciou came to reside on the continent are unknown, but it is possible that, like Kariyasin, he had been dragged off as surety for a debt.

2.5 Summary: Lingua franca on Sakhalin

Records affirmatively supporting the hypothesis proposed by earlier researchers that there was a lingua franca and wide-spread multilingualism among the residents of Sakhalin have not been found, at least among the records of Japanese making on-site surveys between the end of the 18th century and the middle of the 19th century. Granted, in the areas where the Sirunkur were resident on the west coast and where the Taraika were resident on the east coast, communication between different ethnic groups was conducted in Ainu. However, even in the case of the west coast, residents maintaining fluency in Ainu were limited in number (one out of thirty to forty in Otchisi). On the east coast, the Nivkh did move into the areas where the Taraika lived and stayed there for a time, but there are no descriptions of them having active negotiations with the Ainu and speaking Ainu. Rather, as the Nivkh did not understand Ainu, the records show Uilta working as interpreters for the Japanese. It may depend on how lingua franca is defined, but as a language actively functioning as a means of communication with other ethnic groups in a multilingual society, the Ainu language described in the records by Japanese of the time was wanting in every way.

What can be seen from the investigation above is the possibility that the multilingualism observed on Sakhalin from the end of the 18th century to the middle of the 19th century was extremely limited and localized. A certain amount of bilingualism did exist, but that was limited to particular individuals like Kariyasin or to defined groups like "Nivkh men", and there are no descriptions of large numbers of residents speaking multiple languages. Diglossia probably arose historically in a partial fashion (e.g., as the language spoken by the Sirunkur shifted from Ainu to Nivkh). However, that was a particular case that arose in a limited fashion in a transition period during language shift, and no descriptions have been found in which residents across Sakhalin lived in a state of long-term diglossia.

As will be seen in the next section, there was a rich borrowing of lexical items among the languages of the ethnic groups resident on Sakhalin. However, at least as can be determined by looking at on-site survey reports from the end of the 18th century to the middle of the 19th century, evidence providing definitive support for the existence of a lingua franca is thin.

3 Loan words in the languages of Sakhalin

This section deals with loan words and words that can be thought to be loan words from other languages in the languages of Sakhalin, in particular, in Sakhalin Ainu, Sakhalin Nivkh, and Uilta. Loan words in these three languages extend to all lexical strata, but this section will target for consideration words (especially nouns) related to cultural elements. This includes not only the names of goods and related terminology but also the names of plants and animals used daily.

The existence of loan words in these three languages is a result of interethnic contact through economic and social activities, as has been noted by previous researchers (Takahashi 1934; Kreinovich 1955; Panfilov 1973; Ikegami 1990, among others). In addition, the influence of Santan trading and, through Santan trading, Qing China, cannot be ignored when considering loan words from languages of ethnic groups outside of Sakhalin (S. Matsuura 2004, 2006, 2009). The goal of this section is to examine the loan words found in the languages of the ethnic groups on Sakhalin and, based on this, estimate the scale, length of time, and timing of language contact among them and then to see how consistent those findings are with the picture of language contact developed in Section 2 based on records from the 19th century. In addition, we will attempt to determine the direction of borrowing for a number of lexical items. The standards/basis for this are the following:

- 1) the direction of the lexical item's spread (from the continent or Hokkaido)
- 2) possibility of morphological analysis
- 3) phonological validity of sound change
- 4) sound correspondences between dialects

In order to make it possible to estimate the period of time over which the three languages were in contact, it is necessary to confirm when each group settled on Sakhalin, though there is no consensus in literature, especially concerning Ainu and Nivkh. According to an on-site survey conducted by archeologists from the Soviet Union from 1952 through 1959, Ainu are said to have moved from Hokkaido to Sakhalin at some time after the 10th century (Chubarova 1957). The oldest traces of settlement on Sakhalin are older, from the neo-paleolithic period in which people migrated from the continent around the 2 century BCE (Chubarova 1957). Concerning the Nivkh, one theory is that they are the descendants of those neo-paleolithic migrants (Taksami 1975) and another is that they immigrated after the Ainu had settled on Sakhalin (Piłsudski 1909). Concerning the Uilta, there are a variety of theories that place their

migration from the continent to Sakhalin anywhere from the 12th century to the 17th century (Katō 1986).

In Appendix 1, there is a list of loan words related to cultural elements that are considered in this section. Below, we will first consider them grouped into several categories and then we will consider the compatibility of the distribution of loan words and the records in the literature. Abbreviations are, SA: Sakhalin Ainu, HA: Hokkaido Ainu, SN: Sakhalin Nivkh, AN: Amur Nivkh, PN: Poronaisk Nivkh, U: Uilta, M: Manchu, J: Japanese, R: Russian.

3.1 Items imported from outside Sakhalin

(6) 'tea', (7) 'chopsticks', (8) 'spirits, wine', (12) 'pipe body (behind bowl)', (17) 'cotton', (91) 'tamper for tobacco', (92) 'mouthpiece of pipe', etc.

There are many loan words in trade-related vocabulary, particularly in the names of trade goods and their existence has long been reported (Takahashi 1934, 1959; Kreinovich 1955; Ikegami 1980, 1988, 1990, 1994; T. Hattori 2000, etc). For many of them, lexical commonalities can be seen not only among the languages of the residents of Sakhalin but also with the Tungus languages distributed throughout the Amur River area and even with Manchu. It is hypothesized that, as a result of direct or indirect contact with Qing China as represented by the Santan trade, these words became widely distributed throughout the region.

On the other hand, there are cases in which the words are found in Nivkh and Uilta (and furthermore in Manchu), but are not found in Ainu. In many cases, either the items transmitted from the continent had not reached the Ainu culture or else, since a similar item had already entered from Japan, a loan word from Japanese was used. Furthermore, after the influence of the Russian Empire increased, replacing the Qing, loan words arising from Russian increased, e.g., (86) 'broad axe', (98) 'spoon (large)'.

Direction of borrowing: Among the words for goods that can be thought to have entered from Qing China or Russia, there are (63) 'mosquito net', (88) 'coin, money', and (85) 'chess ($sh\bar{o}gi$)'. canban (SN) 'mosquito net' and $c^h \chi a$ (SN, AN) 'money' are forms extremely close to jampan (M) and jiha (M), respectively. Kazama (2009) considers the Nivkh form to be a loan from either Ulcha jampan or Uilta dappan~jappan.

Things that the Ainu are thought to have received from the Japanese include the following: (68) 'paper', (72) 'saw', (73) 'thread', (74) 'gun', (80) 'wheat flour, bread', (81) 'salt', (82) 'sugar', (83) 'medicine', (84) 'metal', (87) 'silver', (89) 'cannon', and (97) 'scissors'. Since words in the Tungus languages and Nivkh are of a different cognate set, it may be thought that Qing China played a large role in supplying them with such goods. ¹⁷ The Ainu, on the other hand, had acquired such items from the Japanese and thus used Japanese loan words.

According to Ikegami (1990), satu (U) 'sugar' is a loan from Japanese (satō). However, seta (AN) and setan (SN) can be thought of, rather, as being related to šatan (M), which came from Chinese. As for Ainu, the Hokkaido dialects have the loan sato (HA), but in the dialects of Sakhalin only otoopenpe (SA) with the broader meaning of 'something sweet' is found.

The Nivkh words for metals are in common with the Tungus languages and are thus probably loans. For example, aizan/aizn (SN) 'metal, gold' correspond to ais (AN) in the Amur dialect and, it should be pointed out that it is not *iis, which would be expected from the Sakhalin dialect if it were a native word. This is because the Sakhalin and the Amur dialects exhibit a correspondence in the vowels /a/:/i/, seen typically in native words as in taf (SN): tif (AN) 'house'. Ainu used a loan word from Japanese, such as konkaani (SA). Regarding 'scissors', haza (AN), hazan (SN), xaja (U) are probably borrowings from hasaha (M). On the other hand, hasami (SA, HA) is clearly a loan word from Japanese.

3.2 Dog sled

(1) 'dog sled, entire', (2) 'dog sled towline', (9) 'sled runners', (10) 'braking pole', (15) 'dog harness', (16) 'towline spreader', (29) 'Turn! (command to dogs)' (30) 'Halt! (command to dogs)', and (31) 'Go straight! (command to dogs)'

The dog sled was a cultural element common to all three ethnic groups and especially highly developed within the Nivkh culture. Common vocabulary is found centered on controlling the dogs as in the commands to the dogs, the sled's braking pole, and the dogs' harness. On the other hand, the words for dogs were all different with native words in each: seta (SA), gann (SN), gan (AN), and ninda (U).

Direction of borrowing: For 'dog sled' (including the dogs in their harnesses and the sled itself), all three languages appear at first glance to use different words. Chiri (1973a: 448, 1973b: 51) holds that *nuso* (SA) is a borrowing from Nivkh *nuci*. Certainly, in the Poronaisk dialect of Nivkh there is the word nuci referring to the dog sled as a whole (Tangiku 2013b: 130) and it would be consistent to think that *nuso/nuhsu* (SA) is a borrowing from that. It would appear that semantically there is no native word in Ainu that corresponds to this meaning. Words similar to $t^h u$ and *nuci* for dog sleds are spread throughout the lower Amur River region

¹⁷ However, there are no words cognate with $p^huv\eta$ (SN) and puupu (U) in other languages. Since there is a transitive verb in Nivkh fuv-, meaning 'cut with a saw', it is thought that these forms are native to Nivkh.

Table 2: Names for (parts of) dog sled in the Amur region (Tsintsius et al. 1975, 1977).

	Oroch	Ulcha	Udehe	Nanai
sled	tukki	nusku	tuxi	toki
towline	puksu			

As shown in Table 2, two sets of cognates resembling t^hu and nuci are spread through the lower Amur region. The Ainu words mentioned earlier, nuso/nuhsu (SA) belong to the *nuci* set rather than the $t^h u$ set.

(9) 'sled runners' mounted on a sled to make it slide better, (10) 'braking pole' for braking the sled, and (16) 'towline spreader' preventing the towlines from becoming tangled are common vocabulary items used in all three languages. The word for 'braking pole' is nearly the same for all three languages, but the direction of borrowing is not clear. Taksami (1975) points out the existence of the Oroch word *kauri*. In the words for 'runner' and for 'towline spreader', only Nivkh has a consonant-final form and is a syllable shorter. The correspondence between [t] and [r] seen in the Nivkh maxt (SN), mahru (SA) 'towline spreader' and motas (SN) mohrasi (SA) 'sled runner' is a general correspondence found in borrowings between the two languages (e.g. mut (SN): muhru (SA) 'pillow').

3.3 Boats

(3) 'axe', (32) 'sampan boat', (48) 'sail', (71) 'board, plank', (93) 'bow of boat', (94) 'boat made of planks', (100) 'boat landing'

The Uilta did not independently make boats but rather bought them from the Ainu or the Nivkh (Ikegami 1997). The Nivkh group living near the mouth of the Tym river also did not make boats but bought half-completed products from upstream (Kreinovich 1973). This regional imbalance can be thought of not as due to the presence or absence of boat-building technology but as being due to whether or not they were able to acquire large logs as material. On the east coast they used only log (dugout) boats but no large logs were available in the coastal region or the reindeer grazing grounds. On the west coast, boats made of planks were probably brought over in a period of migration of Amur dialect speakers to Sakhalin.

Compared to the vocabulary related to dog sleds, loan words related to boats are relatively few in number. Native words are used for boats in general and for dugouts: cis (SA), mu (SN, AN), ugda (U). Correspondence is found between Uilta and the Poronaisk dialect of Nivkh for (94) 'boat made of planks'.

On the other hand, there are commonalities among the ethnic groups regarding boat type with (94) 'boat made of planks' distributed across the west coast and dugouts across the east coast (Kreinovich 1973). The planked boats are thought to be of the type from the Amur River region. Concerning dugout boats also, they have common elements in that they have dogs pull them and the way they mount oars.

Direction of borrowing: Essential to making dugout boats are various types of (3) 'axe'. Since k^{h_i} (SN) has no similar forms in the other languages, it is not a recent borrowing. On the other hand, there are words held to be newly borrowed from Japanese. Kreinovich (1973: 77) reports pandju (SN), which is almost identical to panco (HA) and panču (U). panco is held to be borrowed from Japanese banshō 'carpenter' (Kubodera 1992: 200).

In Nivkh (SN), the word for fish skin is mac and a fish skin cloth made by joining skins is called qai or matʁai (<mac-qai). qai 'sails' were once made of fish skins (Mamiya 1988b: 93). A temporary shelter made from sails and oars is called a *gai* or qai raf (sail house). However, the word qai is not used for clothing made from fish skins and a completely different word viskir is used. On the other hand, kaya (SA, HA) is used to refer to both fish skin clothing and sails. Batchelor (1938: 241) records, "Kaya. A fish-skin garment. It is said that the northern Ainu borrowed the custom of making such garments from the tribes of the Amur river and gave them the name kaya, 'sail' because formerly sails were made of fish skins". Unlike other loan words, this kaya is also found in the Hokkaido dialects. Because of the gap in the meaning, it is difficult to ascertain the direction of borrowing, but, since there is a word kii (AN) in the Nivkh Amur dialect, it can be thought to be an older word dating from the separation of the two dialects. If the direction of borrowing is from Nivkh to Ainu, it is highly probable that the borrowing took place before the Japanese-style art of sailing was transmitted. In the Hokkaido dialects, the meaning of 'fish skin' has bleached and it has simply become a word designating sails. If sails made of vegetable fiber cloth had been transmitted from Japan, then the general word for 'sail' in Hokkaido would not have been *kaya* but would probably have been a loan word from Japanese.

According to Ikegami (1990), (71) kalumuri (U) 'board, plank', indispensable for building plank boats, is a borrowing from *qalmr* (SN). This is *kilmr* (AN) in the Amur dialect of Nivkh and since it shows the typical /a/:/i/ vowel correspondence between SN and AN, it can be hypothesized to have existed in Nivkh from long ago.

3.4 Reindeer herding

(64) 'container (covered with reindeer skin)', (65) 'tool box', (78) 'shed made of bark'

Similarities can be seen in vocabulary related to reindeer herding that strongly suggest influence on Nivkh from the Tungus such as Uilta or Evenki, who had developed reindeer herding concentrated in the middle part of Sakhalin. These groups were linked by intermarriage and some Nivkh on the west coast engaged in reindeer herding (Shiraishi and Lok 2007, 2009). The Evenki are thought to have migrated to Sakhalin after the 1860s (Ikegami 1990; Roon 1996).

Direction of borrowing: Takahashi (1942) recorded the word murcun (SN) 'container' and held it to be a borrowing from *mereččee* (U). ¹⁸ According to Takahashi (65) hulmuk (SN, PN) is a tool box without a lid and is borrowed from Uilta. Although we were not able to view an actual specimen, we were able to receive a description from a Nivkh living in Nogliki of a container made of reindeer skin (Tangiku, Tanzina, and Nitkuk 2008; Tangiku 2013b). The xulmau (U) (accusative case xulmakkoo) in Ikegami (1997) can be thought of as the source of borrowing.

(78) 'shed made of bark' $q^h auri$ (SN) refers to a temporary shelter covered with bark. It is a temporary facility constructed when rites are performed (Tangiku 2013b). This may be related to (10) 'braking pole' $q^h auri$ (SN). However, a summer shelter made of bark is called *kaura* in Uilta. In Nivkh culture, normally a permanent structure was constructed using wood as a summer residence. A *q^hauri* is unquestionably a temporary shelter and is also called an *aundoq* (SN) or a *joyoraf* (SN). The word *aundoq* is probably related to aundau (U) (accusative case aundakkoo) 'winter shelter'. Whether it is a winter shelter or a summer shelter, Uilta houses can be thought of as appearing to the Nivkh eye as *joyoraf*, that is, 'a temporary shed'.

3.5 Flora and fauna

(19) Artic rainbow smelt', (20) 'saffron cod', (21) 'Pacific herring', (22) 'Sakhalin surf clam', (23) 'bearded seal (yearling)', (24) 'bearded seal (two-year old)', (25) 'earless seal (sea lion)', (26) 'moss', (27) 'egg', (28) 'dried fish (with skin)', (54) 'chilton'

The large number of loan words in the names of fish and shellfish is perhaps the result of a newly-arriving ethnic group acquiring fishing and maritime hunting culture from the indigenous group. There are words shared between the Ainu and Nivkh for three kinds of land animals and between the Ainu and the Uilta for seven kinds of fish. It is possible that the Ainu were in contact with the Nivkh on land and with the Uilta on the sea.

Direction of borrowing: Japanese *todo* 'sea lion' is thought to be a borrowing from (25) tonto (HA) 'hairless thick hide, tanned leather' (Kindaichi 1993). Not only sealions but any hairless animal specimen was called tontone 'like a tonto' (S. Tamura 1996). In Nivkh, a sea lion is called $ti\eta$. Since there were many sea lions where the Ainu lived, if there was any borrowing, it is highly likely that the Nivkh word is borrowed from the Ainu.

¹⁸ A cylindrical container for eating utensils, formed of a roll of birch bark covered with tanned reindeer skin. When moving these are carried on reindeer (Ikegami 1997: 127).

The Sakhalin Ainu word for (54) 'chilton' is similar to the Nivkh word and the word in the Hokkaido Ainu dialects is similar to the Uilta word. However, in general, there are very few cognates between Ainu and other languages for words referring to flora and fauna.

3.6 Storing food: Hunting, fishing, and processing

(13) 'shelf, stand', (14) 'head of harpoon', (18) 'barrel, cask', (38) 'bow used in trap', (40) 'harpoon (entire)', (43) 'box', (44) 'trap', (45) 'birch bark plate', (47) 'winter storehouse', (49) 'ladder (stairs)', (51) 'fibrous root', (70) 'wooden pack frame', (79) 'large wooden container', (123) 'pole for hanging fish to dry'

Similarities can be seen in words related to securing and preserving food between Ainu and Nivkh, both of which changed their places of residence and their living habits between the winter and summer seasons.

Direction of borrowing: $c^ha\eta$ (SN, AN) and saan (U) 'shelf, stand' have long been pointed out as lexical items held in common. Ikegami (1994) hypothesizes that san (SA, HA) 'shelf for offerings' has the same source. Since Nivkh formerly had a phonetic constraint not allowing word-initial fricatives, when a loan word began with a fricative, it was replaced by a stop, e.g. saman (Nanai): c^h amn (SN) 'shaman' (Kreinovich 1937: 53). However, new loan words with initial fricatives are borrowed with the fricatives intact e.g., seata (Nanai): seta (SN, AN) 'sugar' (ibid.). If $c^ha\eta$ is a loan from one of the neighboring languages, it must be a loan from a comparatively early period.

As pointed out by Taksami (1975), it is possible that (14) kite (SA), kitin (AN) 'head of harpoon' and gida (U, M) 'head of a spear' have the same origin. The peoples of the Sakhalin-Amur region depended heavily on fishing. Also, in terms of ceremonial rites, bear hunting was considered important, and the implement traditionally used for this was the spear.

Concerning (18) 'barrel, cask', Takahashi (1942) pointed out sindux (SN) and sintoko (HA, SA) as lexical items held in common. Ikegami (1973, 1980) argues that sindux is a borrowing from Ainu, since this word can be seen in a Nivkh folktale in which an Ainu shaman appears. He also argues that sittoo (U) (accusative case sittokkoo) is a borrowing from Ainu.

In Nivkh, at least in Sakhalin, sindux is often found. In a photograph taken in Poronaisk before World War II of a platform for drying fish, there appears a cask that is apparently made of wood. 19 However, it is not found only in areas in contact with

¹⁹ For example, there is a collection of photographs by Chū Hanzawa, who managed a photography studio in Shisuka (Poronaisk) in the early Shōwa period, titled "The lives and customs of the Orokko

the Ainu. The material that follows is from the unpublished fieldnotes of the second author from on-site interviews conducted on fieldtrips in 2002, 2004, and 2005: In Chir-Unvd, the container called a *siduy* was used for storing fish and fish roe and the word refers either to a cask imported from outside or to a home-made container made by hollowing out wood. In Nogliki, it was used to hold beach rose fruits preserved in seal oil and was a Japanese container made, except for the lid, entirely of bamboo (and of the next larger size than an itto (18 liter) container). They were traded up to the end of World War II and were highly valued, but they became unavailable after the war. When they were available, they were traded in exchange for one dog of superior quality. On the other hand, for storing fish and fish roe, there was also the method of not using any container but burying them in a hole dug in the ground. This was called sindux or sidux. Because of this fact, some speakers consider the origin of the word to be from the verb si- 'place, put'.

In terms of the sindux not being regarded as a utensil unique to the Nivkh, the Ainu *sintoko* was similar in that *sintoko* also fundamentally refers to a cask imported from outside. Since *sintoko* is morphologically unanalyzable as an Ainu word, there is the possibility that it is a borrowing and the hypothesis that it has a Japanese origin has long been proposed (Kindaichi 1934). However, there is, in fact, no cognate Japanese lexical item. As a source for the Ainu sintoko, a form like *sidoko can be imagined. There is a word *shitokoga* 'a four-to cask' in Japanese, but *koga* has already been borrowed into Ainu as konka (HA) (Kayano 1996: 250) and so the expected form would be sitokonka.

Words in Ainu referring to a cask other than sintoko include ontaro (HA) and ontoro (SA), both borrowings from the Japanese taru 'barrel, cask'. An ontaro is a kind of sintoko and there is a word ontaro sintoko (HA) 'cask-type sintoko'. This is probably to distinguish such a container from a sintoko cask. Accordingly, if Japanese-made casks came together with an Ainu term, it would be more natural for ontoro to be borrowed than sintoko. Probably ontoro (SA) is a relatively new loan word and the utensils in question were previously called *sintoko*. If the word were borrowed into Uilta and Nivkh, it would probably have been in that period. However, as noted previously, Nivkh formerly did not have nouns with word-initial fricatives and so initial fricatives in borrowings were changed to affricates. At the very least, sidux is a borrowing newer than that.

It is possible that sindux and sintoko are foreign elements and, if the words themselves are borrowings, then the source of the borrowing must either be Japan or the Amur region. However, as noted previously, there is no word resembling them in Japanese and, as for the Amur possibility, as far as we know, there are no words resembling them in either the Tungus languages or in Mongol. However, if we turn our eyes

and the Gilyak living in the Taraika region of Sakhalin" (in the collection of the Abashiri Municipal Regional Museum).

further westward, there are scattered cognates meaning 'wooden chest for clothing' and 'box' (Tangiku 2003). Certainly the Sakhalin 'cask' and the central Asian 'chest' refer to different items, but it should be noted that both refer to containers introduced from outside (at times tools and clothes are also stored in casks): Turkish sandIk 'chest, coffer, box . . .' (Hony 1957), Chuvash *suntăx* 'box' (Andreev and Petrov 1971), Kirgiz-Tatar sandək 'wooden chest for clothing' (Iudakhin 1965), Bashkir handyk 'wooden chest for clothing' (Karimova 1958), and Persian sandūq 'box, safe' (Kuroyanagi 1988). Even if the source of borrowing for sindux (SN) and sittoo (U) should be Ainu, it is possible that its ultimate origin is a loan from the sanduk family of words found spread across northern Eurasia.

The word for the bow part of (38) 'bow used in trap' is common to Nivkh, jur (SN), and Sakhalin Ainu, juuru (SA). Since this term is not found on Hokkaido, it can be considered to be a Sakhalin element.

Ainu tuna (-san-nis) (SA) for (40) 'harpoon (entire)' can be thought of as a borrowing from $t^h la$, $k^h la$ (SN). There are other examples of the sound change $[t^h l] > [t u]$, e.g., tlani (SN): tunahkay (SA) 'reindeer'.

Nishitsuru (1974) gives uokai (SA) (43) 'box' as the name of a container. This term is not found in Hokkaido Ainu. Moreover, even for Sakhalin Ainu, this term is not recorded in other literature. It may very well be a geographically extremely limited term that was recorded. The source of this borrowing could be *waqqi*i, a form recorded in the Poronaisk dialect of Nivkh.

As for (44) 'sable trap' ka (SA) and ha (SN), the Nivkh and Sakhalin Ainu used a same type of trap. The sable was not originally regarded as a game animal of much practical use (Forsyth 1992). It was as an export item to Qing China that sable came to be taken on Sakhalin and it can be thought that the know-how of sable hunting was transmitted at the same time. Considering the geographical location with respect to Qing China, if it is a loan word, it would be expected that the direction of borrowing would be from Nivkh to Ainu.

Birch bark handiwork was much more extensive among the Sakhalin Ainu than among the Hokkaido Ainu. For example, in Hokkaido, saranip (HA) refers to a bag woven from the bark of the Japanese lime, but in Sakhalin the word refers to a container made from birch bark. In addition, the shallow (45) 'birch bark plate' found in Nivkh hanr (SN) has entered Sakhalin Ainu as hankata. Since the word-final -r can be analyzed as a nominal ending in Nivkh, it can be hypothesized that the borrowing was from Nivkh to Ainu. However, here Nivkh [r] corresponds to Ainu [t] whereas in the words for 'pillow' mut (SN), muhru (SA), the correspondence is the reverse. In this case, since there is the form *mukru* (HA) in Hokkaido, even if they are regarded as having the same source, the Nivkh word was probably borrowed from Ainu. In the case of Ainu *muksit* 'poultice' (Batchelor 1938) and Nivkh *muks* 'infant swaddling cloth' also, the direction of borrowing may have been from Ainu to Nivkh.

According to Yamamoto (1970), (47) 'winter storehouse' upun (SA) is, "made of logs or tree trunks placed in a circle to form a hollow cone with the upper part covered

with grasses or dirt, the inside forming an easy, convenient place for temporary food storage" (Yamamoto 1970: 119). He finds the origin of upun (SA) in a homophone upun 'snowdrift, blown snow', since the shape of a winterhouse is similar to a piled-up snow in a snowdrift. But in general, upun refers to a 'blizzard' and not 'snow drift, blown snow'. The Nivkh $uv\eta$ means a platform for the frozen storage of foods like frozen fish in the winter. This is a simple platform without a roof or side walls and is a measure taken to protect the food from bears, dogs, and foxes. Although we have not been able to view an actual specimen, it is simply a wooden floor supported by four pillars (Tangiku 2013b). There may be some differences in construction, but its purpose of preserving food in the winter is the same as the *upun*. This Ainu term is reported from the eastern coastal region of Niitoi (Kubodera 1992) in the northern part of the area in which the Ainu resided. In contact is the Poronaisk dialect of Nivkh. There is a strong tendency in this dialect for word-internal [v] to be pronounced as [b]. For example, the Poronaisk dialect of Nivkh form *c*^h*ebil* 'lance, harpoon' (T. Hattori 2000) corresponds to c^hevr in the Nogliki dialect (SN). The Poronaisk dialect form corresponding to the Nogliki dialect uvn would be [ubn~upn]. Since Ainu does not allow a syllable-final consonant cluster, a vowel was probably inserted after the [p]. However, the accent does not match. If it were to preserve the original accent in the Sakhalin dialect of Ainu, it would have been *uupun. Perhaps the direction was the reverse and the Nivkh word was borrowed from the Ainu.

Item (49) 'ladder (stairs)' in both Nivkh and Ainu refers to a log into which steps are carved used to climb up into houses with elevated floors. Looking solely at the form of the words, it is possible that Nivkh borrowed the word from Ainu. The accent on nikar (SA) is on the second syllable and an unaccented initial vowel is easily lost in Nivkh (nnar).

The words meaning (70) 'wooden pack frame', rimn (SN) and urama (U) are similar to each other. The pack frame is in the shape of an "L" and is used with a birch bark container mounted on it. The Ainu niyesike (SA), like the tar 'tote strap', is designed to be supported from the forehead and the construction is somewhat different; thus, it probably developed independently.

(79) 'large wooden container' ox (SN) oxuma (U), where the Uilta form refers to 'a small container made of birch bark', is quite probably an accidental match, given that the Nivkh form is so short. However, these implements are commonly used for making (5) 'fish jelly' and not only is that dish tasty, it is also indispensable for important ceremonies like the bear ceremony.20

Ikegami (1990) holds (123) sairi (U) 'pole for hanging fish to dry' to be of Ainu origin. Similarities are seen in the names for dried fish, but the names for salmon that formed their main food are all different: kamuyceh (SA), laxi (SN), dawa (U) 'salmon',

²⁰ This jelly is made from fish gelatin and berries.

hemoy (SA), *teŋi* (SN), *naluu* (U) 'pink (humpbacked) salmon'. The method of drying fish in thin slices may have spread later, together with the spread of metal knives.

Item (124) *uray* (SA) 'fish weir' is also found in place names and can be considered to be a lexical item that has existed in Ainu from a very early time. The direction of borrowing is uncertain, but Ikegami (1997) holds it to be of Ainu origin.

3.7 Rituals

(4) 'shaved wooden offering', (76) 'sash with metal decorations'

Direction of borrowing: Ikegami (1980) has made a detailed investigation of (4) *inaw* (SA) 'shaved wooden offering'. The *inaw* is the most fully developed in the Ainu culture. Among the Nivkh and the Tungus ethnic groups, only the shaved portion without a shaft is used. In the Uilta culture and the Nivkh culture in the southern areas, *inaw* with a wooden shaft are used, but considering the distribution, this is under influence from the Ainu culture.

Of the terms for (76) 'sash with metal decorations', only Ainu uses an indigenous term kaanikuh (SA), in contrast to janpan (SN) and jaakpa (U). In Nivkh and Uilta cultures the sash is thought to be a shaman's implement, whereas in Ainu culture it was completely unrelated to shamanism. It is possible that it was transmitted to the Ainu, but its purpose changed. Regarding the implements used in Hokkaido Ainu tusu 'shamanism', the following elements of continental shamanism are lacking: (1) a single-head drum is not used, (2) wooden figures are not used, (3) a metal belt is not used, and (4) there is a difference in the implements used to treat illness. In contrast, in Sakhalin Ainu tusu, similarities can be seen with the surrounding ethnic groups, such as a drum being used and treatment of illness using a head band (Yamamoto 1968). Furthermore, although wooden figures and (76) 'sash with metal decorations' were not for use by shamans, the fact that they did exist as talismans and as adornments can be said to show characteristics intermediate between Hokkaido and the Amur region. Additionally, drums and percussion instruments made from logs were not simple musical instruments, but the former were used in a shaman's rituals (such as treating illness) and the latter were used in community rituals (such as bear ceremonies or funerals) from Sakhalin to the Amur region. Both these uses are lacking among the Hokkaido Ainu.

3.8 Musical instruments

(42) 'stringed musical instrument', (50) 'bell', (61) 'metal mouth harp', (122) 'mouth harp'

Direction of borrowing: The names of musical instruments were probably borrowed from the northern languages, but it is difficult to specify which.

(42) 'stringed musical instrument' probably spread from the Manchus to the Tungus ethnic groups (such as the Nanai and the Ulcha). The names vary, but, as has long been pointed out, tinrin (SN, AN) and tonkori (SA) are thought to be loans from Manchu (Ikegami 1988). Many of the Nivkh musicians playing tinrin on the east coast of Sakhalin are either from the west coast or are descendants of Nivkh from the west coast. The fact that the same word is used in both dialects strongly suggests that the word is originally from the Amur dialect region and that the present tinrin term did not originally exist in the Sakhalin dialect region. However, since the *tinrin* is quite different in form from the Ainu tonkori, their lineage as instruments is clearly different (Shinohara and Tangiku 2013, 2017).²¹

The words for (50) 'bell' $kol\eta gol\eta$ (SN) and konko (SA) are extremely similar in form, but that could simply onomatopoeic words coincidentally matching. However, since the words in Hokkaido Ainu, etor and cirpo are different words, judging from the distribution, the Sakhalin terms may be borrowings after all. Ikegami (1994), comparing with the Tungus languages and literary Mongol, considers them to be borrowings that spread from the continent to the Ainu Hokkaido dialect.

According to Tadagawa (2005), there are two families of words for 'mouth harp' in the area around the Amur, but only one group has entered Ainu. In Nivkh, there is a mismatch between the Amur dialect area and the Sakhalin dialect area. In Sakhalin, probably qongon (SN) referred to sea lyme-grass (Elymus mollis) and to the mouth harp made from that grass, but when 'metal mouth harp' came in, the term came to refer to it. On the other hand, in the Amur dialect area, the term *qanga*, which is close to Ulcha (Tungusic) *kungaa*, is used and *qongon* probably remained as the term referring to sea lyme-grass.

3.9 Others

(5) 'fish jelly', (11) 'mittens', (36) 'cradle', (52) 'whetstone', (67) 'cradle (small)'

These are cultural elements common to the three ethnic groups and include both elements that are held in common with ethnic groups on the continent and elements that are held in common with Hokkaido Ainu.

Direction of borrowing: As a term for (5) 'fish jelly' made by thickening gelatin made by boiling fish skin, mos is widely distributed among the Tungus languages (Tsintsius et al. 1975, 1977; Kazama 2009). The items it refers to differ to some degree

²¹ Typologically, the tiŋriŋ belongs to the erhu family while the tonkori belongs to the Caucasus family of instruments (Shinohara and Tangiku 2017).

depending on the region, but on Sakhalin, it basically refers to the same kind of dish. Since this dish is not found in Hokkaido Ainu, the word can be thought to have been borrowed into Sakhalin Ainu from the languages of the north.

Of the words for (11) 'mittens' vamq (SN), wambakka, mambakka (U), and wampakka (SA), the Uilta and Ainu terms are strongly similar. This type of hand covering does not exist in Hokkaido. Within Sakhalin Ainu, this word is only used on the west coast of Sakhalin; on the east coast another word, matumere, is used. The west coast of Sakhalin is not a traditional place of residence for the Uilta, but the Ainu on the west coast have gone back and forth to the east coast since long ago (Tangiku 2013a, Tomita 2014). The most likely possibility is that the west coast Sakhalin Ainu borrowed this word completely from Uilta. Between Nivkh and Uilta, it is difficult to determine a direction of borrowing. However, since in the Nivkh Amur dialect as well, the word is *vamq* and not the **vimq* that would be expected given the a: high - hicorrespondence between the Nivkh dialects, it is highly possible that Nivkh borrowed the word. In addition, in the neighboring Ulcha, the word is *vagbangi*, which appears to be of the same lineage (Sunik 1985), and, from the presence of the word-internal [b], the Uilta form can be considered to be closer to the older form.

In the Sakhalin Nivkh form for (52) ru bay 'whetstone', the latter part bay means 'stone' and the ru is thought to be a verb stem. The Ainu ruy refers to a whetstone as an unanalyzable word base. As it is only one syllable in length, it is difficult to distinguish between coincidental matching and borrowing, but the Amur Nivkh word $p^h e B r c^h a f$ is totally different and it can be said that the forms show an Ainu-Nivkh geographical continuity in distribution.

Since the type of cradle (36) that an infant can walk on his own 1) does not appear in Hokkaido Ainu, and 2) there is a word in Manchu ceku 'swing' that is cognate to cahka (SA) and caq (SN, AN), it can be thought that the word spread from the Amur region to Sakhalin. Moreover, the smaller sized and differently shaped (67) 'cradle (small)' tur (SN), duri (U) is not borrowed into Sakhalin Ainu. On the other hand, the word for a large cradle əmuwə (U) spread through the Tungus languages but was not borrowed into Ainu, perhaps because its use would compete with sinta 'cradle' (SA, HA).

3.10 Summary: Language contact on Sakhalin seen from the distribution of loan words

The distribution of the loan vocabulary considered in this chapter among the three languages is shown in Figure 1.

Figure 1 makes clear the amount of loan words in the three languages: Nivkh and Uilta (61 words) > Nivkh and Ainu (29 words) > Ainu and Uilta (13 words). This distribution is consistent with the descriptions of the state of language use by the three ethnic groups on Sakhalin introduced in Section 2. As seen there, it is reported that communication between the Nivkh and the Uilta was conducted using each other's

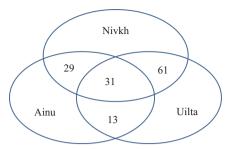


Figure 1: Distribution of loan words cited in this chapter.

languages (T. Matsuura 1978; Mamiya 1988a; Shternberg 1999). There were exchanges between the two groups in their social lives, such as intermarriage and engagement in reindeer herding. That the two groups had language contact on a large scale is supported both by the literature and by the number of loan words seen in this section.

In contrast, there is no support in the 19th century literature for the notion that there was language contact between Ainu and Nivkh on the kind of broad scale found for Nivkh and Uilta. As described in Section 2, on both the west and the east coasts, Japanese who understood Ainu at the time had great trouble in communicating with the Nivkh. However, of special note is the existence of the Sirunkur, who lived in an area between the areas where the Nivkh and the Ainu lived. According to Matsuda and Okamoto, the Sirunkur were originally Ainu and Ikegami says they spoke two languages, both Nivkh and Ainu. However, since the Sirunkur had already almost completely lost Ainu by the time Matsuda visited, if there was a time like that envisioned by Ikegami when they used both languages, it must have been before Matsuda visited in the beginning of the 19th century. Also of note is the fact that Ikegami indicates that the Ainu of the Sirunkur were not from the west coast but came from the east coast. On both the west coast and the east coast, except for trade relations, there is no record of the Nivkh (including the Sirunkur) and the Ainu maintaining extensive social relations. This may seem at first glance to be in conflict with the number of loans between the two languages, but perhaps their existence should rather be taken as a trace of contact between the two (such as mass migrations) before the 19th century that does not show up in the records (Tangiku 2013a, 2015).

Finally, we would like to confirm that the small number of loans between Ainu and Uilta is consistent with the records found in the literature. As Koichirō Nakamura heard from the southern Sakhalin Horakpuni chief at the beginning of the 19th century, the Ainu of the time did not, in general, comprehend Uilta. Communication was always one-sided from Uilta who understood Ainu to the Ainu. Granted, between the Uilta and the Ainu, there were the Taraika on the east coast, who were Ainu whose way of living had been Tungus-ized, but, unlike the Sirunkur on the west coast, their language remained Ainu (Taraika dialect). The fact that there are few loans between Ainu and Uilta strongly suggests that contact between the Ainu and the Uilta was extremely limited both in scale and in duration.

4 Concluding remarks

This chapter has examined language contact among the ethnic groups living on the island of Sakhalin from the point of view of 1) documentary historical materials and 2) the distribution of loan words. The possibility was pointed out that the languages used on Sakhalin among these three groups in social and economic exchanges differed depending on the region. In support of this, emphasis was placed on records left by surveyors who visited the area during the period from the end of the 18th century to the middle of the 19th century. Multilingualism and diglossia in the language use situation of the ethnic groups resident on Sakhalin described in those records was extremely limited. Rather, what stands out is the existence of specific individuals who, because of various circumstances, were able to handle multiple languages. They often took on the role of interpreters when there was interchange between ethnic groups. This is clearly different from the state of language use described in records from after the invasion of Russians and Japanese became palpable in the period from latter half of the 19th century through the beginning of the 20th century (the "ethnography era"), namely active multilingualism and the existence of a lingua franca.

The distribution of loan words in the three languages is generally consistent with the content of the first part of the chapter. In Nivkh, which had been in contact with Tungus languages, including the languages of the ethnic groups living in the lower reaches of the Amur River, for an extended period of time, loan words in common with the Tungus languages, including Uilta, are strikingly abundant. In contrast, the number of lexical borrowings in common with Ainu is comparatively small, suggesting that language contact along the north-south axis of the island of Sakhalin was local and limited. The fact that, of the dialects of Nivkh, the Poronaisk dialect stands out in exceptionally having a large number of loans in common with Ainu, supports the local nature of contact between the two languages. There is a possibility that, including the contact situation on the west coast (Sirunkur), about which there is almost no record, the central region of Sakhalin, where the Ainu came into contact with the Nivkh and the Uilta, developed a unique language use situation different from that of other regions.

Appendix 1: Loan words in the languages of Sakhalin

Unless otherwise mentioned, the sources of the words below are as follows: Sakhalin Ainu (Yamamoto 1970; Chiri 1976a, 1976b), Hokkaido Ainu (S. Tamura 1996), Sakhalin Nivkh (Tangiku, Tanzina and Nitkuk 2008; Tangiku 2013b), Amur Nivkh (Savel'eva and Taksami 1965, 1970), Poronaisk Nivkh (Tangiku 2013b; Takahashi 1942), Uilta (Ikegami 1997), Manchu (Hata 1972). Transcription is slightly modified from the original source.

Loan words common to Ainu, Nivkh, and Uilta (31 words)

No.	Gloss	Ainu	Nivkh	Uilta	Remarks
1.	dog sled, entire (dog and sled)	nuso, nuhsu*	t ^h u, nuci**	puktu, tuči***	*Murasaki (2001: 296) **PN ***sled
2.	dog sled towline	nuso tus	nuci, nuxc*	nusku	*AN
3.	axe	panco*	k ^h i, pancu, paŋu**	panču	*Murasaki (2001: 232) **AN
4.	shaved wooden offering	inaw	nau	illau	
5.	fish jelly	musi*	mos	musi	musi (M) ²² *Haginaka et al. (1992)
6.	tea	cay	c ^h ai	čai	cai (M)
7.	chopsticks	sahka	c ^h afq	sabuu, čakpa*	sabka (M) *fork, fish spear
8.	spirits, wine	arakke*	arak	arakki	arki (M) *M. Tamura (1999: 157)
9.	sled runners (whale rib)	mohrasi	motas*	muttasi	*SN
10.	braking pole	kawre, nuso kuwa	q ^h auri	kaurii	
11.	mittens	wampakka*	vamq	wambakka, mambakka	*M. Tamura (1999: 148)
12.	pipe body (behind bowl)	tumam*	t ^h mam**	tuma	*trunk, body (no data of usage as 'pipe body') **SN
13.	shelf, stand	san	c ^h aŋ	saan	Fabricated of wood.
14.	head of harpoon	kite	ketŋ, kitŋ, k ^h etaŋ, kitɨ*, kitɨn**	dargi***, gida****	gida (M) 'lance, spear' *AN **Taksami (1975: 21) ***harpoon ****head of spear
15.	dog harness	seta hana	hal	xala	
16.	towline spreader	mahru	maχt	makčii	
17.	cotton	pous	pos, maʁrʰ pos*	busu	boso (M) 'cloth' *SN

²² A dish in which rice is ground, boiled in a pot, and eaten mixed with water (Hata 1972).

No.	Gloss	Ainu	Nivkh	Uilta	Remarks
18.	barrel, cask	sintoko	sintux, sidux*	sittoo/ sittokkoo (accusative)	*AN
19.	Artic rainbow smelt	arakoy	arqi, arqe*	arku	*AN
20.	saffron cod	kankay	qaŋi	kaaŋai	komay (HA), komai (J)
21.	Pacific herring	herohki	heruk*, laqi	sarukki, laqqa**, laakka***	heroki (HA) *SN **Ozolinia and Fediaeva (2003: 85) ***Roon (1996: 54)
22.	Sakhalin surf clam	mokomay	moymi*	muxumai	pok, poksey (HA) *SN
23.	bearded seal (yearling)	amuspe	amsp	amuspi	
24.	bearded seal (two-year old)	riyanka, ciyanka	teaŋa*	čееŋа	*SN
25.	earless seal (sea lion)	tonto*	tuŋ	dөөŋө	*hairless thick hide, tanned leather
26.	moss	wahkina	vax, vaχ*	waxi, ləwiktə**	*AN **Usnea
27.	egg	noyohko	ŋoiq, ŋojeq*	ŋojokko	noki, nok (HA) *AN
28.	dried fish (with skin)	mahkuru*, makkuru**	maqr ma	mauri	*Kitahara, Tangiku, and Tamura (2000: 18) **M. Tamura (1999: 142)
29.	Turn! (to the left)	kaj kaj	k ^h ai*, ka:** ²³	kai kai	*Tangiku (2013b) **T. Hattori (2000)
30.	Halt!	pera pera	por por*	puree puree	*Kreinovich (2004)
31.	Go straight!	toh toh to	ta ta*	too too	*Kreinovich (2004)

²³ In Kreinovich (2004) $k^h xa$, $k^h xa$ is given as meaning 'face left'.

Loan words common to Nivkh and Ainu (29 words)

No.	Item	Ainu	Nivkh	Uilta	Remarks
32.	sampan boat	kunkas	kunkas ²⁴ , kungas*		*AN
33.	overcoat	ohko	oq		
34.	hat	hahka	haq		
35.	pillow	muhru	mut, mot*	čireptu	cirku (M) *AN
36.	cradle	cahka	caq	əmuwə	ceku (M) 'swing'
37.	arrow	ku*	k ^h u	ləkkə	*bow
38.	bow used in trap	yuuru	jur*, juru**	dəəŋgurə	*PN **AN
39.	drum	kaco	q ^h as	daali	
40.	harpoon (entire)	tuna (-san-nis)*	kʰla, tʰla, tla**	dargi	*Chiri (1973c) **AN
41.	tobacco	tampaku	tamχ	saŋna	dambaku (M)
42.	stringed musical instrument	tonkori	tɨŋrɨŋ	(təkkərə*)	tenggeri (M) *a Nivkh instrument
43.	box	uokkai*	vaqi, waqqii**, waqi***		*small ceremonial container (Nishitsuru 1974) **PN ***PN (Yamaguchi and Izutsu 2004)
44.	sable trap	ka	ha		
45.	birch bark plate	hankata	haŋŗ*		*container used for washing dishes (Takahashi 1942)
46.	infant swaddling cloth	muksit*	muks, mukŗ**		*Batchelor (1938) **AN
47.	winter storehouse	upun	uvŋ	pəulə	An open outdoor storehouse where foodstuffs are placed.
48.	sail	kaya	qai, kɨi*	kutuli	*AN
49.	ladder (stairs)	nikari	ŋŋaŗ	muktakku	

²⁴ There is a strong consciousness among modern Nivkh speakers of this being Russian. See Sheglov (2015) for a history of sampan boat building on Sakhalin.

No.	Item	Ainu	Nivkh	Uilta	Remarks
50.	bell	konko	kolngoln, qong*		honggon (M)*AN
51.	fibrous root	meciroh	mirl i x, vizl i x*		Used for such things as birch bark handiwork. *AN
52.	whetstone	ruy	c _p at _{**} b _p ert c _p at' tn paX _*	piiwə, xuraktami	*unpublished fieldnote **AN
53.	flounder	nina*	niinaŋ**		*HA **PN (T. Hattori 2000: 72)
54.	chilton	kero*	keŗ, kʰeŗ	əmə	muy (HA) *HA
55.	reindeer	tunakay, tunahkay	t ^h laŋi, c ^h olŋi*	ulaa	*AN
56.	rabbit	osukeh	osq	tuksa	
57.	wolverine	kuciri	kuzŗ, k ^h uzr*	ailiga	*AN
58.	beach rose (mountain)	kumerin	k ^h mirŋ*, kmirdevi, cevi**	utaripu	*Mizushima, Shiraishi, and Tangiku (2007) **AN
59.	dahurian larch	kuy	qoi	sisi	
60.	fishhook	maareh	malix*	taasuma	marek (HA) *SN

Loan words common to Nivkh and Uilta (61 words)

No.	Item	Ainu	Nivkh	Uilta	Remarks
61.	metal mouth harp		vat qoŋgoŋ, qanga*	kuŋgaa**	*AN **made of bamboo
62.	cotton	wata*	joxan, joso**	juxa	yohan (M), wata (J) *HA **AN
63.	mosquito net		caŋbaŋ, camba*	dappa/ dappamba (accusative)	jampan (M) *AN
64.	container		murcun*	mereččee	*PN
65.	tool box		hulmuk*	xulməu/ xulməkkəə (accusative)	*SN, PN

No.	Item	Ainu	Nivkh	Uilta	Remarks
66.	knife	makiri	caqo	kučigə	jokuu (M) 'blade for cutting roots, straw cutter'
67.	cradle (small)		t ^h uŗ*	duri	duri (M) *SN
68.	paper	kanpi	χaulus, xaulus*, xauzul*, χausɨl**	xausali	hoošan (M), kami (J) *AN **PN
69.	treasure		raynt*, rayŋ**, rayd**	jakka	jaka (M) 'goods, articles' *PN **SN
70.	wooden pack frame	niyesike*	rɨmŋ, rɨm**	urəmə	*HA **AN
71.	board, plank	nisos	qalmŗ, kɨlmr*	kalumuri	*AN
72.	saw	icaacah	p ^h uvuŋ, p ^h uf*, p ^h uvŋ**	puupu	*AN **PN
73.	thread	kaa	k ^h uvaŋ, k ^h uva*, k ^h uvan**	kupə, tokpo	*AN ** PN
74.	gun	tehpo	meocaŋ, meucu*	moičča, meučča	miyoocan (M), teppō (J) *AN
75.	part of a trap (horsehair)		p ^h oti	puta	futa (M) 'cord, rope'
76.	sash with metal decorations	kaanikuh	janpa*, jaŋpaŋ**, jaŋpu***	jaakpa	*AN **PN ***Kreinovich (1973)
77.	moss		vax	waxi	
78.	shed make of bark		q ^h auri*	kaura	*SN
79.	large wooden container		οχ*	oxuma**	*SN **a small container made of birch bark
80.	wheat flour, bread	koo	ofa, ofan, ova*	upa	ufa (M), ko (J) *AN
81.	salt	sispo*	tafciŋ, tafc**	dausu	shio (J) *S. Hattori (1964) **AN, dabsun (M)
82.	sugar	otoopenpe*	seta	satu	šatan (M) *S. Hattori (1964)
83.	medicine	kusuri	οχt, oxt*	okto	okto (M), kusuri (J) *AN

No.	Item	Ainu	Nivkh	Uilta	Remarks
84.	metal, gold	konkaani	aizaŋ, aizŋ, ais*	aisi	aisin (M) *AN
85.	chess (<i>shōgi</i>)		damka*	daamukka	damka (R) 'checkers' *PN
86.	broad axe		toppo*	toporo**	topor (R) *PN **word used by old people
87.	silver	sirokaani	tota*, totta*, toto	tuda**	shirokane (J) *PN **'lead'
88.	coin (money)		c ^h χa	j̃axa	jiha (M)
89.	cannon	poro tehpo*	pau**, xau***	pau	poo (M), teppō (J) *Yamabe (1980) **PN ***AN
90.	gaiters, leggings	hos	рал*	pəruu	*SN
91.	tamper for tobacco		keraq*	gidakku	*AN
92.	mouthpiece of pipe		momok*, momof*, momos**	moomoo***	*unpublished fieldnote **AN ***pipe
93.	bow of boat		mɨx	тәәхә	
94.	boat made of planks	tontekka*	t ^h ɨŗkɨŋ, kɨlmɨr mu**	tərkə	*Kitahara, Tangiku, and Tamura (2000) **AN
95.	board to control direction of harpoon	ohkuh*	lax	laaxu	*Chiri (1973c)
96.	brass		tuvs, t ^h ius*	čiiriktə, təusi**	teišun (M) *AN **white metal (nickel?)
97.	scissors	hasami*, ituyekaani**	hasaŋ, xaza***	xaja	hasami (J) *HA **S. Hattori (1964) ***AN
98.	spoon (large)		qob, qomb*, kovs*, qomp**,	kombo***	kovsh (R) *AN **PN ***'ladle'
99.	window glass		p ^h ax	paawa	fa (M), boli (M), bolosu (M)
100.	boat landing		muspi	muspə	

No.	Item	Ainu	Nivkh	Uilta	Remarks
101.	stone flounder	kononkay, kapariw (?)	isq	əskə	
102.	barfin flounder	kapariw (?)	loq	lokko	
103.	char (fish)	tukusis (?)	loim, loimŋ, loŋr*	loima	*AN
104.	burbot (northern blenny?)	warantoka, parantoka (?)	morosk*, mar**	morisku	*PN **AN
105.	bullhead	sohkana	lasq	laskaŋa	esokka (HA)
106.	Japanese surfsmelt	petkon	p ^h roŋ, p ^h ro*	biro	*AN
107.	common rudd	supun	cemlaŋ, cemra*	jimda	*AN
108.	octopus	omaripo, omarupe	arkvifk*, arkwipk**	askuttu	*Tangiku (2008) **PN (T. Hattori 2000)
109.	bearded seal	poroh	tauʁr̥*, tauɣur̞*	dauŋgari	*SN
110.	cat	meko, kosika*	k ^h isk	kəskə	koshka (R), neko (J) *Chiri (1976b)
111.	horse	uuma	murŋ, mur̥*	muri	umma (HA), uma (J) *AN
112.	pig	puta	olsaŋ, olɣoŋ*	orgee	buta (J) *AN,
113.	bovine	peko*	еха, ехап, ека**	ixa	beko (J) *HA **AN
114.	squirrel	rohse	holk, χοlo, laqr*	xele	*AN
115.	mosquito	uuneh*	лет х, лалд**	nalmakta	*S. Hattori (1964) **AN
116.	butterfly	kapahpa, kahpo, koporew	kuɣl*, tap**	guuguldu	*Savel'eva and Taksami (1970) **AN
117.	butterbur (Petasites tatewakianus)	hara	aʁs*	aasi	*Mizushima, Shiraishi, and Tangiku (2007)
118.	Kamchatka lily	hah	qarq	karka	
119.	mold, fungus		p ^h ondolk, p ^h oŋdai*	puŋdai	*AN

No.	Item	Ainu	Nivkh	Uilta	Remarks
120.	dried fish (close to bone)		pɨki*	bəkkəi	*AN unpublished fieldnote
121.	long robe (batting filled)		huxt*, huxt**	xekte	*unpublished fieldnote **AN

Loan words common to Ainu and Uilta (13 words)

No.	Item	Ainu	Nivkh	Uilta	Remarks
122.	mouth harp	muhkun*, muhkuna	qoŋgoŋ, qaŋga**	muxənə***	*S. Hattori (1964) **AN, ***made of metal
123.	pole for hanging fish to dry	sakir*, sawa	muzŗ, mɨzr**	sairi	*HA, **AN
124.	fish weir ²⁵	uray	mraŋ*	urai	*Kreinovich (1973)
125.	sturgeon	karama	tuki, p ^h arq	karuma, karima	
126.	Amur pike	eyukas	ius c ^h o, c ^h acf c ^h o*	juwakkasi	joakashi (J) *SN
127.	crab	takahka	tavi, tavsi, tavsai*	taxakka	*AN
128.	oyster	pipa*		рәрә	pipa (HA) *general term for bivalves
129.	kind of shellfish (<i>danbegai</i>)	kaparsey*, sey kapara		kabarasi	*НА
130.	sea cucumber	kakura*, kukura	kuyi maq**	kaura	*HA **SN
131.	sea urchin	nona		nuna	nino (HA)
132.	tick, mite	paraki	hirk, vac*, vaca*	parraaji	*AN

²⁵ A three-cornered board or platform (placed in the water). According to Savel'eva and Taksami (1970), a "dammed area" to catch Sakhalin taimen (itō).

No.	Item	Ainu	Nivkh	Uilta	Remarks
133.	ladybug	itanki-kikir*		itaŋgili, itaaŋgi	*HA
134.	beach rose (ocean) <i>Rosa</i> rugosa	otaruh	tevi, cevi*	utaripu	*AN

Appendix 2: Timeline of expeditions to Sakhalin and settlement by Russians and Japanese

1635	Expedition by Matsumae Domain (Kamozaemon Satō and Kurando Kakizaki)		
1785–1786	First expedition by Tokugawa Shogunate		
1790	Founding of the trading post Shiranushi by Matsumae clan		
1792	Expedition by Tokunai Mogami		
1801	Expedition by Koichirō Nakamura and Jidayū Takahashi		
1808	Expedition by Denjūrō Matsuda and Rinzō Mamiya		
1809	Expedition by Rinzō Mamiya		
1846, 1856	Expedition by Takeshirō Matsuura		
1849	Expedition by Genadii Nevel'skoi to Tatar Strait		
1853	Founding of a Russian military post on the shore of Aniva bay (dismantled in 1854)		
1855	Treaty of Shimoda (Japanese border with Russia on Sakhalin left undetermined)		
1856	Founding of a Russian military post of Dué on the west coast		
1858	First arrival of the Russian exiles		
1865	Expedition by Bunpei (Kansuke) Okamoto		
1867	Provisional Regulations on Sakhalin		
1875	Treaty of St. Petersburg (Russo-Japanese treaty in which Japan exchanged Sakhalin for the Kuril Islands)		

Appendix 3: Ethnic groups on Sakhalin under Russian regime: Population

	Ainu	Nivkh	Uilta	Evenki	Yakut
1896	1,168	1,897	770	102	
1897	1,399	1,912	773	157	13

(Voennyi Gubernator Ostrova Sakhalina 1897: 108, 1898: 81)

Appendix 4: Ethnic groups on Sakhalin under Japanese regime: Population

	Ainu	Nivkh	Uilta	
1906	1,163	37	91	
1910	1,597	150	318	
1920	1,353	94	277	
1930	1,437	113	346	
1940	1,254	71	290	

(Karafutochō 1910-1928, 1928-1941)

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Hiroshi Nakagawa and Mika Fukazawa

8 Hokkaido Ainu dialects: Towards a classification of Ainu dialects

1 Introduction

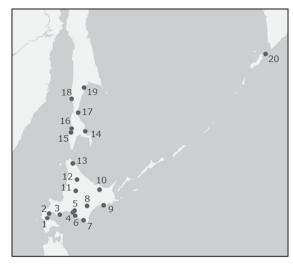
The purpose of this chapter is to attempt to provide a more comprehensive description of the distribution of Ainu dialects based primarily on the history of and data from Ainu studies, focused on Hokkaido Ainu dialects, looking not only at the common origins of vocabulary words but also including phonetic and morphological indicators. Previous research on the categorization of dialects has categorized them on the basis of the percent of cognates from Swadesh's basic vocabulary list found, but this study aims to present finer distinctions among the Hokkaido Ainu dialects from a variety of perspectives, going beyond the basic vocabulary framework. Section 2 below presents an overview of problematic points in previous research on dialect categorization and of points that should be included in the consideration of Ainu dialects. As examples of possible categorizations other than those of previous research, Section 3 presents a categorization based on the use of a detailed phonological differences as an indicator, and Section 4 puts the focus on differences in function words outside of the basic vocabulary and on morphological differences. Section 5 presents an overview of historical change in the lexicon and the geographical distribution of basic vocabulary as a study in linguistic geography.

2 Classification using basic vocabulary as an indicator

Ainu is said by Kyōsuke Kindaichi to be broadly divided into Hokkaido dialects, Sakhalin dialects, and Kuril dialects (Kindaichi 1931) and that approach is largely still prevalent today as well. However, at the stage when Kindaichi proposed this division, it was largely an impressionistic evaluation based on the fact that Hokkaido, Sakhalin, and the Kuril Islands were all regions separated by expanses of ocean, and there was no mention, in particular, of concrete differences between the Kuril dialects and the other two regions. It was after the end of World War II that empirical research into the dialects of Ainu advanced and, in this chapter Hattori and M. Chiri (1960) and Asai (1974) will be taken up as representative examples of previous research on the division of Ainu dialects.

2.1 Hattori and M. Chiri (1960)

The method that has been the focus of discussion of previous research on the division of Ainu dialects has mainly been to calculate the percentage of matches in basic vocabulary and quantitively derive the categories. The starting point for this methodology was Hattori and M. Chiri (1960) "A lexicostatistic study on the Ainu dialects". In this work, interviews were held and vocabulary words from the 200-word basic vocabulary¹ were elicited at nineteen locations of which thirteen were in Hokkaido (Yakumo, Oshamambe, Horobetsu, Biratori, Nukibetsu, Niikappu, Samani, Obihiro, Kushiro, Bihoro, Asahikawa, Nayoro, and Sōya) and six were in Sakhalin (Ochiho, Tarantomari, Maoka, Shiraura, Raichishka, and Nairo) and the degree of mutual coincidence for lexical stems was calculated (see Map 1: location 20 is from Torii (1903) and the others are from Hattori (1964).



Map 1: The Atlas of Ainu Dialects.

Hokkaido:

- 1. Yakumo, 2. Oshamambe,
- 3. Horobetsu, 4. Biratori, 5. Nukibetsu,
- 6. Niikappu, 7. Samani, 8. Obihiro,
- 9. Kushiro, 10. Bihoro,
- 11. Asahikawa, 12. Nayoro, 13. Sōya,

Sakhalin:

- 14. Ochiho, 15. Tarantomari,
- 16. Maoka, 17. Shiraura,
- 18. Raichishka, 19. Nairo

The Kuril Islands:

20. Shumshu

Saying that the lexical stems match means that they are considered to derive from the same source; for example, depending on the dialect, the various forms meaning

¹ The basic vocabulary used in Hattori and M. Chiri (1960) essentially followed Swadesh's list and included all of the 100 items Swadesh considered most important. However, the following 17 words were missing from list of the other 107 words: some, animal, forest, stick, to spit, to breathe, to laugh, to fight, to hunt, to scratch, to turn, to wipe, to count, to play, to float, and because. To make up the 10-word shortage, the following words were added: arm, lip, fur, navel, saliva, milk, dark, down, up, and ripe.

'tooth', mimak, nimak, imak, imah, all differ, but since they can be considered to have been derived from the same source, they are said to match.

Table 1 shows the Yakumo data appearing in Hattori and M. Chiri (1960).

The meaning of the symbols appearing in Table 1 are given below.

- The stems mutually correspond (Shown by blanks in Table 1)
- The stems do not mutually correspond
- There are two (or more) morphemes to compare; one pair can be considered ± a + relationship and the other(s) -
- It is unclear whether there is a correspondence relationship, or it is unclear 0 which morpheme should be considered for correspondence
- There is some doubt about the survey data
- Since there was no appropriate word in one of the dialects, the interviewee was unable to answer
- () Missing data

An explanation of the method of calculation used is shown below, using Ono (2015: 25–26) as a concrete example.²

- 1. Count a + as 1
- 2. Split a \pm , assigning the + part of a \pm the value 0.5 and the parts also 0.5
- 3. Count a as 1
- 4. Ignore all other symbols

Concerning vocabulary comparisons across dialects, the percent of +s and the + parts of a ± (counted as 0.5) versus the total of +, ±, and -s is used as a measure of the similarity of the dialects.

Hypothetical example: Comparing Yakumo and Oshamambe, there are 60 +s, 30 $\pm s$, and 10 - s.

Numerator = $60 \times 1 + 30 \times 0.5 = 75$

Denominator = $60 \times 1 + 30 \times 1 + 10 \times 1 = 100$

Thus, the degree of similarity between Yakumo and Oshamambe is 75/100 = 75%.

Basing their calculations on the data above, Hattori and M. Chiri (1960) derive the following conclusions:

- There is a great gap between Hokkaido and Sakhalin dialects.
- (2) The Soya dialect is relatively distant from the other Hokkaido dialects and, moreover, is the Hokkaido dialect closest to the Sakhalin dialects.

² Misprints in the original are corrected when quoting.

Table 1: Hattori and M. Chiri (1960).

									\vee	#1	Yakumo	0							
		内路	71	日浦	真岡	タラ	落帆	宗谷	名寄	旭川	美幌	釧路	帯広	様似	新冠	貫気	平取	幌別	長万
		Na	Ra	Sh	Ma	Ta	Ос	Sô	Ny	As	Bi	Ku	Ob	Sa	Ņ	Nu	Ξ	Но	0s
1.	_	+1	+1	+1	ı	1	ı	ı											
5.	that	ı	ı	ı	ı	ı		•		۰.									
.9	who	1	1	I	1	-	1								1	1	ı		
7.	what	ı	ı	ı	ı	ı									1	ı	ı	+1	
8.	not	I	ı	I	ı		ı							I					٠,
9.	all	ı	1	ı	ı	1	1												
10.	many	+1	+1		+1	+1													
15.	small	1	1	I	1	-	1												
16.	woman	+1	+1	+1	+1	+1	+1	+1			+1	+1	+1	+1	+1	+1	+1		+1
20.	bird	+1	+	+	+1	++	+1	+1	+	+1	+1	+	+1	+1	++	+1	+1	+	+1
22.	louse	ı	1	ı	+1		+1												
25.	leaf	0	0	0	0	0	0												
26.	root	ı	+1	ı	ı	+1	,	+1											
27.	bark								_							()			
28.	skin	+1		ı	+1	+1					1								
35.	tail													1					
44.	tongue	I	ı	I	ı	ı	ı	ı	+1										
46.	46. foot	+1	+1	ı		+1				+1	+1	1		ı				ı	1

- There are dialects among the Hokkaido dialects that are relatively close to each other and form dialect groups, such as Yakumo, and Oshamambe; Nukibetsu, Biratori, and Niikappu; and Obihiro, Kushiro, and Bihoro, but choosing one from each as representative of the group, such as Oshamambe, Biratori, Nayoro, and Bihoro, the groups are quite distant from each other.
- (4) Numerically, there is quite a gap between the Samani dialect on the one hand and the Niikappu, Biratori, and Nukibetsu (and Horobetsu) dialects on the other, and this gap can probably be thought to be significant. Since there is said to be a large difference in customs and lifestyles between the southern part of Hidaka, where Samani is located, and the northern part, where Niikappu, Biratori, and Nukibetsu are located, (according to M. Chiri, there is a legend that there was a major war between them), these numbers can be considered to reflect a dialect difference corresponding to such a cultural difference. Also, it should be noted that, in contrast, the Samani dialect shows relatively high numbers (that is, a comparatively close relationship) with the Obihiro and Kushiro dialects. (Hattori and M. Chiri 1960: 337–340)

This analysis is included verbatim in Hattori (1964) and is largely considered even today to be an appropriate conclusion. Hattori (1964) is a major collection of materials for which a number of linguists conducted more detailed surveys of speakers of ten dialects (Yakumo, Horobetsu, Biratori, Obihiro, Kushiro, Bihoro, Asahikawa, Nayoro, Sōya, and Raichishka (Sakhalin)) to which Ryūzō Torii's records of Kuril Ainu (Torii 1903) were added. There are 1935 entries expanded from Swadesh's basic vocabulary. The contents are arranged focusing on Ainu to the extent possible, but there is no trace of a reconsideration of the divisions among Ainu dialects based on this dictionary.

2.2 Asai (1974)

Based on 200 data items from 19 dialects in Hattori and M. Chiri (1960), Asai (1974) recalculated the mutual distances between dialects using the technique of cluster analysis. When doing so, Asai added Chitose dialect data that he had recorded and, based on that and information he had obtained from speakers of Asahikawa, Obihiro, and Kushiro dialects, he made a partial revision. Accordingly, although Asai (1974) and Hattori and M. Chiri (1960) use almost identical data sets, attention must be paid to differences in their judgements on cognate sets. For example, Hattori and M. Chiri (1960) consider the set par, car, cara, caru 'mouth' to be "forms that include morphemes from the same source", Asai (1974) counts them to be different forms differing phonologically. Also, whereas Hattori and M. Chiri (1960) give a weight of 0.5 when a dialect has two forms, of which one shares a common source, Asai (1974) assigns the value 1 without exception, as seen in Table 2.

Table 2: Examples of differences in weighting.

'mouth'					
Dialects: lexical forms	Horobetsu:	Sōya: car	Ochiho:	Raichishka: <i>caru</i>	
Yakumo:	+(1)	+(1)	+(1)	+(1)	Hattori and M. Chiri 1960
Yakumo:	+(1)	-(1)	-(1)	-(1)	Asai 1974
'tongue'					
Dialects: lexical forms	Horobetsu: <i>parunpe</i>	Sōya: aw			
Nayoro: parunpe, aw	± (0.5)	± (0.5)			Hattori and M. Chiri 1960
Nayoro: parunpe, aw	± (1)	± (1)			Asai 1974

As a result, although cautioning that these are preliminary results, Asai (1974) proposed the following division.

Hokkaido

North Hokkaido: Sōya

East Hokkaido: Obihiro, Kushiro, Bihoro, Asahikawa, and Nayoro

Central South Hokkaido: Yakumo, Oshamambe, Horobetsu, Biratori, Nukibetsu,

and Niikappu

Eastern Hokkaido: Samani

Sakhalin

North Sakhalin: Nairo

Central Sakhalin: Ochiho, Maoka, Shiraura, and Raichishka

South Sakhalin: Tarantomari

The Kuril Islands-Kuril

In this analysis, the broad division into Hokkaido dialects, Sakhalin dialects, and Kuril is given objective support. However, looking only at the results of Asai's analysis, these three are not treated as being of equivalent weight. A major division is first drawn between the Hokkaido and Kuril dialects on the one hand and Sakhalin on the other, with the former then further divided between Hokkaido and Kuril dialects. Even within the Hokkaido dialects, the group formed by the North Hokkaido (Sōya) and East Hokkaido (Obihiro, Kushiro, Bihoro, Asahikawa, and Nayoro) dialects appear to be closer to the Kuril dialect. This is an important point when considering the history of the movement of the Ainu people into the Kurils.

2.3 Problems in previous analyses

As seen in Sections 2.1 and 2.2, studies such as Hattori and M. Chiri (1960) and Asai (1974) are important for presenting the division of Ainu dialects based on objective data, and, given that it would be impossible to freshly gather such a collection of homogeneous linguistic materials across such a broad range, they must remain an important base for current and future consideration of Ainu dialects. However, there are a few points that deserve consideration.

One such point is the treatment of the Hidaka eastern region. As Hattori and M. Chiri (1960) also states, everyone recognizes the existence of large linguistic and cultural differences between the eastern part of Hidaka (Hattori and M. Chiri's South) and the western part (Hattori and M. Chiri's North). The dividing line is generally recognized experientially to fall on the boundary between Shizunai and Niikappu. In this region, historically there was a conflict between the *Menas un kur* 'people of the east' and Sum un kur 'people of the west' which led to the 1669 Shakushain's War. The grave markers of the Menas un kur and the Sum un kur have different shapes, and, until recent years, both forms were found intermingled in the Shizunai area.

However, there is no information in these studies on the eastern Hidaka regions of Shizunai, Mitsuishi, or Urakawa, or, put differently, on the regions between Niikappu and Samani. Thus, because Samani is close to dialects like Obihiro and Kushiro, a clean division ends up being made between east and west. However, as research into the dialects of east Hidaka has progressed, it has become clear that the speech of this region is not homogeneous and, in particular, within the Shizunai dialects, Urakawa and Samani are very different and, even within Shizunai, there appear to be large differences among speakers themselves. In sum, the categorization of the speech of eastern regions of Hidaka is a major question when considering the classification of Hokkaido dialects.

A second point, one that deserves even more attention than the first point, is that both the Hattori and M. Chiri (1960) and Asai (1974) studies are based solely on matches between basic vocabulary items. For example, one reason that one feels uneasy about Asai's treatment of Yakumo, Oshamambe, Horobetsu, Biratori, Nukibetsu, and Niikappu as forming a single Central South Hokkaido dialect group is that there is a large difference between the way person affixes are affixed in at least the Biratori and Nukibetsu dialects on the one hand and the Horobetsu dialect on the other. In terms of this feature, Horobetsu shows much more similarity to dialects like Obihiro, Kushiro, and Asahikawa.³ If indicators other than basic vocabulary are used, different dialect distributions may be considered.

³ Details of the forms of person affixes and their affixation in the Yakumo, Oshamambe, and Niikappu dialects are unclear.

A third point to consider is that when choosing the 200 words used in the Hattori and M. Chiri (1960) study, Hattori's purpose was to investigate the methodological question of the applicability of glottochronology, not measuring the degree of difference between dialects. That is, Hattori's selection of basic vocabulary was not with the purpose of deciding which dialects formed a group with which other dialects, but rather was with the purpose of seeing when the various dialects branched off from the Ainu protolanguage. If the purpose were for investigating dialect groupings using a limited number of items like Hattori and M. Chiri's 200 words, it would be better to choose words that differed maximally across dialects. However, if one is looking at the history of branching, it does not matter if the same form is found in each of the dialects, and, in fact, deliberately selecting maximally differing forms would have the effect of skewing the results. As a result, because items that would have shown more differences among dialects if chosen were eliminated, intuitively felt differences were not reflected.

For example, Hattori and M. Chiri (1960) includes 'come' in its 200 words but does not include 'go'. 'Come' is ek in all Hokkaido dialects and is the regularly corresponding form eh in all Sakhalin dialects. In contrast, 'go' is arpa in the Saru and Chitose dialects but is oman in all others. Hattori and M. Chiri (1960) include 'where (at-where)' in their 200 words and list such differences as hunak/hinak ta for the Saru and Chitose dialects, ney/nei ta for other Hokkaido dialects, and nah ta for Sakhalin. On the other hand, if one looks at 'where (to-where)', not included in the 200 words, one finds a completely different distribution of forms from that of 'where (at-where)', with hunak/hinak un in Saru and Chitose, ney/nei un in dialects to the west, a unique form enon in the Samani and Obihiro dialects to the east (a form also found in such places as Shizunai and Urakawa in the eastern part of Hidaka), and ney/nei ne in the rest of Hokkaido and in Sakhalin.

While treating these studies as one portion of the materials for judging, Suzuko Tamura adds in additionally collected data and indicators other than basic vocabulary and divides Hokkaido dialects as follows.

Among the Hokkaido dialects, some differences in vocabulary, phonology, and word formation can be seen between the northeast and the southwest, but no major grammatical differences are found. The northeast region runs from Soya along the west coast, south to Teshio and Ishikari, along the east coast through Kitami and Nemuro and then to Kunashiri and Etorofu and then out to the Pacific from Kushiro, Tokachi, and Erimo to around Shizunai. The rest of Hokkaido is the southwest region. The northeast dialects can further be divided into north (Sōya), central (Teshio and Ishikari), and east (Tokachi, Kitami, Kushiro, Eastern Hidaka). The southwestern dialects can further be divided into south (Western Hidaka, Eastern Iburi) and west (Shiribeshi). Among these, the Soya dialect is closer to Sakhalin dialects than the other Hokkaido dialects. There is also a split in Hidaka between east and west. Many places in Eastern Hidaka are similar to the Obihiro and Kushiro dialects. Shizunai appears to be on the boundary line and regional differences can be seen within Shizunai. (S. Tamura 1988: 7-8)

The broad division here into northeast and southwest regions, other than the treatment accorded to the Soya dialect, is shared among most researchers. This division also corresponds to the geographical distribution found in the names of the genres of oral literature and in the names and treatment of the cultural heroes Okikurmi and Samayekur and can be said to be highly meaningful when considering the history of the Ainu people. The fact that regional differences can be seen in Shizunai is also an important observation. S. Tamura's dialect division is probably the closest to what most scholars agree on. When we refer to "southwest dialects" below, we will be using S. Tamura's terminology for convenience.

From section 3 on, we will reconsider Hokkaido dialects using indicators other than basic vocabulary. One point we would like to mention that should be held in mind as we do so is the regional imbalance in materials that can be used in our analysis. These days, when it is difficult to conduct a survey of Ainu dialects, we find both regions for which there are comprehensive studies of the basic vocabulary and grammar of the dialects and regions for which we must string together scattered bits of materials. There are both regions for which there are records of many speakers and regions for which there are only the records of a single speaker. Leaving aside early-modern records, there are hardly any materials other than those for Sōya and Bihoro describing the Ainu language used on the Sea of Japan and the Sea of Okhotsk coasts of Hokkaido. 4 In short, the majority of materials available recording known Hokkaido dialects are limited to the Pacific Ocean coast and the regions along the Ishikari River.

In addition, while we will refer to the "XX dialect", in fact there are many areas for which there may only be the records of a single speaker and we are perforce referring to that speaker's idiolect as a dialect. In many cases for which we may have been able to obtain the records of multiple speakers, research has not progressed to the point that we can figure out how to regularize the idiolectal differences among those speakers. For example, we refer to the Soya dialect, but at this point in time we are referring to the idiolect of a single speaker named Ben Kashiwagi. In contrast, the Saru dialect refers to the characteristics of a dialect for which we have grammatical elicitations and textual records from some tens of speakers. However, even for the Saru dialect, each of the speakers has a different idiolect and their speech is often presented as representative of the dialect. For this reason, the term "XX dialect" can be said to be based more on geographical or administrative districts than on linguistic indicators. In the appendix to this chapter, we have arranged the dialects for which research has been conducted by the old administrative districts and have gathered the primary

⁴ Of course, this does not mean that there were no Ainu living on the Sea of Japan and Sea of Okhotsk coasts of Hokkaido. For example, according to the records of a survey (Ainu Bunka Hozon Taisaku Kyōgikai ed. 1969: 3-4) performed in 1822 (Bunsei 5), the population of Ainu living in Yoichi facing the Sea of Japan was 564, more than twice that of Horobetsu, one of the dialects for which we have a good number of texts recorded. However, there almost no records of the Yoichi Ainu dialect from the Meiji (1868–1912) period on. It is not easy to explain why this situation has arisen, but it is a fact that when discussing the division of Hokkaido dialects, it is impossible to give a comprehensive categorization of all the areas where the Ainu once lived.

literature concerning the regions, the state of the records, and the characteristics of the dialect. We hope it will prove to be a suitable reference.

3 Division using phonological differences as indicators

Among the Hokkaido Ainu dialects, it is not unusual for the same form to appear in all regions, very often with only minor phonological differences. In fact, since Hattori and M. Chiri (1960) looked only at matches of stems and excepted phonological differences, of the 200 items, only 91 were actually included in their calculations. Since a similar situation is found even when including the Sakhalin dialects, it is difficult to search within the Hokkaido dialects for items that do not have a common source.

The standard for judgement of cognates in Asai (1974) is more strict than that of Hattori and M. Chiri (1960) and even should a stem match, if there is a phonological difference, in many cases it was distinguished as a different word form. However, the standard for judgement is not explicitly stated in Asai's work and there appear to have developed some inconsistencies among the items. In this section, then, we will present the trends that can be seen in accent and phonological differences among the Hokkaido Ainu dialects, and then examine each with concrete examples.

- 1.
- 2. Elision of word-initial /h/: /hV/ > /(')V/
- 3. Regressive assimilation of consonants: tk > kk; pt > tt; rs > ss; etc.
- 4. Pseudo sound correspondence: ca-:pa-
- Insertion of word-initial /h/: /(')V/ > /hV/5.
- 6. Characteristic sound alternation: -iw:-uy
- 7. Vowel alteration
- 8. Consonant alternation
- 9. Elision or addition of -y: ay:a

3.1 Accent

Ainu is a language in which the pitch accent has a phonologically distinctive function, and there are minimal pairs distinguished only by the location of the accent.

```
nísap 'sudden' – nisáp 'shin'
nína 'collect firewood' - niná 'mash'
(Saru dialect examples)
```

However, although there are many exceptions, the accent in most words is determined by rules based on syllable structure. The rules can be summarized by the following two statements.

- A. If the first syllable is a closed syllable, the first syllable is high.
- B. If the first syllable is an open syllable, the second syllable is high.
 - A. ávnu 'human', ínkar 'look', áskepet 'finger' B. kamúy 'spirit', nukár 'see', kisárpuy 'earhole' (Saru dialect examples)

However, there is a group of words in which, even though the first syllable is open, the first syllable is high, a phenomenon that is thought to be related to the location of long vowels in the Sakhalin dialects.

The Hokkaido dialects can be broadly divided into three groups depending on whether or not these rules apply.

- Standard Accent Type: Dialects in which rules A and B apply as stated Saru, Chitose, Horobetsu, Asahikawa, Nayoro, Obihiro, Sōya
- 2) Irregular Accent Type: Dialects in which rule B move one syllable further into the word and the third syllable becomes high - Yakumo, Oshamambe
- 3) Unaccented Type: Dialects in which accent does not have a distinctive function Shizunai, Urakawa, Samani, Bihoro, Kushiro, Shiranuka

Expanding on the second type, even in the Yakumo dialect, rule A applies as stated.

```
nótkew 'jaw', tékkotor 'elbow'
```

Also, the exceptions to rule B are the same as in other dialects.

```
hápo 'mother', hácire 'let it fall'
```

Furthermore, even if the first syllable is an open syllable, if the second syllable is a closed syllable, the second syllable becomes high.

```
parúnpe 'tongue', ikúynimak 'molars'
```

However, if both the first and second syllables are open syllables, then, unlike the standard accent type, the third syllable becomes high. Table 3 shows a comparison with the Saru dialect.

As far as the unaccented type is concerned, in Samani there is a tendency for the last syllable of a word to become high. On the other hand, pitch in Shizunai has no relation to syllable location and is not uniform.

meaning	Yakumo dialect	Saru dialect
'esophagus'	iperékut	ipérekut
'tattoo'	sinuyé	sinúye
ʻrise'	hopuní	hopúni

The Sakhalin dialects are also of the unaccented type, but where the Hokkaido dialects have an opposition in accent, the Sakhalin dialects have a vowel length opposition and, generally syllables with long vowels appear to be pronounced with a higher pitch than syllables with short vowels. It is believed that it was through the long vowels merging with short vowels, leaving only a pitch opposition that the Hokkaido accent opposition developed (Hattori 1967), but for an alternative opinion see Satō (Chapter 3, this volume). Since the unaccented type dialects like Samani and Shizunai developed through the loss of the pitch opposition, their origin is different from the unaccented Sakhalin dialects. Throughout section 3, accent is marked to allow the reader to see the relation between accent and phonological differences.

3.2 Elision of word-initial /h/: /hV/ > /(')V/

As seen in section 3.1, in the standard accent type dialects rule B applies making the second syllable high if the first syllable is open. When the accent falls on the second syllable due to the application of this rule, in geographically more eastern dialects, word-initial /h/ is often elided.

As shown in Table 4, group 2 dialects (Obihiro, Kushiro, Bihoro, Asahikawa, Nayoro) have forms in which word-initial /h/ has elided, in contrast to group 1 dialects (Horobetsu, Biratori, Nukibetsu, Niikappu, Samani, Sōya). The dialects of group 3 (Yakumo and Oshamambe) are irregular accent dialects in which the third syllable becomes high, but word-initial /h/ is retained.

Table 4: Elision of word-initial /h/.

	Form	Dialects	Form	Dialects	Source
'wash'	huráye	1	uráye	2	Hattori and M. Chiri
	hurayé	3			1960: No. 123 ⁵
'husband'	hokú	1	okú	2	Hattori and M. Chiri
		3			1960: No. 145

⁵ No. XX shows the number within the 200-word basic vocabulary list.

Table 4 (continued)

	Form	Dialects	Form	Dialects	Source
'child'	hekáci	1	ekáci	2	Hattori and M. Chiri
	hekací	3			1960: No. 151
'children'	hekáttar	1	ekáttar	2	Hattori and M. Chiri
		3			1960: No. 151
'down'	herási	1(except	erás(i)	2(except	Hattori and M. Chiri
		Sōya)		Bihoro)	1960: No. 194
	herás	3			
'up'	heríkasi	1(except	eríkas(i)	2(except	Hattori and M. Chiri
		Sōya)		Kushiro)	1960: No. 195
	herekás	3			

3.3 Regressive assimilation of consonants: tk > kk; pt > tt; rs > ss; etc.

The occurrence of regressive consonant assimilation is characteristic of eastern dialects. This tendency is especially striking in the Bihoro dialect, as shown in Table 5.

Table 5: Regressive consonant assimilation.

	Form	Dialects	Form	Dialects	Source
'lie'	hótke	Most Hokkaido dialects	hókke	Obihiro, Kushiro, Bihoro	Hattori and M. Chiri 1960: No. 67
'hot'	sírsesek	Most Hokkaido dialects	síssesek	Bihoro, Asahikawa, Nayoro	Hattori and M. Chiri 1960: No. 93
'move it (to another place)'	túpte	Most Hokkaido dialects	tutte	Bihoro	Hattori 1964: 64
'bosom'	úpsor	Most Hokkaido dialects	ússor	Bihoro, Asahikawa, Nayoro	Hattori 1964: 86
'warm'	sírpopke	Most Hokkaido dialects	sírpokke	Bihoro, Sōya	Hattori 1964: 225
'armor'	hayókpe	Yakumo,	hayóppe	Asahikawa, Sōya	Hattori 1964: 122
		Horobetsu, Saru	ayóppe	Bihoro, Nayoro	
'myste- rious, strange'	i(y)oyamokte, aoyámokte	Yakumo, Horobetsu, Saru, Asahikawa	ioyamotte	Bihoro	Hattori 1964: 293

3.4 Pseudo sound correspondence: ca-:pa-

There are a few words that show a *ca*-:*pa*- correspondence. There are no such correspondences with the vowels e, i, o, or u. There is a view that most of them are dependent on words related to 'mouth', but in any case, the number of words showing the correspondence is limited and in the purest sense, this cannot be called a sound correspondence. Broadly speaking, words taking the stem pa- are found in southwest dialects and those taking ca- in northeast dialects. Dialects like Nayoro and Asahikawa have both forms. A more detailed description will be given in section 5.

3.5 Insertion of word-initial /h/: /(')V/ > /hV/

Insertion of word-initial /h/ is striking in the unaccented type dialects located in the northeast part of Hokkaido. The elision of word-initial /h/ described in section 3.2 had the characteristic that it could occur when the accent fell on the second or third syllable, but no tendency with respect to accent placement is found with the insertion of /h/, as shown in Table 6.

Table 6:	Insertion	of word	l-initial	/h/

	Form	Dialects	Form	Dialects	Source
'fog'	úrar	Most Hokkaido dialects	hurar	Bihoro	Hattori and M. Chiri 1960: No. 116
'nail'	ám	Most Hokkaido dialects	ham	Bihoro	Hattori and M. Chiri 1960: No. 45
'sand'	otá	Most Hokkaido dialects	hota	Samani ⁶	Hattori and M. Chiri 1960: No. 78
'flower'	арарро	Kushiro, Bihoro	hapáppo	Sōya	Hattori and M. Chiri 1960: No. 137
'make an effort'	aríkiki	Most Hokkaido dialects	harikiki	Kushiro	Hattori 1964: 158; Kushiro Ainugo no Kai 2004: 191

⁶ However, in the elicitation Nakagawa conducted with Ms. Yumi Okamoto from Okada, Samani Town, this word was ota. The speaker of this dialect in Hattori and M. Chiri (1960) was born later than Ms. Okamoto and there is a problem with considering this to be a characteristic of Samani. Rather, the insertion of word-initial /h/ is a striking characteristic of the Urakawa dialect that borders Samani to the west and it is necessary to consider the possibility of such influence.

3.6 Characteristic sound alternation: -iw:-uy

Having -uy where other dialects have -iw is a characteristic of the Bihoro and Kushiro dialects especially, as shown in Table 7. It can be considered a type of metathesis.

Table 7: Characteristic sound alternation: -iw:-uv.

	Form	Dialects	Form	Dialects	Source
'yellow, green'	síwnin	Most Hokkaido dialects	suynin	Bihoro	Hattori and M. Chiri 1960: No. 88
'stab'	cíw	Most Hokkaido dialects	cuy	Bihoro	Hattori and M. Chiri 1960: No. 179
'bitter'	síw	Most Hokkaido dialects	suy	Bihoro	Hattori 1964: 98
'traut'	icániw	Horobetsu, Obihiro, Asahikawa, Samani	icánuy	Saru, Bihoro, Kushiro	Hattori 1964: 191; Komatsu 2004: 49; Kushiro Ainugo no
	icaníw,	Yakumo			Kai 2004: 50
'bridge'	ríwka	Obihiro, Asahikawa, Nayoro, Samani	rúyka	Yakumo, Horobetsu, Saru, Bihoro,	Hattori 1964: 67; Komatsu 2004: 254; Kushiro Ainugo no Kai 2004: 229
	(réwka)	(Sōya)		Kushiro	
'help; assist'	kásiw	Yakumo	kasúy	Most Hokkaido dialects	Hattori 1964: 76; Kushiro Ainugo no Kai 2004: 98
'star'	nocíw	Most Hokkaido dialects ⁷	nocuy	Kushiro	Hattori and M. Chiri 1960: No. 74
'servant'	ússiw	Most Hokkaido dialects	ussuy	Bihoro	Hattori 1964: 46;

Those in Table 8 are also examples of metathesis.

Table 8: Other examples of metathesis.

'window'	piyár	Nayoro, Samani, Kushiro	puráy	Horobetsu	Hattori 1964: 103; Komatsu 2004: 215; Kushiro Ainugo no Kai 2004: 194
	puyár	Saru, Obihiro, Asahikawa, Sōya, Shiranuka			

⁷ However, Bihoro has the form *rikop* and Sōya the form *keta* (Hattori and M. Chiri 1960).

Table 8 (continued)

'light'	nipék	nipék Saru, Asahikawa, nikép Sōya Nayoro, Kushiro		Sōya	Hattori 1964: 224; Kushiro Ainugo no Kai 2004: 180	
	nupék	Yakumo, Horobetsu, Obihiro, Bihoro				
'finger'	áskepet	Most Hokkaido dialects	áspeket	Horobetsu	Hattori 1964: 11	

3.7 Vowel Alternations

An example of vowel alternation in Table 9 is u:o. It is characteristic for Sōya to take o.

Table 9: Vowel alternation *u:o*.

	Form	Dialects	Form	Dialects	Source
'snow'	upás	Most Hokkaido dialects	opás	Sōya	Hattori and M. Chiri 1960: No. 149
'urinate'	okúyma	Yakumo, Horobetsu, Saru, Obihiro	okóyma	Asahikawa, Nayoro, Sōya	Hattori 1964: 15
'hiccup'	yónkur	Yakumo	yónkor	Horobetsu, Bihoro, Sōya	Hattori 1964: 10
	yómkur	Saru, Obihiro	yómkor	Asahikawa, Nayoro	
'trousers'	omúnpe	Yakumo, Horobetsu, Obihiro	omónpe	Saru, Bihoro, Nayoro, Sōya	Hattori 1964: 86
			homónpe	Asahikawa	
'frame of a fireplace'	inúnpe	Most Hokkaido dialects	inónpe	Sōya	Hattori 1964: 105
	iunpe	Bihoro			

Of the vowel alternation o:e, it is characteristic for Yakumo to take e where most Hokkaido dialects take o, as shown in Table 10.

Table 10: Vowel alternation: o:e.

'hair'	otóp	Most Hokkaido dialects	etóp	Yakumo	Hattori 1964: 2
'calm; lull'	notó	notó Horobetsu, Saru		Yakumo,	Hattori 1964: 230;
	nóto (?)	Nayoro		Samani	Komatsu 2004
'woman'	menóko	Most Hokkaido dialects	menéko	Sōya	Hattori and M. Chiri
	menokó	Yakumo, Oshamambe			1960: No. 16

Table 10 (continued)

ʻall'	opítta	Most Hokkaido dialects	epítta	Yakumo	Hattori 1964: 268
	oputta	Bihoro			
'present, gift'	imóka	Asahikawa, Nayoro, Sōya, Saru	iméka	Yakumo	Hattori 1964: 80, Kayano 2002: 74
'rabbit; hare'	isópo	Obihiro, Bihoro	isépo	Most Hokkaido dialects	Hattori 1964: 187
			isepó	Yakumo	

When the syllable-initial consonant is k or s, it seems to be easy for the vowel alternation V(e, u): i to take place, as shown in Table 11.

Table 11: Vowel alternation V(e, u):i.

	Form	Dialects	Form	Dialects	Source
'forehead'	keputur	Bihoro	kipútur	Most Hokkaido dialects	Hattori 1964: 3
			kiputúr	Yakumo	
'dog'	setá	Most Hokkaido dialects	sitá	Samani, Obihiro, Kushiro, Bihoro	Hattori and M. Chiri 1960: No. 21
'smoke'	supúya	Most Hokkaido dialects	sipuyá	Yakumo, Oshamambe	Hattori and M. Chiri 1960: No. 81
			sipúya	Sōya	
'box'	supóp	Obihiro, Asahikawa, Nayoro	sipop	Bihoro, Kushiro	Hattori 1964: 119; Kushiro Ainugo no Kai
	suwóp	Yakumo, Saru, Sōya			2004: 139
	suyóp	Horobetsu			
'grow up'	sukúp	Saru, Asahikawa, Nayoro	sikúp	Most Hokkaido dialects	Hattori 1964: 28
'well'	sunpuy	Bihoro	sínpuy	Most Hokkaido dialects	Hattori 1964: 101
'mold'	kumí	Most Hokkaido dialects	kimi	Bihoro	Hattori 1964: 98
'brushwood'	káykuma	Saru, Obihiro	káykima	Asahikawa	Hattori 1964: 107

Table 11 (continued)

	Form	Dialects	Form	Dialects	Source
'window'	puyár	Saru, Obihiro, Asahikawa, Shiranuka	piyár	Nayoro, Samani, Kushiro	Hattori 1964: 103; Komatsu 2004: 215; Kushiro Ainugo no Kai
	puwár	Yakumo, Bihoro			2004: 194
	puráy	Horobetsu			
	purár	Sōya			
ʻlight'	nupék	Yakumo, Horobetsu, Obihiro, Bihoro	nipék	Saru, Asahikawa, Nayoro, Kushiro	Hattori 1964: 224; Kushiro Ainugo no Kai 2004: 180
			nikép	Sōya	

3.8 Consonant alternations

It is characteristic of Yakumo to take w where other dialects take y and for Horobetsu and Obihiro to take y where other dialects take w, as shown in Table 12.

Table 12: Consonant alternation *y:w*.

	Form	Dialects	Form	Dialects	Source
'window'	puyár	Saru, Obihiro, Asahikawa, Shiranuka	puwár	Yakumo, Bihoro	Hattori 1964: 103; Kushiro Ainugo no Kai 2004: 194
'box'	suyóp	Horobetsu	suwóp	Yakumo, Saru, Sōya	Hattori 1964: 119
'sweep'	nuyé	Horobetsu, Obihiro, Bihoro	nuwé	Yakumo, Saru, Nayoro	Hattori 1964: 103
'write'	nuyé	Most Hokkaido dialects	nuwé	Nayoro	Hattori 1964: 59
'to cook; to boil'	suyé	Horobetsu, Obihiro, Bihoro	suwé	Yakumo, Saru, Asahikawa, Nayoro, Samani	Hattori 1964: 97; Komatsu 2004: 152
'rain'	ruyánpe	Samani, Obihiro, Asahikawa, Nayoro, Sōya	ruwanpe	Kushiro, Bihoro	Hattori and M. Chiri 1960: No. 76
'kite'	yátotta	Yakumo, Horobetsu, Obihiro, Asahikawa	watotta	Bihoro	Hattori 1964: 188

Table 13 shows the consonant alternation n:m.

Table 13: Consonant alternation *n:m*.

	Form	Dialects	Form	Dialects	Source
'tooth'	nimák	Oshamambe, Horobetsu, Saru (Biratori), Asahikawa, Nayoro	mimák	Yakumo, Saru (Nukibetsu), Niikappu	Hattori and M. Chiri 1960: No. 43
'hiccup'	yónkur	Yakumo	yómkur	Saru, Obihiro	Hattori 1964: 10
	yónkor	Horobetsu, Bihoro, Sōya	yómkor	Asahikawa, Nayoro	
'cough'	ónke	Sōya	ómke	Most Hokkaido dialects	Hattori 1964: 10
'yard, garden' or 'dirt foor'	míntar	Yakumo, Samani	mimtar	Horobetsu, Saru, Obihiro, Bihoro, Nayoro	Hattori 1964: 100, 103; Komatsu 2004: 239
'be lonely'	nísmu	Yakumo, Horobetsu, Asahikawa, Nayoro	mísmu	Saru	Hattori 1964: 285
'cat' (< Japanese NEKO)	nekó	Yakumo, Obihiro	mekó	Horobetsu	Hattori 1964: 185
'grand-child, grand-son, grand-daughter'	nítpo	Obihiro	mítpo	Yakumo, Horobetsu, Saru, Bihoro, Nayoro, Sōya	Hattori 1964: 38
			тірро	Saru, Asahikawa	

It sometimes happens that a copy of the syllable-final consonant of the following syllable replaces a preceding consonant element, as in Table 14.

Table 14: Consonant copying.

	Form	Dialects	Form	Dialects	Source
ʻwindow' puwár puyár	puwár	vár Yakumo, Bihoro		Sōya	Hattori 1964: 103;
	puyár	Saru, Obihiro, Asahikawa, Shiranuka			Komatsu 2004: 215; Kushiro Ainugo no Kai
	piyár	Bihoro, Samani, Kushiro			2004: 194
'box'	suyóp	Horobetsu	supóp	Asahikawa, Nayoro	Hattori 1964: 119; Kushiro Ainugo no Kai 2004: 139
	suwóp	Yakumo, Saru, Sōya	sipop	Bihoro, Kushiro	

In addition, there are also examples of consonant alternation as shown in Table 15.

Table 15: Consonant alternation C:p.

	Form	Dialects	Form	Dialects	Source
'dust, dirt'	maná	Yakumo	paná	Saru, Bihoro, Asahikawa, Samani	Hattori 1964: 104; Komatsu 2004: 211
'narrow'	hútne	Most Hokkaido dialects	húpne	Bihoro, Asahikawa, Nayoro	Hattori 1964: 271

3.9 Elision or addition of -y: ay:a

In the Saru and Chitose dialects, the plural form of the existence verb *okay* appears as oka, as shown in Table 16. The same phenomenon is observed with the person pronouns which are considered to be formed based on okay. Person marking will be discussed in section 4.

Table 16: Forms of the existence verb.

	Form	Dialects	Form	Dialects	Source
'exist (pl.)'	okáy	Most Hokkaido dialects	oká	Saru, Chitose	Hattori 1964: 150; Nakagawa 1995

Regarding particles, *kay* can be found in some of the eastern dialects instead of *ka*, and the same sort of dialectal difference can also be found in conjunction particles. Kushiro is a dialect having both forms.

Table 17: Forms of conjunction particles.

	Form	Dialects	Form	Dialects	Source
'also, too'	ka	Most Hokkaido dialects	kay	Obihiro, Kushiro	Hattori 1964: 325; Kushiro Ainugo no Kai 2004: 97
'even if'	yákka	Most Hokkaido dialects	yákkay	Obihiro, Kushiro	Hattori 1964: 323, Kushiro Ainugo no Kai 2004: 219
			akkay	Bihoro	
'but, however'	kórka	Most Hokkaido dialects	kórkay	Obihiro, Bihoro, Kushiro	Hattori 1964: 323, Kushiro Ainugo no Kai 2004: 123

4 Division by indicators other than basic vocabulary

4.1 Person marking

Hattori and M. Chiri's dialect grouping was fundamentally based on the forms of their basic vocabulary, but if other indicators are used, different results can be expected. One point on which there is a difference between the grouping described earlier and an intuitive division of dialects is the fact that the Saru dialect and the Horobetsu dialect are always treated as belonging to the same group. A grammatical phenomenon that can be observed to be held in common between the Saru and Chitose dialects is that person marking on transitive verbs is realized entirely by prefixes, as in Table 18. In all other dialects in Hokkaido for which we have some degree of description of their person affixes, person marking for transitive verbs is shown by both prefixes and suffixes, like circumfixes, as shown in Table 19 and 20.

Table 18: Saru and Chitose dialects: made by Nakagawa.

	ACC	1 st Person		2 nd Person		3 rd Person	4 th Person
NOM		Sing.	Plur.	Sing.	Plur.		
1 st	Sing.			eci-	eci-	ku-	kuy-
Person	Plur.			eci-	eci-	ci-	ay-
2 nd	Sing.	en	un-			e-	ey-
Person	Plur.	ecien-	eciun-			eci-	ecii-
3 rd Perso	n	en-	un-	e-	eci-		i-
4 th Perso	on	aen-	aun-	ae-	<i>aeci-</i> <i>aci-</i> in the Chitose dialect	a-	ay-

Table 19: Horobetsu dialect: from Kindaichi and M. Chiri (1936).

	ACC	1 st Person		2 nd Person		3 rd Person	4 th Person
NOM		Sing.	Plur.	Sing.	Plur.		
1 st	Sing.			e-, -as	eci-, -as	ku-	i-, -as
Person	Plur.	/				ci-	
2 nd	Sing.	een-	eun-			e-	ey-
Person	Plur.	ecien-	eciun-			eci-	ecii-
3 rd Perso	n	en-	un-	e-	eci-		i-
4 th Perso	n	aen-	aun-	ae-	aeci-	a-	ay-

	ACC	1 st Person		2 nd Person		3 rd Person	4 th Person
NOM		Sing.	Plur.	Sing.	Plur.		
1 st	Sing.			e-, -an	es-, -an	ku-	?
Person	Plur.			e-, -as	es-, -as	ci-	?
2 nd	Sing.	een-	eun-			e-	?
Person	Plur.	es'en-	es'un-			es-	?
3 rd Person		en-	un-	e-	es-		i-
4 th Person		en-, -an enci-	un-, -an unci-	e-, -an ane-	es-, -an	an-	i-, -an an-

Table 20: Ishikari dialect: from S. Tamura (1988) and Asai (1969).

For example, to express 'I give to you' using the verb kore 'give', the Horobetsu dialect would say e-kore-as and the Ishikari dialect e-kore-an with the affixes split to appear before and after the verb. In the Saru and Chitose dialects, this would be expressed as *eci-kore* with only a prefix appearing. The actually appearing forms vary by dialect, but in terms of whether prefixes or circumfixes are used, a line can be drawn between the Saru and Chitose dialects on the one hand and all other dialects on the other, and the Horobetsu dialect ends up belonging to the same type as the geographically distant Ishikari or Tokachi dialects.

The Saru and Chitose dialects also show other differences from other dialects in person marking. One such difference is the phenomenon of contraction of person affixes. In all dialects 'I (NOM)' and 'we (NOM)' are respectively ku- and ci-, but in this group alone, these are contracted to *k*- and *c*- before a word beginning with the vowels a, u, e, or o. For example, 'I ate' and 'We ate' are ku-e and ci-e, respectively, in other dialects, but in this group, they are k-e and c-e. This contraction phenomenon extends also to person pronouns, so where other dialects have the forms kuani 'I' and ciokay 'we', the Saru dialect has kani and coka. (The Chitose dialect also has the form cokay.)

Also, whereas the intransitive verb fourth-person nominative affix only co-occurs with the plural form of a verb in other dialects, in the Saru and Chitose dialects, it can also appear with the singular form.

- (1) ne cise sov ta paye-an hine this/that house outside LOC go.PL-4.S and 'I went to the front of the house, and . . .' (Shizunai)
- (2) nea pon-menoko uni akusu ta arpa-an that young-woman house LOC go.SG-4.S then 'I went to the girl's house, then . . .' (Saru)

(3) eci-unu tura-no pave-an hine 2PL.A-mother.AFF COM-ADV go.PL-4.S and 'with your mother we went, and . . . '(Saru)

Parallel to this, while many dialects have only the pronouns *anokay* or *aoka(y)* formed from the fourth-person possessive affix and the plural form of the existence verb, in addition to aoka, the Saru and Chitose dialects also have the pronoun asinuma corresponding to the singular form. The Shizunai dialect neighboring the Saru dialect to the east and the Horobetsu dialect to the west have a singular form pronoun an-an-i formed from the possessive prefix an-, which is identical with the transitive subject marker (A), plus the singular form of the existential verb an and the affiliative suffix or nominalizer -i.

Although the Saru and Chitose dialects thus have an extremely unique person-marking system, the dialect grouping proposed until now heavily weighting basic vocabulary would put them together in a bundle with dialects like Horobetsu. However, since the two dialects have several other characteristics different from other dialects, the Saru and Chitose dialects should be seen to form a group independent from the Horobetsu dialect.

4.2 Plural marking

Ainu is a language that, while not distinguishing between singular and plural nouns has verbal number, in which singular and plural are distinguished in verbs, see Nakagawa (Chapter 17, this volume). The means for expressing the distinction basically do not differ greatly across the dialects, including the Sakhalin dialects. However, through the addition of postverbal elements, a plural meaning can be added to verbs that do not distinguish singular and plural and can even add an additional plural meaning to verbs in their plural forms. These postverbal elements differ greatly from dialect to dialect.

A. (a)hci: Sakhalin dialect

okay ahci. koro hci exist.PL PL PL have

B. ci: Shizunai dialect, Horobetsu dialect, Shiranuka dialect

hawki ci. osip-pa ci PL speak PL return-PL

C. pa: Saru dialect, Chitose dialect, Ishikari dialect

mina pa, arki ра laugh PLcome.PL PL

The forms A and B are thought to be related in terms of their origin, but compared to the Sakhalin (a)hci, the use of ci in Hokkaido dialects is quite limited and there are large inter-dialectal differences. On the other hand, the Saru, Chitose, and Ishikari

dialects do not use ci but have developed another form pa in its place. Considered historically, in Hokkaido, the *ci* form can be considered the older form and the *pa* form one that developed in the Saru or Ishikari region and replaced the ci form, see Nakagawa (Chapter 17, this volume).

4.3 Particles

Since the 200-word basic vocabulary used by Hattori and M. Chiri focused on nouns and verbs, the number of cases in which those 200 words were included in actual utterances was quite limited. Compared to them, particles have a much higher frequency of use and, since they are used in every kind of text, they contribute greatly to dialect differences caught by ear. They show a pattern of distribution different from that of the basic vocabulary and illustrate the complexity of dialect categorization.

The following particles are ones that show striking differences across dialects.

Case particles – Allative: un, en, ne, ekota; Juxtapositional: newa Conjunctional particles – Successive: wa, tek; Conditional: ko, kor Continuative: kor, kane, kan; Continuing result: ayne, ahinne Final particles – Imperative: yan, ya; Cohortative: ro, no, rok

4.3.1 Case particles

Allative case particles

As shown in Table 21, the allative case particles take the three forms un, en, and (e)ne, and their distribution does not match any of the other distributions described earlier.

lable	71:	Allative	case	particles.

	un	en	(e)ne
Yakumo	0		
Horobetsu	0		
Chitose	0		
Biratori	0		
Sizunai	0	0	
Urakawa		0	
Tokachi		0	
Shiranuka			0
Kushiro			0
Nemuro			0

Table 21 (continued)

	un	en	(e)ne
Bihoro			0
Asahikawa			0
Nayoro	0		0
Sōya			0
Raychishka (Sakhalin)			0
Shumshu (Kuril)			0

- (4) mac-ihi sapa-ha inkar or un wife-AFF head-AFF place ALL look su or inkar kane i-ki un pot place ALL look and ANTIP-do 'looking at my wife's head and looking at the pot' (Horobetsu: Y. Chiri 2004: 40)
- (5) payekay kor nean nupuri en oman kor or mountain place ALL go.SG then wander and that 'when we went out and tried going toward that mountain' (Tokachi: Sawai 1995: 61)
- (6) ku-cise or **ene** ku-osipi kuni ne na. 1SG.A-house place ALL 1SG.S-return.SG in.order.to COP SFP 'I intend to go back to my house.' (Kushiro: Yae 1997: 73)

Here we can see the possibility of the further division of the eastern dialects into the *en* region (eastern Hidaka and Tokachi) and the *e*(*ne*) region (Kushiro, Bihoro etc.).

Asahikawa is in the (e)ne region, but actually, in this dialect the postpositional adverb *ekota* 'in the direction of' is used to express a directional meaning.

(7) orwa-no Noboribetsu ekota paye-as. then-ADV Noboribetsu ALL go.PL-1PL.EXCL.S 'And then I went to Noboribetsu.' (Asahikawa: Sunazawa 1983: 117)

This *ekota* is a word also found in Chitose, which is in the Ishikari watershed and is in the *un* area, but in Chitose it is overwhelmingly used as a postpositional adverb, and the use as an allative case particle can be considered an independent Asahikawa development. When we also consider the fact that both *ne* and *un* are distributed in Nayoro, which is also in the Ishikari watershed, we can hypothesize that there was a competition between un and ne in this region, and Asahikawa came to use a completely different form, ekota, to mark the allative.

Iuxtapositional case

The juxtapositional case presents several noun phrases in parallel, and in many dialects, this is shown by the form newa.

- (8) ku-ak-i **newa** ku-tures-i 1SG.A-vounger.brother-AFF JXT 1SG.A-vounger.sister-AFF ku-ki. tura ohasirun with house.sitting 1SG.A-do 'I was house-sitting with my younger brother and sister.' (Ishikari: Sunazawa 1983: 62)
- (9) mici newa hapo ekaci **newa** re-n newa ne father IXT mother IXT bov IXT three-person.CLF COP okav-an exit.PL-4.S 'The three of them, father, mother, and boy, were living together.' (Tokachi: Fujimura 2004: 55)
- (10) *retar* katak newa kunne katak sa-p-te. white clew IXT black clew front.place-INTR.PL-CAUS '(Someone) set out a white ball of thread and a black ball of thread.' (Horobetsu: M. Chiri 1937: 84)

However, this particle does not exist in the Saru and Chitose dialects and the same meaning is expressed by simply juxtaposing the noun phrases.

- (11)sokoni nitek or wa sirokane tuki konkane tuki orasitomne. branch place ABL silver elder gold hang.down cup cup 'Hanging from the red elder branch were silver and gold cups.' (Saru)
- (12) *teeta* kane a-unu-hu a-ona-ha okav ruwe somewhat 4.A-mother-AFF 4.A-father-AFF exist.PL INFR.EVID long.ago ne hine COP and 'Long ago I had a mother and a father, and ' (Chitose)

Here, too, we can see characteristics in the Saru and Chitose dialects not found in other dialects.

4.3.2 Conjunctional particles

- **1. Successive:** This refers to lining up the occurrences in the verb phrase in the order that they take place; there are dialects in which this is done using *wa* and *hine* and dialects that additionally use *tek*. In the Horobetsu, Saru, and Chitose dialects, primarily *wa* and *hine* are used and *tek* is overwhelmingly used as an auxiliary verb to show that the event occurred in a light, short time.
- (13) a-tek-ehe un turse tek hine
 4.A-hand-AFF ALL fall momentary and
 '(The cup) fell plop into my hand.'
 (Saru)

In contrast, in dialects like Shizunai, Samani, Tokachi, Kushiro, Shiranuka, and Ishikari, *tek* is frequently used as a conjunctional particle.

- (14) oyuppa-an ki **tek**/ hakketek or ta oyuppa-an wa run.PL-4.S do and scallop place LOC run.PL-4.S and 'I ran, I ran to the place of the scallops' (Shiranuka: M. Tamura et al. 2007: 225)
- (15) *pet oske oma* **tek** *wakka ku na* river inside enter and water drink SGST 'I entered the river and drank the water.' (Samani)

The Sakhalin dialects also have a form *teh* corresponding to the conjunctional particle *tek*, and this can be considered to be an older form that became an auxiliary verb in dialects like Saru, taking the meaning 'do for a short time', leaving showing successive events largely to *wa* and *hine*.

- **2. Conditional:** Ainu has a variety of conjunctional particles expressing conditions, and one of them is *ko*. It is found in the Abuta, Horobetsu, Samani, Kushiro, and Shiranuka dialects.
- (16) Pananpe inkar **ko** Penanpe sino mat kor rusuy kor an.
 Pananpe look then Penanpe very.much wife have DESI while exist.SG
 'When Pananpe looked, Penanpe was very much wanting to have a wife.'
 (Horobetsu: M. Chiri 1937: 120)

(17) ranke kanto/ rikun kanto/ an-oposo ki wa/ downward heaven 4.A-go.through do and heaven upper rik-i-p-an ko/ kani casi/ kani cise/ uororoski upper.place-EP-INTR.PL-4.S then metal fort metal house stand.PL 'When I passed through the lower heaven, through the upper heaven, there were splendid buildings, splendid houses.' (Shiranuka: M. Tamura et al. 2007: 171)

This ko appears as kor in the Tokachi, Ishikari, Saru, and Chitose dialects, taking the same form as the *kor* that means 'while doing'. Accordingly, there are examples for which it is impossible to tell which one is being used from contextual relations.

In the Shizunai dialect, the form *konno* is used in place of *ko*.

(18)yupo utar ka a-kor-e konno upsor-o elder.brother PL even 4.A-have-CAUS then inside.pocket-AFF oma-re enter-CAUS 'Elder brothers received (the acorns) and put them in his pocket, and then . . .' (Shizunai: Okuda 1998: 115–116)

Since this *konno* probably can be understood as being derived from *kor-no*, it can be considered to be part of the kor group. Looking at the forms along the Pacific coast from west to east, we find Horobetsu ko – Saru kor – Shizunai kor(no) – Samani ko – Tokachi *kor* – Kushiro *ko*. Considering the fact that the *kor* regions are surrounded by ko regions, rather than hypothesizing that it was because the kor forms express both successive and conditional conjunction that they were divided into the two forms kor and ko, it would be less problematic to consider ko to be the older form and to hypothesize that it changed to *kor* under attraction from the other conjunctive particle *kor*. Under this hypothesis, in the Shizunai dialect, the adverbializing affix -no was added to *kor* to preserve the distinction from the successive conjunction *kor*.

- **3. Continuative (=progressive) and sustaining:** In many dialects, *kor* is used as the form that shows the continuation of an action, and wa is often used to show that a state is sustained, but several dialects east of Shizunai use kane or kan for the both situations, see Takahashi (Chapter 18, this volume).
- (19) avnu sine/ poro cise as kan an na. Ainu one big house stand.SG while exist.SG SFP 'One big Ainu house was standing (there).' (Ishikari: Ōtsuka and Nakagawa 1990: 45) (Sustained state)

- (20) kam-i ris-pa osur-pa kan i-ki kan wa ироро throw-TR.PL while ANTIP-do while meat-AFF tear-TR.PL and sing kan nunuri emes-u ahinne while mountain climb.up-INTR.SG finally 'While tearing off and tossing (his) meat, and singing, (he) climbed up the mountain.' (Tokachi: Sawai 1995: 59) (Continuation of action)
- **4. Continuing result:** The continuing result is used to show a case in which "as a result of carrying out some action for a fixed span of time, this resulted". In many dialects this is *ayne* but in the Tokachi dialect it is *ahinne*.
- (21) *u-koyki kor hemes-pa* **ayne** *situ ka ta*RECP-attack while climb.up-INTR.PL finally ridge top LOC *hemes-pa p*climb.up-INTR.PL NMLZ

 '(They) went up the mountain fighting along the way and when they reached the ridgeline, . . . '(Saru)
- (22) u-e-neusar ahinne. tane ankes kay akkari kan RECP-about.APPL-talk finally now midnight even over while kotom sir-an iram-an kan appearance-exist.SG apparently think-4.S while '(They) continued (their) talk, thinking it was already past midnight, . . .' (Tokachi: Asai 1985: 207–208)

4.3.3 Final particles

- **1. Imperative:** In many dialects, an imperative directed at a single person is shown using the singular form of the verb without nominative person markers, and an imperative directed at more than one person is shown using the plural form of the verb plus the final particle *yan*. However, in the Ishikari dialect there is a form for imperatives directed at a single person consisting of the singular form of the verb plus the particle *ya*.
- (23) nep ka en-ko-pisi p an ciki en-ko-pisi what even 1SG.O-to.APPL-ask thing exist.SG if 1SG.O-to.APPL-ask yan!

 IMP.POL.PL

 'If you want to ask me something, please ask.'

 (Chitose)

- (24)"beko tope hok wa ku-re va." sekor itak kusu milk buy and drink-CAUS IMP.POL.SG QUOT cow sav because 'Since (someone) said, "buy some milk and make (him/them) drink it," . . . ' (Asahikawa: Sunazawa 1983: 59)
- **2. Cohortative:** To express the meaning of 'let's do (something)', Saru, Chitose, Horobetsu, Yakumo, Asahikawa, Nayoro, and Sōya use ro; Asahikawa, Nayoro, and Obihiro use rok; Urakawa and Samani use no. Although the Tokachi region, including Obihiro, shares many lexical items in common with Urakawa and Samani, on this point they differ.
- (25) pon Okikirmuy sinot-as ro! tiny Okikirmuy play-1PL.EXCL.S COHORT 'Little Okikirmuy, let's play!' (Horobetsu: Y. Chiri 1923: 138)
- (26) ipe-an **rok**! eat-4.S COHORT 'Let's eat!' (Asahikawa: Ōta 2005: 180)
- (27) sao kar. ап-е no! gruel make 4.A-eat COHORT 'Cook the gruel. Let's eat!' (Samani)

5 A linguistic geography analysis

As described in section 2, in studies of dialect division up until now, Hattori started out intending to apply the methodology of glottochronology, building a model of a so-called family tree showing how dialects branched off from the protolanguage. It is clear that the state of differences in dialects cannot be satisfactorily explained by such a model, and Hattori himself, in Hattori and M. Chiri (1960) took up the example of car:par 'mouth' and argued for the possibility of making use of linguistic geography research materials.

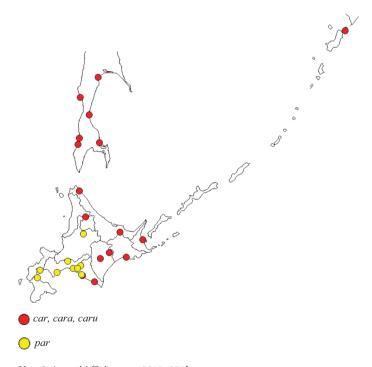
It is thought that the first serious application of the methods of linguistic geography to the Ainu language was Nakagawa (1982). In this work, Nakagawa added to the data of Hattori and M. Chiri (1960) examples from his own survey materials from the Shizunai and Chitose dialects. In addition, he cited materials from Asai (1972) thought to be of the Nemuro dialect from the *Kaga-ke Monjo* and mapped the distribution of the allative case particles *un*, *en*, and *(e)ne*.

Nakagawa (1996) further mapped the distributions of the items 'mouth', 'when', 'tongue', 'root', 'star', 'how, in what manner', 'father', and 'mother', and found such distribution patterns as the Eastern-Western Type, the ABA Type, the Sakhalin Type, the Sakhalin and Kuril Type, the Saru-Chitose Type, the Saru-Chitose and Sakhalin Type, the Eastern-Ezo Type, and the Western-Ezo Type. Since the Sakhalin and Sakhalin and Kuril Types concern forms found in Sakhalin and the Kuril Islands, they are irrelevant to the classification of dialects in Hokkaido and will not be considered here. Below, the other types of distribution will be illustrated with maps prepared by Fukazawa (2017) together with relevant research results.

5.1 Eastern-Western Type and ABA Type

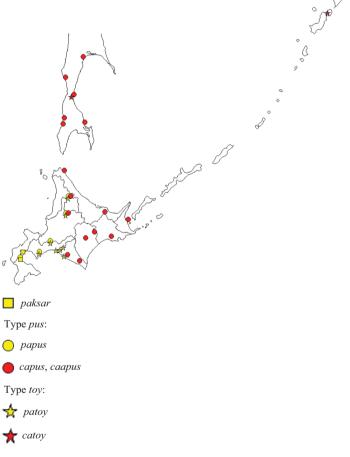
The Eastern-Western Type corresponds to S. Tamura's (1988) northeast and southwest dialect division. Representative of this is the pseudo sound correspondence ca-:pa- discussed in section 3.4. Kindaichi (1911, 1931), Kindaichi and M. Chiri (1936), and M. Chiri (1942) considered this to be a diachronic change from pa- to ca-, and Naert (1958) claimed that both p and c were derived from a single consonant (*Xa). In contrast to these proposals, Kirikae (1994) hypothesized that the Ainu protolanguage already had two words for 'mouth' differing in their meaning in some way and claimed that the majority of words having this sound correspondence were dependent on words related to 'mouth'.

The two forms expressing the meaning 'mouth', car and par are considered to be formed from ca/pa plus or 'inside (of)' (cf. Nakagawa 1996: 7; Kirikae 1994: 117). Map 2 shows the distribution of the forms for 'mouth'.



Map 2: 'mouth' (Fukazawa 2017: 234).

Map 3 shows the dialect distribution of words for 'lip'. The stems *ca*- and *pa*- are also used in the forms for 'lip', and, because they are compounded with two types of nouns, four types of forms can be recognized: capus (caapus in Sakhalin), papus, patoy, and catoy (chātoi on Shumshu Island in the northern Kurils (Torii 1903: 67). These can be analyzed as forms consisting of ca-/pa- 'mouth (stem)' with pus 'head (of grain, etc.)' or toy 'land, field' added, and all can be considered compounds created as metaphors expressing the lip's appearance. Asahikawa and Nayoro have the three forms capus, papus, and catoy, but differences in their meanings and use are unclear. According to Nakagawa (1995: 323), in Chitose, the two forms papus and patoy are used differentially with the former meaning 'a part of the mouth that sticks out' and the latter 'the whole of the lips'.

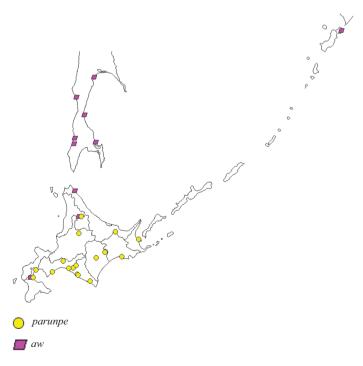


Map 3: 'lip' (Fukazawa 2017: 236).

As Kirikae points out, almost all the words showing the *ca*-:*pa*- correspondence can be explained as having undergone a metonymic or metaphoric semantic extension. In particular, semantic extensions observed include "linguistic acts" related to language use or language ability, "eating acts" related to appetite, flavor, or perceptions of food texture, "emotional expressions" related to the shape of the lips, and cases of anthropomorphic uses such as 'entrance, edge, brim'. In addition, there is a restriction such that the correspondence is not found with the vowels *e*, *i*, *o*, or *u*, and it cannot be said to be a phonological correspondence in the true sense. However, be that as it may, there are at least the following four problems that need to be considered,

- A word meaning 'tongue' parunpe (< par 'mouth', un 'be in', pe 'thing') uses paeven in ca- regions, and the word carunpe does not exist (Hattori 1964, etc.)
- (b) On the other hand, even in pa- regions, the idiom sanca or ta mina kane (< san 'forward', ca 'mouth', or 'place', ta 'LOC', mina 'laugh', kane 'while') meaning 'to have a smile on one's lips' is used.
- (c) There exist a few words for which it is difficult to clearly conclude that they are semantic extensions of 'mouth'. Examples include can:pan 'thin' and cas:pas 'run' (Fukazawa 2014).
- (d) In addition to 'mouth', *pa* is also used as a stem meaning 'head' (Fukazawa 2014).

The form for 'tongue' in (a) is one that shows an ABA distribution and was classified in Nakagawa (1996) as belonging to the ABA Type. In an ABA distribution, regions using



Map 4: 'tongue' (Fukazawa 2017: 237).

the B form are surrounded by regions using the A form, and in linguistic geography, the A form is considered to be the older form. Since, in Map 4 showing the distribution of 'tongue', there is an ABA distribution with aw being the A form and parunpe the B form, Hattori (1964) pointed out that the aw form is older than the parunpe form and considered the *parunpe* form to have originated in the *par* region and spread to the *car* region. This has become an influential theory and is picked up in Nakagawa (1996).

The fact that there are examples of *ca*- being used in *pa*- regions like that in (b) is evidence that ca-, which is distributed toward the eastern regions, is older than pa-, which is distributed to the western regions (Nakagawa 1996). On the other hand, regarding the fact that there are lexical items like those in (c) that cannot easily be explained as semantic extensions of 'mouth', it can be thought that there is a tendency for some degree of ambiguity to develop in the boundaries where ca-comes to be used even in pa- regions, and ca- and pa- become tightly bound to certain meanings (Fukazawa 2014, 2017).

Furthermore, it is argued in Fukazawa (2014, 2017), taking into account the fact that pa- is also used as a stem meaning 'head' as in (d), that this is not a case of diachronic phonological change, but rather ca- and pa- existed as separate morphemes to begin with. This is a continuation of Kirikae's (1994) explanation, but it does not directly negate the directionality of a change from ca- to pa-. In the end, might it not be thought that at some stage in history, the regional group that chose ca- as the stem meaning 'mouth' and another regional group that chose pa-were divided east and west and in the western region there might be a replacement of ca- by pa- like the example of parunpe in (a).

One matter that may be important when considering diachronic change is place names. Kirikae (1994) extracted place names with *ca-* and *pa-* from Nagata (1909) and sorted their numbers by region. Table 22 shows the numbers from Kirikae (1994: 109-110).

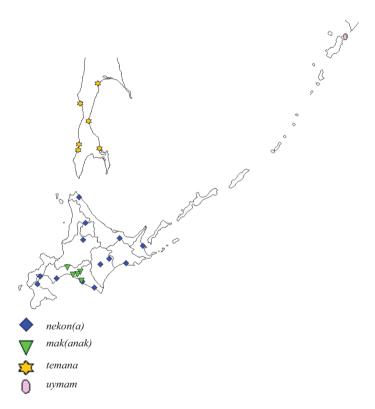
Tab	le 22:	Ca-	and	pa in	pla	ace	names.

	par	car
Oshima	1	0
Shiribeshi	1	1
Iburi	3	0
Eastern Hidaka	1	3
Tokachi	1	5
Kitami	5	7
Kushiro	0	9
Nemuro	0	4
Ishikari	11	0
Teshio	2	0

Kitami and Tokachi are regions in which car is used, but place names are found in forms that use par. Shiribeshi is considered to be an area in which par is used, but car is found in place names. Attention should be paid to the fact that place names with par are overwhelmingly common in Ishikari with 11 such names, and names with car are overwhelmingly common in Nemuro and Kushiro with a joint total of 13, and it is possible that these regions influenced the choice of pa- or ca- in surrounding areas, leading to the Eastern-Western distribution.

5.2 Saru-Chitose Type and Saru-Chitose and Sakhalin Type

The distribution of the Saru-Chitose Type parallels the grammatical uniqueness described in section 4. Map 5 shows the typical Saru-Chitose Type of distribution.



Map 5: 'how, in what manner' (Fukazawa 2017: 205).

There are several forms of interrogative words that appear only in the Saru, Chitose, and Mukawa dialects (Table 23), while the terms for 'how many,' 'when' and 'which' show an Eastern-Western distribution (Table 24).

Table 23: Interrogatives and indefinites.

Dialects	Saru-Chitose Group	Most Hokkaido		
Forms		Dialects		
'who'	hunna	nen		
'somebody; anybody'	nen (ka/kay)			
'what'	hemanta/h(i)nta	пер		
'something; anything'	nep (ka/kay)			
'why'	hemanta/h(i)nta kusu	nep kusu		
'for some reason(s)'	nep kusu			
'at-where'	hunak/hinak ta	ney/nei ta		
'at-somewhere; at-anywhere'	ney/nei ta (ka/kay)			
'to-where'	hunak/hinak un	ney/nei un		
		ney/ne ne		
		enon		
'to-somewhere; to-anywhere'	ney/nei un (ka/kay)			
		ney/ne ne (ka)		
		enon (ka)		
'from-where'	hunak/hinak wa	ney/nei wa		
		onon		
'from-somewhere; from-anywhere'	ney/nei wa (ka/kay)			
'how'	mak/makak/makanak	nekon		
'somehow; anyhow'	neun (ka)	nekon (ka/kay)		

Table 24: Interrogatives and indefinites.

Dialects Forms	Western	Eastern		
'how many'	hempak(-pe)	nempak(-pe)		
'some; a number of'	hempak(-pe) (ka/kay)	nempak(-pe) (ka/kay)		
'when'	hempara	nempara		
'sometime; anytime'	hempara (ka)	nempara (ka/kay)		
'which; which'	inan; inan(-pe/-ike)	inkian/inkean; inkian/inkean(-pe/-ike)		
		nean; nean(-pe/-ike)		
'some (of these); some one (of these)'	inan (ka); inan(-pe/- ike) (ka)	inkian/inkean (ka/kay); inkian/inkean(-pe/-ike) (ka/kay)		
		nean (ka); nean(-pe/-ike) (ka)		

If we consider Haspelmath's (2013) categorization of indefinite pronouns, in the Saru-Chitose group the indefinite nouns are nep 'something' and nen 'somebody' contrasting with the interrogatives hemanta 'what' and hunna 'who'. Since both nep and nen can be interpreted as being composed of the stem ne and the classifiers used to designate things -p(e) 'thing' and persons -n 'person', it is possible to regard them as being "generic-noun-based indefinites". In contrast to this, in the majority of other Hokkaido Ainu dialects, interrogatives and indefinites are the same and, although it is not obligatory, when used as indefinites they may appear with ka(y) 'also', as in nep ka(y), putting them in the "interrogative-based indefinites" category.⁸

Against Haspelmath's (2013) idea of "interrogative-based indefinites", Bhat (2000) takes the position that both interrogative nouns and indefinite nouns can be thought as having in common the meaning of showing "a lack of knowledge by the speaker concerning some specified element" and thus there is no need to "derive" indefinites from interrogatives (rather, indefinite nouns are used interrogatively). For example, in Mandarin Chinese, the same pronouns are used for both interrogatives and indefinites, but they are distinguished by the use of an intonation showing interrogation (Bhat 2000: 379). In Lakota the same forms of pronouns are used for interrogatives and indefinites, but a final particle showing interrogation is required in a wh-question (Bhat 2000: 380).

In the majority of Hokkaido Ainu dialects, interrogatives and indefinites have the same form, but the interrogative meaning can be shown by immediately following the form with the focus adverbial particle ta. The ta in the Saru-Chitose interrogative *hemanta* can be considered both syntactically and functionally to have the same source as the focus adverbial particle ta. The ta in hemanta has become fossilized after being suffixed and a redundant structure with the focus particle ta added is possible (e.g., hemanta ta? 'what?').

Nakagawa (1996: 80) claims regarding the forms hempara/nempara 'when' that the hem and ne have an ABA distribution and that the nem of nempara, which would otherwise be difficult to explain, can be explained by saying that the h of henpara changed to *n* by analogy. This also suggests at the same time that Hokkaido Ainu dialects have long had an interrogative stem of the form hVm. (Map 6). That is, originally,

⁸ In the Sakhalin dialects, the interrogatives are hemata 'what' and naata 'who' and the indefinites neeranpe (ka) 'something' and naata (ka) 'somebody', which can be thought of as forming a system mixing "interrogative-based indefinites" with "generic-noun-based indefinites", that is, what Haspelmath (2013) termed "mixed indefinites".

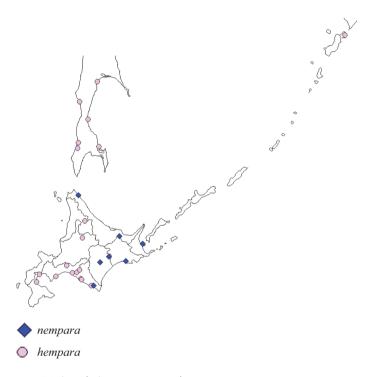
⁹ The forms nem ne and nem ta have been reported for the Shiranuka dialect, but it is hypothesized here that these are examples in which h has been replaced by n. The following is an example M. Tamura (2010) offers as corresponding to the Saru dialect form hem siyeye 'what disease'.

e-oman oka/ e-kor tures-i/ u nem ta siyeye/ u ki ayne/

²SG.S-go.SG after/ 2SG.A-have younger.sister/wife-AFF/ RTM what EMPH disease/ RTM do finally 'After you went, your wife came down with some disease, and as a result, . . .'

⁽Shiranuka: M. Tamura 2010: 42)

the stem showing interrogation was hVm or hVn and that showing indefiniteness was *ne*, and the Saru-Chitose group can be viewed as a dialect that has retained both stems. Most Hokkaido Ainu dialects developed a distinction between interrogative and indefinite using the adverbial particles ta and ka(y), respectively, and perhaps, since ne was also used as an interrogative stem, the indefinite nep 'what' also came to bear the meaning and function of an interrogative pronoun. Accordingly, it can be thought that interrogatives in the majority of Hokkaido Ainu dialects have indefinites as their source.



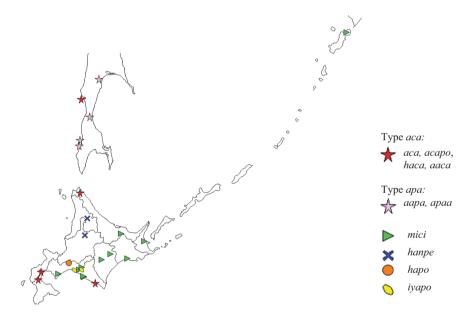
Map 6: 'when' (Fukazawa 2017: 209).

The Saru-Chitose and Sakhalin Type refers to a distribution in which the forms from the Saru-Chitose group are also found in Sakhalin. For example, the interrogative 'what' also takes the form hemata in Sakhalin, so the Saru, Chitose, Mukawa form appears in a distantly separated region. This is the Saru-Chitose and Sakhalin Type and the person marker eci-meaning 'I (give) to you' discussed in section 4 that appears only as a prefix is also of this type. It is hard to believe that such examples developed separately, and they present important questions when contemplating the historical relations of Ainu dialects.

5.3 Pacific coast pattern and Ishikari watershed pattern

The terms Eastern-Ezo Type and Western-Ezo Type used in Nakagawa (1996) were classifications based on the earlier Eastern-Ezo and Western-Ezo division. The terms Pacific Coast Pattern and Ishikari Watershed Pattern may be more appropriate. For example, it is thought that the terms *nishi* 'west' and *higashi* 'east' referring to dialects in early modern sources were meant to refer to Nishi-Ezo and Higashi-Ezo.¹⁰ Since there are not many materials concerning Nishi-Ezo even now, it is comparatively difficult to judge, but at least the fact that the Pacific Coast dialects formed a *higashi* group can be discerned from eighteenth and nineteenth century materials.

As an example of the Pacific Coast Pattern, the distribution of forms meaning 'father' is shown in Map 7. The form *mici* is found in a distribution spreading all along the Pacific Coast from the Kurils on the east to Horobetsu on the west, spanning eastwest boundaries.



Map 7: 'father' (Fukazawa 2017: 185).

The form *iyapo* is isolated around the mouth of the Saru River, but possibly related to this fact is a study of Ainu place names by Hidezō Yamada, in which he proposed the idea of a "Pacific Tribe" (Yamada 1982: 305). Yamada analyzed place names expressing 'east' and 'west' and found that the place names koyka and koypok are distributed

¹⁰ This is according to Satō (1995: 35). However, depending on the materials, there appear to be some for which this cannot be stated definitely, for example Ezogo by Takeshirō Matsuura (Satō 1990: 173).

along the Pacific Coast only and found that that distribution is interrupted between Western Hidaka and Eastern Iburi. As an explanation, Yamada argued that people with the custom of naming places kovka and kovpok originally lived along the whole of the Pacific Coast (which he termed the Pacific Tribe), but a people, the sum un kur, who did not have such a custom in naming places advanced into a wedge-shaped territory between Western Hidaka and Eastern Iburi and wiped out any koyka place names. Given that there is quite a difference in time between the naming of places and the vocabulary used in modern times, the two cannot simply be treated in the same way, but it is clear that the people referred to as *sum un kur* here were the ancestors of the Saru dialect speakers and there is a large possibility that this is another piece of evidence showing the different qualities of the Saru dialect.

The reason that introducing place names into research on Ainu dialects in this way is important is that, as described in section 2.4, materials from after the Meiji period dealing with the Sea of Okhotsk and the Sea of Japan coasts are completely insufficient. Place name material, on the other hand, is widely available from across Hokkaido and, in order to revise and strengthen the results of analyzing the modern language, which is highly skewed toward the Pacific Coast, reference to place names can be expected to become important in the future.

6 Concluding remarks

This chapter has attempted to offer a comprehensive categorization of Ainu dialects using indicators from vocabulary, phonetics, and morphosyntax, together with indicators of the geographical distribution of forms from a linguistics geography perspective.

For categorization by vocabulary, there are Hattori and M. Chiri (1960) and Asai (1974), but, while basing her analysis on these, S. Tamura (1988) added a more comprehensive judgement and proposed to divide Hokkaido dialects broadly into northeast and southwest, with more detailed subdivisions as shown below.

Northeast dialects Northern (Sōya) Central (Teshio, Ishikari) Eastern (Tokachi, Kitami, Kushiro, Eastern Hidaka) Southwest dialects Southern (Western Hidaka, Eastern Iburi) Western (Shiribeshi)

This division corresponds with, for example, the distribution of the elision of word-initial /h/ and the pseudo sound correspondence ca-/pa- as well as, for example, the distribution of a wide range of Ainu culture, such as the names of semi-divinities like Okikurmi and Samayekur and the names of genres of oral literature. However, the phonology and syntax, as well as the distributions of individual forms, present aspects different from this. In particular, the Saru dialect, which S. Tamura includes in Western Hidaka, and the Chitose dialect, which is thought to belong to Eastern Iburi, (part of the Ishikari Subprefectural Bureau under the current administrative districting) show a variety of differences from other dialects, including their person-marking system, the morphology of interrogatives and the existence verb, the lack of a juxtapositional particle, and the existence of a singular-plural distinction in the fourth person, making it clear that the classification of dialects ought to be regarded as a multi-layered endeavor.

Appendix

Below is a collection of descriptions of geographical regions, of the state of documentation, of the characteristics of dialects, and of major reference works concerning Hokkaido and Kuril Ainu dialects on which research has been conducted, arranged by the old administrative districts¹¹ of the early Meiji period shown in Map 8, when Ainu was still spoken as a daily language. Before moving on to the individual districts, general works containing such material as vocabulary and texts from multiple dialects are introduced.

Dictionaries and word lists

- Chiri, Mashiho. 1953. Bunrui Ainugo jiten: Shokubutu-hen, dobutsu-hen [Categorical Ainu dictionary: Plants and animals]. Reprinted in 1976, Chiri Mashiho chosakushū bekkan 1 [Selected writings of Chiri Mashiho extra volume 1]. Tokyo: Heibonsha.
- Chiri, Mashiho. 1954. Bunrui Ainugo jiten: Ningen-hen [Categorical Ainu dictionary: People]. Reprinted in 1976, Chiri Mashiho chosakushū bekkan 2 [Selected writings of Chiri Mashiho extra volume 2]. Tokyo: Heibonsha.
- Chiri, Mashiho. 1956. Chimei Ainugo shōjiten [A concise dictionary of Ainu place names]. Reprinted in 1973, Chiri Mashiho chosakushū 3 [Selected writings of Chiri Mashiho 3]. Tokyo: Heibonsha. Also reprinted in 1984. Sapporo: Hokkaido Shuppan Kikaku Center.
- Hattori, Shirō (ed.). 1964. Ainugo hōgen jiten [An Ainu dialect dictionary]. Tokyo: Iwanami Shoten. Yoshida, Iwao. 1989. Hokkaido Ainu hōqen qoi shūsei: Tokachi, Kushiro, Hidaka-Saru chihō [A collection of Hokkaido Ainu dialect vocabulary words: The Tokachi, Kushiro, Hidaka-Saru regions]. Tokyo: Shōgakukan. (Texts with CD and tape recordings.)
- Nihon Hōsō Kyōkai (ed.). 1965. *Ainu dentō onqaku* [Ainu traditional music]. Tokyo: Nihon Hōsō Kyōkai.

¹¹ In 1869, when the office of the Hokkaido Development Commissioner was established, the name was changed from Ezochi to Hokkaido and the land was divided into 11 kuni (states) and 86 gun (counties). This system continued until 1882, when it was changed to the three ken (prefectures) of Hakodate, Sapporo, and Nemuro and the Hokkaido Works Administration Bureau.



Map 8: Early Meiji administrative districts.

These are works collecting vocabulary and texts, as well as other information from multiple dialects and are all valuable references for research on dialects. However, even in cases where the names of the dialects are included, only Hattori (1964) provides information on the speakers, and more analysis of the others is needed. Also, caution is necessary when using the *Dōbutsu-hen* in Chiri (1953) and Yoshida (1989) as they were compiled posthumously from manuscripts left by the authors. With the exception of Hattori (1964), this chapter will not refer to these works in the descriptions of the old administrative districts below.

In addition, among the records of Ainu dialects, reports published by the Hokkaido Board of Education Hokkaido Government Office are especially valuable today as Ainu dialect materials. A number of scholars have been involved in the production of each and the various series are usually identified by the color of their bindings.

Green Series: Collections of oral literature from various regions of Hokkaido 1988–2004. Ainu mukei minzoku bunkazai kiroku kankō series [Publication series: Records of intangible folkloric cultural property of the Aynul

Ainu minwa. [FOLKTALES OF THE AYNU].

Oyna (Kamigami no monogatari) [OYNA (Tales of gods)], vol. 1–3.

Tuytak (Mukashigatari) [TUYTAK (Old tales)], vol.1–5.

Ainu no kurashi to kotoba [Folktales of the Ainu and life and language of the Ainu], vol. 1-8.

The following series can be considered predecessors to the above.

Association for the Transmission and Maintenance of Ainu Intangible Culture. (eds.). 1981–1986. *Ainu mukei bunkazai (no) kiroku* [Ainu life in oral tradition].

Kamigami no monogatari [Stories of gods].

Eiyū no monogatari [Stories of men].

Hitobito no monogatari [Fables of men].

Ainu no minwa [Ainu folklore], vol. 1–2.

Katari no naka no seikatsushi [Ainu life and custom].

b) Blue Series: Works that record and preserve data regarding Ainu society, religion, and tangible cultural elements categorized by content. Since the survey categories are fixed, it is possible to compare across regions, making this useful material for looking at Ainu basic vocabulary items, such as names for family relations or names of body parts. Publication continues after 1999, although the format changes from volume 19, but it is only up to volume 18 that they form a single series identifiable by their blue bindings.

> 1982–1999. Ainu minzoku bunkazai chōsa hōkokusho [Urgent field research on ethnography of the Ainul, vol. 1–18.

Red Series: Series of field notes and transcriptions of audio recordings

1982-1986. Chiri Yukie note [Chiri Yukie's notebook], vol. 1-5. (Horobetsu dialect)

1987–1991. Kubodera Itsuhiko note [Ainu epic Kutune Shirka transcribed by Itsuhiko Kubodera], vol. 1–5. (Saru dialect)

1993–2001. Yae Kurō no denshō [Narratives by Kuro Yae], vol. 1–9. (Kushiro dialect)

2002–2007. Chiri Mashiho field note [Mashiho Chiri's field notes on the Ainu language], vol. 1–7.

Of these, as indicated in parentheses, the three series between 1982 and 2001 are each records of a single dialect. Since the others contain texts from dialects from a number of regions, they will not be referred to below. Also, works introduced below will not appear in the usual alphabetical order by author's name, but will be introduced in the order of the year of publication. This treatment is adopted with the view that the year of publication roughly coincides with the date of recording. This is not an absolute standard as, obviously, for some materials some time may have passed between recording and eventual publication.

Hidaka-no Kuni

Hidaka-no-kuni includes the Saru, Niikappu, Shizunai, Mitsuishi, Urakawa, and Samani dialects.

Saru dialects

Location: Saru-gun in the Saru River watershed (now the towns of Biratori and Hidaka). There are areas with sub-dialects like Fukumitsu, Shinbiraka, Shiunkotsu, Biratori, Nibutani, Penakori, Nioi, and Nukibetsu.

State of documentation: The number of speakers is large, and many sub-dialects have been documented along the length of the Saru River. Most intensively studied since the Meiji period, producing an abundance of grammars, dictionaries, and texts. Hattori and Chiri (1960) investigated the Biratori and Fukumitsu regions along the lower reaches of the Saru River and Nukibetsu along the upper reaches. Hattori (1964) listed words in Fukumitsu as representative of the Saru dialect.

Dialect characteristics: Of all the Hokkaido dialects, Saru and Chitose both show differences from other dialects in their lexicon and grammatical behavior. Within the Saru dialect, there are differences in lexical items, particularly in phonology, but they all share unusual person marking, especially in person affixes.

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Niikappu dialect

Location: Village of Niikappu in Niikappu-gun (now town of Niikappu) in the watershed of the Niikappu River.

State of documentation: Niikappu was a survey site for Hattori and Chiri (1960) but was not included in Hattori (1964). Some oral literature texts survive.

Dialect characteristics: Geographically located between the Saru and Shizunai regions and shares lexical dialect characteristics with those dialects.

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Shizunai dialect

Location: Village of Shizunai in Shizunai-gun in the Shizunai River watershed (after becoming town of Shizunai, now town of Shin-hidaka.)

State of documentation: Studies of the Shizunai dialect have rapidly progressed since the 1970s, and, although the number of speakers is limited compared to Saru, there are an abundance of texts remaining and word lists have been compiled. The Western-language grammar Refsing (1986) appeared early and Shizunai is a dialect often referred to outside of Japan.

Dialect characteristics: Tamura (1988) says that the Shizunai dialect lies on the boundary that divides Hidaka into eastern and western regions, and it shows characteristics of both. Also, because of this environment, differences in grammar, for instance, can be observed between speakers and comparative research on the Shizunai dialect as a whole will be a problem. Grammatical descriptions are primarily based on the speech of Suteno Orita. The Shizunai dialect as a whole has characteristics, such as allative case particles, question words, and conjunctions, that are close to the Tokachi dialect and the farther east one looks, the more the lexicon also approaches that of the Tokachi dialect. A comparatively large number of texts by Tatsujirō Kuzuno and Haru Torao (Sonoura) exist, but they have characteristics different from those from Suteo Orita.

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Mitsuishi dialect

Location: Village of Mitsuishi in Mitsuishi-gun (after becoming the town of Mitsuishi, now the town of Shin-Hidaka).

State of documentation: Documentation of the Mitsuishi dialect was conducted by the Hokkaido Board of Education.

Dialect characteristics: Details are unknown.

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Urakawa dialect

Location: Village of Urakawa in Urakawa-gun (now town of Urakawa).

State of documentation: A very few texts and word lists exist. Lexical studies have been conducted from 2000 until recent years.

Dialect characteristics: Few details are known, but it has been confirmed that, like the neighboring Samani dialect, the Urakawa dialect is unaccented.

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Samani dialect

Location: Village of Samani in Samani-gun (now town of Samani).

State of documentation: Samani was a survey site for Hattori and Chiri (1960). Although limited in quantity, there are audio recordings of oral literature, including surveys of lexical items, by Yumi Saruma (Okamoto).

Dialect characteristics: Samani is known as an unaccented dialect. According to Hattori and Chiri (1960) tu appears as cu, but this could be considered the idiolect of the speaker.

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Iburi-no Kuni

The following dialects belong to the Iburi-no-kuni dialects: Chitose, Mukawa, Hobetsu, Shiraoi, Horobetsu, Usu, Abuta, Oshamambe, and Yakumo.

Chitose dialect

Location: Chitose-gun in the Chitose River watershed, a tributary of the Ishikari River (Now city of Chitose).

State of documentation: There are some older records, but it was from the 1980s on that serious studies of the Chitose dialect began. Grammars and dictionaries were written and, while not in the quantity of the Saru and Horobetsu dialects, a good number of texts were also recorded.

Dialect characteristics: At the basic vocabulary level, there are some differences from the Saru dialect, but the dialect shares grammatical characteristics with Saru and can be thought to have a close historical relation with the Saru dialect.

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Nakagawa, Hiroshi. 2001. Tumunci Pencay, Okokko Pencay – Ainugo Chitose hōgen jojishi tekisuto [Tumunci Pencay, Okokko Pencay: Text of heroic epic in Chitose dialect of Ainu]. (Told by Nabe Shirasawa). In Sukeyuki Miura (ed.), Jojishi no gakusai teki kenkyū [Academic studies of epic poetry]. Heisei 9 nendo – Heisei 12 nendo kagaku kenkyūhi hojokin (kiban kenkyū (C)(2)) kenkyū seika hōkokusho.

Texts with CD or tape audio recordings

Katayama, Tatsumine (ed.). 1995. Kamuyyukar. Tokyo: Katayama Gengo Bunka Kenkyūjo.

Mukawa dialect

Location; Shiomi and Kasuga in the Mukawa watershed in Yūfutsu-gun (after merger with the town of Hobetsu, now the town of Mukawa).

State of documentation: Although there are not so many texts collected, it is an area where surveys of vocabulary have been frequently conducted since 2000.

Dialect characteristics: Very close in vocabulary to Saru and Chitose, but subtle phonological differences have been observed.

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Shiraoi Dialect

Location: Village of Shiraoi in Shiraoi-gun (now town of Shiraoi).

State of documentation: Some texts and reports are scattered here and there, and collection and production of vocabulary lists is being conducted by the local Ainu language circle.

Dialect characteristics: Although not many details are known, it can be surmised that it was close in form to the geographically proximate Horobetsu dialect.

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Shiraoi Tanosiku-yasashii Ainugo Kyōshitsu (ed.). 2012. Ainugo Shiraoi hōgen jiten [Dictionary of the Shiraoi dialect of Ainu]. Shiraoi: Private edition.

Shiraoi Tanosiku-yasashii Ainugo Kyōshitsu. (ed.). 2019. Moritake Takeichi uepeker no kenkyū [Study of the uepeker by Takeichi Moritake]. Shiraoi: Private edition.

Reports

Mitsuoka, Shin'ichi. 2003. *Ainu no ashiato* [Ainu traces]. 9th edition. Shiraoi: Ainu Museum.

Horobetsu Dialect

Location: Horobetsu-gun (Now city of Noboribetsu).

State of documentation: The next best documented dialect after Saru. Grammars were written early on and the number of texts recorded is comparable to that of the Saru dialect. However, most of the materials surviving today are based on the speech of an aunt and niece pair of speakers, and native speakers of the dialect passed away early.

Dialect characteristics: In basic vocabulary, the dialect shows characteristics extremely close to the Saru and Chitose dialects, but when one turns one's eyes to other aspects, there are differences. See section 4 for details.

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Usu dialect

Location: The area of Usu-gun surrounding Mount Usu. Adjacent to the town of Tōya-ko.

State of documentation: It was a survey site for the Hokkaido Board of Education, but not much is known. There is an old Ainu language document called Nenbutsushōnin Kobikiuta at the Zenkōji temple near Mount Usu.

Dialect characteristics: Details are not known.

Abuta Dialect

Location: In the town of Tōya-ko in Abuta-gun.

State of documentation: In recent years audio recordings of the speech of Taneranke Tōshima were found at the Ryōshōji Temple in Abuta-town, and description of the dialect is proceeding based on these recordings. They are extremely limited as linguistic materials but are an unusual example in that the audio is available.

Dialect characteristics: The grammatical characteristics of this region are described in Satō (2008). According to this source, the form expressing the continuation of a result wa okay can appear after the verb of existence okay and also after the form expressing the continuation of an action kor okay. These are examples that are not much known in other dialects.

Texts

Shiga, Setsuko.1994. Tōshima Tane no denshō – Ryōshōji Ainugo onsei shiryō [The handing by Mrs. Toshima Tane - Ainu Recording Collection of Ryosho Temple]. Bulletin of the Ainu Museum 4. 1-48. Shiraoi: Ainu Museum.

Satō, Tomomi. 2008. Date chihō no Ainugo hōgen no bunpōteki tokuchō [Some linguistic properties of the Date dialect of Ainu]. Bulletin of the Hokkaido Ainu Culture Research Center 14. 1-54. Sapporo: The Hokkaido Ainu Culture Research Center.

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Oshamambe dialect

Location: Village of Oshamambe in Yamakoshi-gun (now town of Oshamambe).

State of documentation: Oshamambe was a survey site for Hattori and Chiri (1960). A text from Rikiya Shiba has been reported by Mashiho Chiri. A very few audio recordings also exist.

Dialect characteristics: The accent peak is known to move one syllable later in a word compared to the Saru dialect.

Yakumo dialect

Location: Village of Yakumo in Yamakoshi-gun (now town of Yakumo).

State of documentation: Yakumo was a survey site for Hattori (1964), but there are almost no surviving texts.

Dialect characteristics: The accent peak is known to move one syllable later in a word compared to the Saru dialect. There are many phonetic differences from other dialects. (See section 3.)

Texts and reports

Ōva. Kvōsuke and Tetsuhito Ōno. 2013. Shiritsu Hakodate Hakubutukan shozō "Shiiku Collection": Yakumo Ainu no minzoku shiryō to Ainugo onsei ["Shiiku Collection" of Hakodate City Museum: Ethnological materials of the Yakumo Ainu and audio recordings of their language]. Bulletin of the Hokkaido Ainu Culture Research Center 19. 33-73. Sapporo: The Hokkaido Ainu Culture Research Center.

Oshima-no Kuni

Since this region was the earliest to be inhabited by the Japanese, the Ainu language survives only in place names. However, since Oshamambe and Yakumo in Iburi-nokuni later came to be called Oshima by the Oshima Subprefecture Office and the Oshima Subprefectural Bureau, these two dialects are also known as the Oshima dialect.

Shiribeshi-no Kuni

Shiribeshi dialect

Location: The Sea of Japan coastal region designated as Shiribeshi-no-kuni in the Meiji period.

State of documentation: This is an area into which many Japanese migrated at an early stage and many old reference materials for Otaru, Takashima, Yoichi, Shakotan, and Futoro have been found. Although there are no audio materials, comparative analyses are progressing. As research on old references on the Ainu language develops, it can be anticipated that little by little more will become clear.

Dialect characteristics: Concerning the vocabulary in the Otaru old reference work Ezokotoba Irohabiki, Satō (1995) says regarding personal pronouns, "the closest dialect is the Chitose dialect and next would be the Yakumo and Horobetsu dialects (p. 27)", and concerning basic vocabulary as well it is clear there is a high degree of matching with dialects in the southwest part.

Takasaki, Shinkuro. 1808. Nishi Ezochi Takashima nikki [Diary from Takashima in Western Ezochi]. Kawabata, Yoshihira (ed.). 1975. Ezo Nishi-basho Ainugo jiten: Yoichi onbasho Aino kotoba [Dictionary of Ainu in western Ezo: Ainu language in Yoichi]. Yoichi: Yoichi Kyōdo Kenkyūkai. Satō, Toshio. 1976. Iroha banzuke Aino kotoba [Ainu vocabulary in iroha order]. Hokkaidō no Bunka

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Nozaki, Hiroko. 2006. Ezo kotobashū no honkoku [Reprint of "Collection of Ezo words"]. Bulletin of the Otaru Museum 19. 45-64.

Ishikari-no Kuni

The Ishikari dialect is so named because it is found in the Ishikari River watershed region; caution is necessary as this region is not the area called Ishikari today.¹² In today's administrative districting, the region where the Ishikari dialect is found is called Kamikawa.

Ishikari dialect

Location: The Ishikari River watershed region that constituted Ishikari-no-kuni; concretely, it refers to the dialect of such places as Asahikawa in Kamikawa-gun and Uryū of Sorachi-gun. The majority of materials were collected in Asahikawa without regard to the birthplace of the speakers, and the term Asahikawa dialect is sometimes used to mean the same as Ishikari dialect. There are some who think that, in the face of this, the speech of Uryū should be called the Sorachi dialect.

State of documentation: Ishikari was a survey site for Hattori and Chiri (1960) and for Hattori (1964). The number of speakers recorded is second only to the Saru dialect, and production of grammatical descriptions and dictionaries is proceeding.

Dialect characteristics: Located in the central region of Hokkaido, various dialect characteristics are shared in part with other dialects. There are many lexical matches with the Nayoro dialect.

¹² Little is known about the language of the area around the City of Sapporo that is called "Ishikari" in today's administrative districting.

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Teshio-no Kuni

There is only the Nayoro dialect, but, like Asahikawa, it is called Kamikawa, and dialectally as well it is known to show extremely close characteristics.

Navoro dialect

Location: The watershed of the Navoro River, a tributary of the Teshio River (now the city of Nayoro).

State of documentation: Survey site for Hattori and Chiri (1960) and Hattori (1964). Vocabulary from Isokichi Kitakaze and a few example sentences.

Dialect characteristics: Shows lexical characteristics extremely close to the Ishikari dialect.

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Kitami-no Kuni

With only a few records of the Sōya and Abashiri dialects, almost nothing is known about the Ainu language of Kitami-no-kuni facing the Sea of Okhotsk.

Sōya dialect

Location: Sōya-gun (later Sōya Subprefecture Office, now Sōya Subprefectural Bureau). Located at the northernmost part of Hokkaido.

State of documentation: Survey site for Hattori and Chiri (1960) and Hattori (1964). Only records are of the speech of Ben (Hatankoima) Kashiwagi. The existence of texts with audio materials has been confirmed, but they are almost never open to the public.

Dialect characteristics: The most striking characteristic is the fact that the dialect shows similarities in its basic vocabulary to Sakhalin dialects, but overall it is grouped with the Ainu language of eastern Hokkaido. There are many phonetic characteristics differing from other dialects. (See section 3.)

Texts

Tezuka, Yoritaka (ed.). 2008. Ainuqo Sōya hōqen shiryō: Ainuqoqaku kenkyū shiryō [Ainu Sōya dialect materials: Ainu linguistic research materials] 2. Asahikawa: Hokkaido University of Education.

Abashiri dialect

Location: Formerly the Abashiri Subprefecture Office, now the Okhotsk General Subprefectural Bureau. Located along the coast of the Sea of Okhotsk.

State of documentation: There are early Meiji materials from Notoya Enkichi, who was a guard at Monbetsu, but it is uncertain to what degree they reflect the Abashiri dialect. As modern Ainu language materials, only a few vocabulary words remain.

Dialect characteristics: There is little information about the dialects of the region along the coast of the Sea of Okhotsk, and it is quite difficult to extract dialect characteristics in comparison with other dialects.

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Kushiro-no Kuni

Kushiro-no-kuni includes the Bihoro, Kushiro, and Shiranuka dialects. Bihoro was originally included in Kushiro-no-kuni but was later transferred to Kitami-no-kuni. From the Edo period into early Meiji, it formed a single political unit with Kushiro and its historical connection with Kushiro is strong.

Bihoro dialect

Location: Current town of Bihoro in Abashiri-gun.

State of documentation: Survey site for Hattori and Chiri (1960) and Hattori (1964). Although not a large quantity, audio recordings of oral literature do exist, and their future analysis is anticipated.

Dialect characteristics: Although differing from the Kushiro and Shiranuka dialects at the basic vocabulary level, they are often considered to form a single grouping as eastern Hokkaido dialects. Although geographically adjacent to the Sea of Okhotsk coast, since it is not clear there are dialect characteristics corresponding to Kitami-no-kuni, the degree to which there is a relation of influence is also unclear. Often has phonetic differences from other dialects. (See section 3.)

Kushiro dialect

Location: Kushiro River watershed. Broadly refers to the region including Harutori in the present city of Kushiro, the towns of Teshikaga and Shibecha in neighboring Kawakamigun and the town of Akan and the village of Tsurui in Akan-gun.

State of documentation: There are audio materials and many texts and word lists have been published. One characteristic is that the recordings of speakers of this dialect include many men.

Dialect characteristics: Adjacent to the Kushiro and Shiranuka dialects, they are extremely close in terms of vocabulary and grammar, but they differ in details. Also, since comprehensive grammatical research on the neighboring Shiranuka dialect is more advanced, it has been given the Shiranuka name to differentiate it from the Kushiro dialect.

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Shiranuka dialect

Location: Village of Shiranuka in Shiranuka-gun (now the town of Shiranuka).

State of documentation: There are many audio materials from Yae Shitaku and many texts have also been published. It is one of the few dialects for which a sizable grammar description exists and research is comparatively advanced.

Dialect characteristics

Shows lexical characteristics close to the Kushiro dialect and thought to be an unaccented dialect. Detailed comparative research between Shiranuka and Kushiro has been conducted and it is sometimes thought of as the Kushiro-Shiranuka dialect.

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Tokachi-no Kuni

Tokachi-no-kuni is bounded by the Hidaka mountain range, the Ishikari mountainous area, the Shiranuka hills and the Pacific Ocean. Linguistically as well, the speech of the area is treated as a single unit, the Tokachi dialect. The Obihiro and Honbetsu dialects are known as sub-dialects.

Tokachi dialect

Location: Throughout the former Tokachi-no-kuni. The Tokachi River watershed and the Tokachi Plain.

State of documentation: The Obihiro dialect was a survey site for Hattori (1964) and, while there are records from a large number of speakers, no comprehensive grammar or dictionary has appeared. Vocabulary and texts from Tomeno Sawai of Honbetsu-town have been recorded in abundance, and within the Tokachi dialects, grammatical description of the Honbetsu dialect is the most advanced. There is some information about the Makubetsu dialect.

Dialect characteristics: Even within the Tokachi dialects, there are lexical differences between Obihiro and Honbetsu, but as a dialect of the eastern part of Hokkaido, there are also lexical similarities with Kushiro, Bihoro, and Nemuro dialects.

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Nemuro-no Kuni

The easternmost part of Hokkaido bordering the eastern part of Kitami-no-kuni and Kushiro-no-kuni. Includes the Nemuro and the Southern Kuril dialects.

Nemuro dialect

Location: All of the former Nemuro-no-kuni, excluding the four island Northern Territories. (after becoming the Nemuro Subprefecture Office, became the current Nemuro Subprefectural Bureau).

State of documentation: Although there remain a few word lists, there are no audio materials. It is thought that a Meiji era Ainu language resource written by the Japanese in this region, the *Kaga-ke Monjo* will be useful in elucidating the Nemuro dialect.

Dialect characteristics: The vocabulary found in the *Kaga-ke Monjo* can be recognized as being similar to the neighboring Kushiro-Shiranuka and Bihoro dialects. Since there is no audio material, it is unclear whether the dialect was unaccented or not. As there had been trips to and from the Southern Kurils, it can be thought that there would be parts of the dialects that were similar, but that is not particularly clear. Clarification of the grammar is extremely difficult.

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Southern Kuril dialects

Location: The four islands of Kunashiri, Shikotan, Etorofu, and Urup.

State of documentation: A few lexical items from the Shikotan dialect remain. Also, it is stated in Ezo Nikki from 1798–1799 by Kenji Kimura that an Ainu from the Nemuro area translated for the Japanese on their way to Etorofu.

Dialect characteristics: Reports that the Southern Kuril dialects did not differ much from the Hokkaido dialects and a few vocabulary words are preserved in resource materials, and typically they are regarded as being Hokkaido dialects (Hayashi 1973). On the other hand, there is an account saying that in the first half of the 18th century an Ainu from the Northern Kurils named Lipaga reported that the language of the Northern Kurils did not differ much from that of the Southern Kurils. 13

¹³ Murayama (1971) points out this account on page 120 of Крашенинников Степан Петрович. (1755-56) Описание Земли Камчатки. СПБ.

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Chishima-no Kuni

Consists of just the Northern Kuril dialects.

Northern Kuril dialects

Location: All the Kuril Islands north of the four islands of the Southern Kurils. There is an abundance of records of vocabulary items only for the Shumshu dialect.

State of documentation: Records of the Ainu language of the Kuril Islands are limited and there are no audio materials. Europeans like Krascheninnikov, Steller, Klaproth, and Dybowski collected word lists, and the Japanese archeologist and anthropologist Ryūzō Torii collected word lists and short sentences. Shichirō Murayama (1971) presents a comprehensive study of these.

Dialect characteristics: The Northern Kuril dialects are distinct from the Hokkaido dialects. Hattori (1964) cites the lexical items reported in Torii (1903) as "Chishima dialect".

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9 Differences between Karafuto and Hokkaido Ainu dialects

1 Introduction

The heritage languages of the Karafuto (Sakhalin) Ainu people (the Enciw), who traditionally resided in the southern half of the island of Sakhalin, are the Karafuto Ainu dialects, which form a major dialect group, along with the Northern Kuril and Hokkaido groups. Taking the word-initial p/c opposition as an example, the Karafuto dialects belong to the latter group, that is, the c- dialects. In terms of subcategorizations, dialects like the Taraika dialect in which conversion of a syllable-final consonant to -h does not take place have been described, but the distribution of dialects is not completely clear.

Until their residential territory came to be under Japanese rule through the Portsmouth Treaty (1905) ending the Russo-Japanese War, the Ainu population was around 2,000 and nearly all were fluent speakers. In Hokkaido, the number of speakers drastically decreased following modernization, but in Karafuto there remained many small, primarily Ainu hamlets until the end of World War II, and the proportion of speakers was also high. There is estimated to have been several hundred speakers remaining at the end of WWII, but by the 1950s nearly all had emigrated to Hokkaido and dispersed, and at the present time, other than a few learners, there are no fluent speakers.

Karafuto Ainu materials include Piłsudski (1912) and Murasaki (1976, 2001, 2013, and 2016). The Murasaki materials were published together with cassette tapes and CDs. Murasaki (1976) consists primarily of traditional stories related by FUJIYAMA Haru (Ainu name: Esohrankemah, 1900–1974), who was from Esutoru (now Углегорск) on the northern part of the west coast of Karafuto. Murasaki (2013) and Murasaki (2016) are collections of short pieces by the same speaker. Since FUJIYAMA Haru lived for a long time in Raichishika (Rayciska, now Красногорск), Murasaki and Hattori treated her as a speaker of the Rayciska dialect.² Murasaki (2001) is a collection of oral literature (folktales) by ASAI Take (1902–1994) from Odasu (Otasuh, now Парусное).

¹ For example, *par* (southern Hokkaido) / *car* (elsewhere) 'mouth' or *pas* (southern Hokkaido) / *cas* (elsewhere) 'run', for more examples see Nakagawa and Fukazawa (Chapter 8, this volume). Kirikae (1994) and Nakagawa (1996) say this peculiar phonological change originated in northern Hokkaido and spread north to Karafuto.

² According to the brief biography of FUJIYAMA Haru appearing in Hattori (1957) and Murasaki (1979), FUJIYAMA Haru moved to Furoochi at around age 11 or 12 and then to Raichishika at 18 on the occasion of her marriage. Regarding FUJIYAMA Haru's speech, Hattori (1957: 159) says, "Esitori (meaning Esutoru, note by Tangiku) and Furoochi are respectively 20 *li* and 14 *li* north of Raichishika, but, since they are both settlements of migrants from Raichishika, their language is the same. The language of Usoro,

Grammatical and phonological descriptions include Chiri (1973 [1942]), Hattori (1957, 1961, 1967), and Murasaki (1979). Hattori (ed.) (1964) is also valuable as a dictionary with reliable morphology. This chapter is fundamentally based on the descriptions of Murasaki and Hattori and, focusing on the west coast dialects of Esutoru and Odasu, describes differences with Hokkaido dialects.

2 Phonological system

2.1 Vowels

Like the Hokkaido dialects, the Karafuto dialects have a five-vowel system: a, e, i, o, u, but, unlike the Hokkaido dialects, there is a vowel length contrast. Many vowels that carry a high accent in many Hokkaido dialects (H) are lengthened in Karafuto (K).

```
kaani (K), káni (H) 'metal'; seeseh (K), sések (H) 'hot'
```

Based on this opposition, Hattori (1967) attempted an internal reconstruction of the proto-language of the Karafuto and Hokkaido dialects. However, there is room for debate as to whether the long vowels in Karafuto dialects are phonemically long or whether they carry a high accent in their base forms and only realized on the surface as long vowels.3

The root vowel in a single-syllable word may be long, but it becomes short when a suffix is added. These should probably be considered to be phonemically short vowels that have simply been lengthened on the surface.

```
puu (K), pu (H) 'warehouse'; kii (K), ki (H) 'do', ki-hci (K) 'do (plural form)'
```

In word-final position, -e in Hokkaido dialects corresponds to -i in Karafuto dialects.

```
tani (K), tane (H) 'now'; poni (K), pone (H) 'bone';
tek-ihi (K), tek-e-he (H) 'hand (affiliative form)'
```

There are also some lexical items that are limited to certain geographical regions.

¹² li north of Raichishika, is, contrary to expectation, a little different." See an example of FUJIYAMA Haru's text in Dal Corso (Chapter 21, this volume).

³ If the Karafuto long vowels are seen as high accent in reality, the explanation becomes even more simple, cf. Satō (Chapter 3, this volume).

kaani (K), káne (H: area around Saru only. Elsewhere káni) 'metal'; rayke (H: throughout. K: Maoka (Kholmsk), Tarantomari, Ochiho), rayki (K: Shiraura, Esutoru) 'kill'

2.2 Consonants

As in Hokkaido dialects, there are 12 consonants: p, t, k, c, s, r, m, n, w, y, h, and ', but syllable-finally, p, t, k > h, m > n, and r > rV. Furthermore, the syllable-final h thus derived changes to s following the vowel i.

2.3 Change of syllable-final p, t, k to h

Following the vowels a, e, o, and u, syllable-final p, t, and k change to h and following the vowel i to s. However, in the northern part of the east coast from Taraika (near what is now Поронайск) to Nairo (now Гастелло) and around Tarantomari (now Калинино) in the central part of the west coast, some dialects preserve the p, t, k as in the Hokkaido dialects. Also, the Esutoru dialect is reported to distinguish between -is and -ih.4

```
teh (K west coast), tek (K east coast northern part and west coast central region),
tek (H) 'hand'
sis (K west coast), sik (K east coast northern part and west coast central region),
sik (H) 'eye'
```

Consonants that have been changed to h appear as p, t, and k before the affiliative form suffixes and the person suffix -an.

```
teh 'hand', tek-ihi 'hand (affiliative form)'
itah 'speak', itak-an 'we speak'
```

2.4 Addition of vowel after syllable-final r

A vowel is added to a syllable-final r, creating an open syllable. Often the root vowel is reduplicated, but in several words, the same vowel as appears in the affiliative form

⁴ Murasaki (1976: 4) states: "When h or s appears as C_2 in the pattern C_1 i C_2 , they are neutralized in pronunciation. The neutralized sound shifts between [ç] and [ʃ] but it is often pronounced closer to [ʃ] than [c]." "However, according to my informant, there is a contrast between *cih* 'boat' and *cis* 'cry'." "It can be said that in reality, the /-h/ and /-s/ in cih and cis are neutralized."

in Hokkaido dialects is added.⁵ Formation of complex verb forms takes place before vowel addition.

```
nukara (K), nukar (H) 'see'
kisaru (K), kisar (H) 'ear' cf. kisar-u, kisar-u-hu 'ear (H affiliative form)'
```

The causative suffix -re/-te is realized as -re after a CV syllable and as -te after a CVC syllable. Since this is affixed before vowel addition, it is the -te form that affixes to the base forms *nukar* and *kor*. As in Hokkaido dialects, the syllable-final *r* changes to *n* in this environment.

```
nukar 'see' + causative suffix -re > nukan-te 'show'
kor 'have' + causative suffix -re > kon-te 'give'
```

When the plural suffix -hci affixes to a word ending in a consonant, it takes the form -ahci, but when it affixes to a word to which a vowel has been added to a final r, it appears in the form -hci. That is, unlike the causative suffix described above, it is attached after vowel addition.

koro 'have' + plural affix -hci > koro-hci 'they have / he has it'

2.5 Accent

According to Hattori (1961) and Murasaki (1979), Karafuto dialects do not have distinctive accent. If the first syllable contains a long vowel or is a closed syllable, pitch accent is placed on the first syllable; if the first syllable is an open syllable with a short vowel, pitch accent is placed on the second syllable.

héekopo 'younger sister', káhkemah 'wife', cikáh 'bird'

2.6 Change of word-initial r to t

In many Karafuto dialects, a word-initial *r* is changed to a stop *t* in some lexical items.

⁵ In Tangiku (1998), these are treated as intrusive vowels inserted at surface structure and phonologically (in their base forms) these are treated as CVC syllables. In this chapter, all are written in the form with the vowels inserted.

retar (H), retara (K: southern area), tetara (K: west coast northern region, Esutoru), tetara (K: east coast northern region, Nairo) 'white'

Only tetara 'white' is geographically widespread. However, there are words like te 'numeral 3' that are sporadically pronounced with a t in Esutoru and other areas. In addition, according to Hattori and Chiri (1960), in the northern Karafuto Nairo dialect there is a tendency to pronounce several words with an initial *r* with the stop consonant *t*.

rup (H), ruh (K: west coast northern region, Esutoru), rup (K: west coast southern region, Tarantomari), tup (K: east coast northern region, Nairo) 'ice'

Since this tendency can also be found on the east coast in places like Ōtani, in addition to Nairo, it can be considered an east-west Karafuto dialect difference.

3 Lexicon

3.1 Differences in basic lexical items

Words for basic verbs, family relations, and numerals different from Hokkaido dialects are found in Karafuto dialects.

```
ahci (K), húci (H) 'grandmother'; henke (K), ekasi (H) 'grandfather'; unci (K), ape (H)
'fire'; hukuy (K), uhuy (H) 'burn'; etaras (K), as (H) 'stand'
```

3.2 Age-related lexical variation

Hattori (1957) found variation by age level in lexical items used, calling them "special elderly vocabulary" or "old peoples' language". Younger people (below maturity) do not use these vocabulary items, but after they reach maturity, they are reported to begin to use them. Either the "young peoples' language" [Y] or the "elders' language" [E] often corresponds to the forms used in the Hokkaido dialects.

```
'head' sapa (Y), key, paake (E) Cf. sapa (H)
'sun' cuh (Y), rikomah (E)
                                Cf. cup (H)
```

⁶ According to Hattori, a contrast between young peoples' language and elders' language is found for 70 items of the 200 items in Swadesh's basic vocabulary. Furthermore, of the 2,052 items in Hattori (ed.) (1964), 8 are marked as "young peoples' language".

```
'mother' onmo (Y), unu (E) Cf. unu (H)
'father' aaca (Y), ona (E) Cf. ona (H)
```

For some locative nouns, the "elders' language" form corresponds to the conceptual form in the Hokkaido dialects while the "young peoples' language" form corresponds to the affiliative form.⁷

```
'above (contiguous, in contact)' kasike, kaske (Y), kasike (H affiliative form), kaa (E), ka (H conceptual form)
```

Other examples show a complex correspondence.

```
sanke 'beside' (Y), kurupoke 'beside' (E) samake 'beside' (H affiliative form), kurpok 'below, under side' (H conceptual form) Cf. sam 'beside' (H conceptual form)
```

There is also a special lexical stratum, different from "special elderly vocabulary" that is used in prayers in ceremonies.

```
'fire' ape (in prayers), unci (normal speech) Cf. ape (H)
```

3.3 Numerals

The numbers from 1 through 10 are more-or-less the same as in the Hokkaido dialects, but for numbers 11 and above, the numbers are expressed in a decimal fashion with the tens unit expressed by *kunkutu* and the hundreds unit expressed by *tanku*, forms not found in the Hokkaido dialects. *tanku* '100' is a Tungusic borrowing, but *kunkutu* '10' is not. Krasheninnikov (1755: v.2, 144) records *Yýmxmykъ* (*chumkhtuk*) and *Kýmxmykъ* (*kumkhtuk*) (southern region) for the number 10 in Itelmen (= Kamchadal). It could be regarded as a borrowing due to a trading relationship.

```
sine-h 'one (things)', tu-h 'two (things)', re-h 'three (things)', iine-h 'four (things)', asne-h 'five (things)', iwan-pe 'six (things)', arawan-pe 'seven (things)', tupesan-pe 'eight (things)', sinepisan-pe 'nine (things)', wan-pe 'ten (things)'
```

```
tu-kunkutu '20' (also, hohne), re-kunkutu '30', . . . sinepisan-kunkutu '90' sine-tanku '100', tu-tanku '200', re-tanku '300'
```

⁷ On the difference between conceptual and affiliative forms see Nakagawa (Chapter 14, this volume).

```
'101' sine-tanku sineh ikasma
'110' sine-tanku orowa wanpe (ikasma)
'111' sine-tanku orowa sineh ikasma wanpe
'1000' sine-wan-tanku, '2000' tu-wan-tanku
```

4 Ordinary nouns

4.1 Formation of ordinary noun affiliative forms

Like the Hokkaido dialects, see Nakagawa (Chapter 14, this volume), there is a distinction in Karafuto dialects between ordinary nouns and locative nouns. There are some tens of locative nouns, which express a spatial locative relationship. Many ordinary and locative nouns have both conceptual and affiliative forms. Conceptual forms are non-specific, while affiliative forms are specific and concrete.

Affiliative forms are formed by adding a suffix of the form -VhV to the conceptual form. In many cases when the word ends in an open syllable, the suffix is formed using the same vowel as the word-final vowel. If first or second person, person affixes also attach.

```
sapa 'head (conceptual form)', sapa-ha 'head (affiliative form)', ku-sapa-ha 'my
head (affiliative form)'
```

If the word ends in the long vowels *ii* or *uu*, the vowel for the affiliative suffix is *e*. The long vowel ii shortens, and the suffix is -yehe; uu also shortens, giving -wehe as the suffix.

```
imii 'clothes (conceptual form)', imi-yehe 'clothes (affiliative form)'
```

Many words ending in a closed syllable form the affiliative suffix using a vowel other than the last vowel in the word. What vowel is used depends on the word, but in many cases, it is the same as in the Hokkaido dialects.

```
ram 'heart (conceptual form)', ram-uhu 'heart (affiliative form)',
cf. ram-u (H short affiliative form), ram-u-hu (H long affiliative form) 'heart'
```

Murasaki (1979) gives the following tendencies depending on the word-final consonant.

```
affiliative suffix vowel
final consonant
y, w
                        i, u
m, n
                        e, i, u
```

As mentioned in Section 2.3, for words in which the final consonant changes to -h, it is the consonant of the base form that surfaces. In this case, there is no distinction between long forms and short forms of the affiliative forms in the Karafuto dialects like there is in the Hokkaido dialects; only the form corresponding to the long form of the Hokkaido dialects is used.

```
teh 'hand (conceptual form)', tek-ihi 'hand' (affiliative form)'; otoh 'hair (conceptual form)', otop-ihi 'hair (affiliative form)' Cf. tek (conceptual form), tek-e (short affiliative form), tek-e-he (long affiliative form) 'hand' (H)
```

4.2 Variety of uses of the affiliative form in possessive expressions

Names of parts of the body and family relations are generally used in the affiliative form, see also Bugaeva (Chapter 1, this volume) for Hokkaido dialects. Instruments and buildings are next most frequent. Astronomical and physiographical features and natural phenomena like *cuh* 'sun', *ahto* 'rain', *atuy* 'ocean', *ape* 'fire', and *wahka* 'water' normally do not appear in affiliative forms. However, compared to Hokkaido dialects, possessive expressions with affiliative forms are often used.

- (1) unkayoh seta-ha (Karafuto) monster dog-POSS'monster dog (that he is keeping)'
- (2) a-kor seta (Hokkaido) 4.A-have dog 'my dog (that I am keeping)'

The affiliative form has a plural form. When either the possessor or the possessed is plural, the plural suffix *-hcin* is suffixed, See Sections 6.6 and 6.7 for a more detailed description.

```
(3) ipe-he-hcin food-POSS-PL'the food (that they preserved)'
```

Possessive expressions with the affiliative form can be restated as a noun modifying expression using the verb *koro* 'have'.

- (4) ku-kotan-uhu 1SG.A-village-POSS 'my village'
- (5) *ku-koro kotan*1SG.A-have village
 'the village **that I occupy**'

Both examples (4) and (5) are due to Murasaki (1979: 83–84). Murasaki (1979: 84) reports an informant as saying that when one is in one's village and referring to one's village, he would say *ku-kotanuhu* and when one is in another village referring to one's own village, he would say *ku-koro kotan*. A god (*kamuy*) speaking would use *ku-koro kotan*. Perhaps it shows some sort of strong psychological tie.

4.3 Uses of the conceptual form of ordinary nouns

The conceptual form is used when forming compounds and in incorporation.

```
teh-kotoro 'palm < hand + surface' (Hattori (ed.) 1964: 11)
teh-kupapa-re 'grip between one's fingers < hand + hold in one's mouth + CAUS' (Hattori (ed.) 1964: 11)
```

It also appears with the instrumental case marker *ani*.

- (6) **teh ani** sitayki-hi neampe **tek-ihi kotahma**hand INS hit-NMLZ TOP hand-POSS cling
 'When he hit it with hand (and not some other body part), his hand got stuck.'
 (Murasaki 2001: 352)
- (7) **tek-ihi ani** sitayki-hi neampe **tek-ihi kotahma** hand-POSS INS hit-NMLZ TOP hand-POSS cling 'When he hit it with his (own) hand, his hand got stuck.' (Murasaki 2001: 28)

Since this is a standard scene in oral literature, there are several examples from a single speaker. In all of them, the second appearance of 'hand' in a single sentence is in the affiliative form. It is clear that the 'hand' appearing in the latter part is the same 'hand' as that appearing in the former part, and the affiliative form is used to show this concreteness.

However, in the case of a tool or instrument, both can be expressed in the conceptual form.

(8) nii utohtonke-he taa **mukara ani** sitayki-hi neampe tree trunk-POSS EMPH axe INS hit-NMLZ TOP **mukara kotahma** axe cling 'When I struck the trunk of the tree with an axe, the axe got stuck.' (Murasaki 2001: 352)

5 Locative nouns

5.1 Locative nouns and locative particles

As in the Hokkaido dialects, there are locative nouns that follow ordinary nouns, expressing a spatial relation. There are tens of such locative words, including *kaske* 'above ~', *onnayke* 'on the inside of ~', *sanke* 'next to ~', *okaake* 'behind ~', *tunke* 'inside ~', *etoko* 'before ~', *uturuke* 'between ~', *soyke* 'outside ~, neighboring ~', and, expressing a location but no particular spatial relation, *oro* 'place of ~'.

Locative nouns can be followed by locative case particles like *ta* 'locative case', *wa* 'ablative case', and *ene* 'allative case' (ordinary nouns cannot be directly followed by a locative particle).

(9) nevke taa pise kaske ta sumari taa tani taa and EMPH fox EMPH now EMPH oil.container top LOC ama teh taa pahkav teh taa oman manu. and EMPH carry.on.back and EMPH go.SG REP.EVID 'And they say (he) put the fox **on top of the oil container** and went off carrying it on his back.' (Murasaki 2001: 302)

The object of the transitive verb *ama* 'put' is *sumari* 'fox' and the place the fox is put is *pise* 'oil container' and is expressed in an adverbial phrase using the locative case particle *ta*. Since only locative nouns can appear directly before a locative case particle,⁸ *pise* cannot be directly followed by *ta*. Thus, *kaske* 'on top of' is added between *pise* and *ta*.

Certain transitive verbs can only take locative nouns as objects. In such cases, an ordinary noun becomes the object in a pattern in which it is directly followed by a locative noun.

⁸ See Nakagawa (Chapter 14, this volume) for an analysis of locative expressions.

(10) nukara koh taa **suu kaske ke-oo** teh an manu. see and EMPH pot on.surface fat-put and exist.SG REP.EVID '(They say that) when (he) looked, the fatty meat had been put in (lit. on) the pot.' (Murasaki 2001: 96)

5.2 Omission of the antecedents to locative nouns

If it is a location has already been mentioned or is already known, the antecedent to a locative noun can be omitted.

(11) keesintah empoke wa paa numaa kusu manu. cliff under.place ABL smoke rise when exist.SG REP.EVID numa kusu an-ihi neampe **oh-ta** oman-ihi paa when exist.SG-NMLZ TOP place-LOC go.SG-NMLZ smoke rise neampe taa... TOP **EMPH** '(They say) smoke was rising **from below the cliff**. When (he) went **there** because smoke was rising ' (Murasaki 2001:80-82)

Here the *keesintah empoke wa* [cliff under.place ABL] in the first part is expressed by *oh-ta* [place-LOC] in the latter part and the antecedent is omitted.

(12) an-kotan ta okay-an-ike, oh-ta yay-reske-an 4.A-village LOC exist.PL-4.S-and place-LOC REFL-grow-4.S an-kovavnupa an-mosiri-hi Karahuto mosiri Rayciska 4.A-be.born 4.A-island-POSS Karahuto island Ravciska okay-an-ike kotan oh-ta village place-LOC exist.PL-4.S-and 'I am living in my village; I am living on my island where I grew up and I was born there, in Rayciska village on Karafuto island, and . . . ' (Murasaki 1976: 5)

Here, *oh-ta yay-reske-an an-koyaynupa* 'there I grew up and I was born' is an adnominal modifier to *an-mosiri-hi* 'my island'.

5.3 Use of locative nouns in temporal expressions

Locative nouns are not only used in spatial expressions but also, as in *tumi ohta* 'in the war', in eventive and temporal expressions. They can also directly follow a verb

phrase without modification. In such a case, unlike the -hV neanpe pattern as in (11), the verb does not need a nominalizing suffix or a formal noun. See Section 8.2.

(13) an-ona-ha ekantasa ona-ha-hcin sukup-ahci 4.A-father-POSS previous father-POSS-PL grow-PL oh-ta oruspe nee an manu. place-LOC exist.SG story COP REP.EVID '(They say) it's a story of the time when my father's fathers were growing up.' (Murasaki 1976: 14)

5.4 Uses of the affiliative form of locative nouns

Like ordinary nouns, locative nouns have affiliative forms.

```
sanke 'beside', sanke-he 'beside X'
onnayke 'inside', onnayke-he 'inside X'
```

In Hokkaido dialects, these locative nouns are:

sam (conceptual form) 'beside', sama (short affiliative form), samake (long affiliative form) 'beside X' onnay (conceptual form) 'inside', onnayke (short affiliative form), onnaykehe (long affiliative form) 'inside X'

However, there are no examples of the bare root form san (< sam) in the Karafuto west coast northern dialects (Esutoru, Odasu). In this chapter, forms like sanke that can be directly followed by locative case particles will be called the conceptual form and forms like sanke-he that can become the objects of locative verbs will be termed the affiliative forms. Furthermore, a number of locative nouns like *kaa* 'above ~' and soy 'outside ~' have no affiliative forms and always appear alone immediately followed by locative case particles.

When a locative noun is followed by a simple locative case particle, it appears in its conceptual form and does not change to its affiliative form.

⁹ Murasaki (1976) also holds that locative nouns in Karafuto Ainu do not have free-standing forms corresponding to the "conceptual forms" in Hokkaido dialects. In addition, since free-standing forms like sanke and onnayke have a high degree of concreteness, she does not use the term "conceptual form" for them. However, Piłsudski (1912) records forms like sam and onnay from Karafuto east coast dialects, showing that forms corresponding to Hokkaido dialect conceptual forms and in other areas as well, locative nouns (locative expressions) are more-or-less the same as in Hokkaido dialects. This can be thought of as being a dialectal difference.

(14) *cise* onnayke ta cis-ahci kusu okay-ahci manu. house inside LOC crv-PL exist.PL-PL REP.EVID and '(They say) they were crying inside the house.' (Murasaki 2001: 306)

The affiliative form of a locative noun is used with general, non-locative verbs to show the possessor or possessee of the verb's subject or object.

- (15) *apa* cahke ahu-n-ihi neanpe anpene cise inside.house-INTR.SG-NMLZ TOP door open really house **onnayke-he** ekuhteh manu. inside-POSS be.black REP.EVID '(They say) when (he) opened the door and entered, the interior of the house was really dark.' (Murasaki 2001: 340)
- (16) *soy* asi-n-ke cise onnayke-he ta mun. place.out LOC exit-INTR.SG-CAUS trash house inside-POSS mun-ihi sa-n-ke ko-'oman-te ranke, trash-POSS front.place-INTR.SG-CAUS to.APPL-go.SG-CAUS ITERA '(He) always threw out the trash that was outside, always threw out the trash that was inside the house.' (Murasaki 2001: 94)

5.5 Uses of the locative noun oro

Since an ordinary noun cannot be directly followed by a locative case particle, a locative noun is placed between them. If one does not want to clearly indicate a relative spatial relation, a compound form of locative case particle incorporating the formal locative noun *oro* and a locative case particle, as in *ohta*, *onne*, or *orowa*, is placed after the ordinary noun. 10 Place names and the words cise 'house' and kotan 'village' have the characteristics of both ordinary and locative nouns and can be followed either by the simple locative case particles ta, ne, or wa or by the compounded locative case particles.

¹⁰ The Karafuto locative noun oro corresponds to the Hokkaido dialect or, but, unlike Hokkaido dialects, there is no or/or-o distinction. Historically, the distinction did exist in the Karafuto dialects between the conceptual form or and the affiliative form or-o, and the forms compounded with locative particles like ohta and onne can be thought to have been formed from the former, but presently there are no corresponding forms with the affiliative forms like oro ta or oro ene. Accordingly, when cooccurring with locative particles like ta, wa, or ene, there is no distinction between otta (< or ta) / or-o ta, or wa / or-o wa, or onne (< or ne | or-o ne as in the Hokkaido dialects, all appearing simply as ohta, orowa, and onne.

In the Karafuto dialects, compounded locative case particles can follow either of the conceptual or the affiliative forms of ordinary nouns. Whether the conceptual form or the affiliative form appears depends on the tendencies of the word and on the context. For example, *wahka* 'water' almost is always in its conceptual form, always showing up as *wahka onne* or *wahka ohta* and never as **wahkaha ohta*, **wahka ene* or **wahka ta*. Body parts often appear in the affiliative form as in (17), but, when the possession relation is not important, the conceptual form is used. In that case, the compounded forms *ohta* and *onne* follow.

(17) nav sa-n-ihi wahka kuu on-ne neampe taa. river place-ALL front.place-INTR.SG-NMLZ TOP EMPH water drink kusu herari-hi neampe wahka on-ne in.order bend-NMLZ TOP water place-ALL ahu-n-ike wahka taa. caru-hu on-ne inside.house-INTR.SG-and EMPH mouth-POSS place-ALL water taa. rav manu. teh inside.house-INTR.SG and EMPH die REP.EVID '(They say) when (he) went down to the river, (he) squatted down to drink the water and the water entered (his) mouth and (he) died (of drowning).' (Murasaki 2001: 102)

5.6 The conceptual and affiliative forms

When the possessor is clear, or the information of possessor is important, the affiliative form is used; if it is not important, the conceptual form is used. See Section 4.1.

(18) sine too taa niina kusu maka-n. day EMPH gather.firewood in.order inland-INTR.SG one kinta maka-n-ihi neampe taa sine to.mountain inland-INTR.SG-NMLZ TOP EMPH one cise an manu. house exist.SG REP.EVID '(They say) one day, (he) went up the mountain in order to gather firewood. When (he) went up in the direction of the mountain, (he was surprised to find) there was a house!' (Murasaki 2001: 146)

This is a scene at the beginning of a story where the protagonist comes upon a house he had not known about. Since at this point the ownership of the house is unclear, the conceptual form *cise* is used.

"monimahpo uta! sinenehka ANOtope'enke horokewpo PL. girl alone that bamboo.sharpening young.man utah cise-he-hcin naa suv puntu nuve ahcahcipo cise-he PLhouse-POSS-PL also again pillar draw old.ladv house-POSS naa pe-'e-ketu-hu ka hannehka." also water-with.APPL-discard-NMLZ even NEG 'Young women! You (PL) did not all by yourselves (by means of shamanism) destroy with water and wash away the "house of the bamboo-sharpening young men" and the "house of the pillar-drawing old lady".' (Murakami 2001:86)

Folkloric materials. The young women prayed to the gods and destroyed the houses in which lived their enemies, "the bamboo-sharpening young men" and the "pillar-drawing old woman". Whereupon, some mysterious young people appeared and announced with these lines that they had aided in the destruction. puntu nuye ahcahcipo cise-he is the object of the transitive verb pe-'e-ketu 'destroy with water < [water-with.APPL-discard]' (the subject is not overt but is understood as monimahpo uta). The possessor is clearly indicated, and 'house' is realized in the affiliative form cise-he.

(20) *pahko* naa caaca naa emuyke aw-wante koroka **cise-he** also all 4.A-know house-POSS old.ladv also old.man but nahta ka an utar-i DA-KA ampene an-eram'esikari. where even exist.SG people-POSS COP.NONPST-Q at.all 4.A-don't.know 'I know them all, both the old woman and the old man, but I absolutely don't know where the house they are people of is.' (Murasaki 1976: 83)

The portion *cise-he nahta ka an* 'where is that house' is in an adnominal modification relation with *utar-i* 'people'. The *cise* that is modifying its possessor is in the affiliative form. In previous examples in which the possessor is unspecified or unknown, the conceptual form *cise* has been used. When the possessor is identifiable, as a general rule, the affiliative form is used, but, when the information of possessor is clear, it is easy for the conceptual form to surface.

asin-ihi (21) okovse kusu neampe taa, urinate in.order come.out.SG-NMLZ TOP **EMPH** cise onnavke ene hemata hum-ihi an manu. house place.inside ALL what sound-POSS exist.SG REP.EVID '(They say) when (he) went outside to urinate, a noise was heard from inside the house.' (Murasaki 2001: 42)

Folkloric material. This is a scene in which a loud noise comes from a house that is supposed to only have an infant inside. It is clear that the possessor of the *cise* is the protagonist who went outside, but *cise* is nevertheless in its conceptual form. Because the locative relation that is important is that the noise originates not from the outside but from the inside of the house, the conceptual form, which does not express a possession relation, is used. Furthermore, in showing the source of the noise, as in Hokkaido dialects, the allative case particle *ene* is used rather than the ablative case *wa*.

(22) muunin teh taa osmake ene, ANO, orowa taa, be rotten and EMPH and EMPH place.back ALL that cise-he onnayke-he rusa ike taa, kotesu ANO. house-POSS inside-POSS grass.mat be.attached and EMPH, that osmake ta neya hoku-hu taa ama manu. place.back LOC EMPH that husband-POSS put REP.EVID '(They say) since (her bill) was rotten, then, she went to the rear (of the house), that house of hers had grass mats hung on the inside and, she went to the rear, and there her husband was lying.' (Murasaki 2001: 118)

This is from a folktale in which the protagonist is a large-billed crow. Since grass mats are something understood to be hung on interior walls, specification of the relative spatial location is unimportant. What is important is that it is the protagonist's house in which the mats are hung and not someone else's house; that is, the possessor is important. It is for this reason that the affiliative form *cise-he* is used.

The choice between the conceptual form *cise* and the affiliative form *cise-he* in examples (18)–(22) depends on which noun is important. When the conceptual form *cise* is used, the location is important, and when the affiliative form *cise-he* is used the *cise* 'house' or the possessor of the house is important.¹¹

5.7 The conceptual form + compounded locative case particles

This use of conceptual forms also occurs with the locative noun *oro*, which does not specify a particular relative spatial relationship.

¹¹ However, since normally, if the target of the affiliation is determined, even should *cise* be in the affiliative form, it cannot be said to be emphasized. By putting *cise* in the conceptual form, one merely puts emphasis on a locative noun.

(23) iineahsuv, monimahpo "hoku-hu cinunuka-puu-he well girl husband-POSS food-storage.house-POSS oh-ta oman teh pookoro kusu nevke pirika kusu place-LOC go.SG and baby have and if.so good intention i-ki. "nah vee omantene. "neera hanka nah kii teh ANTIP-do COMP and.then how PROH COMP do and sav cise oh-ta koro waa." nah роо taa ku-vee house place-LOC baby have SFP COMP EMPH 1SG.A-sav vahka monimahpo taa, hoku-hu ka-ama-puu-he EMPH husband-POSS trap-put-storage.house-POSS but girl oh-ta oman teh taa роо koro manu. pon place-LOC go.SG and EMPH baby have REP.EVID little horokewpo koro manu." young.man have REP.EVID

'Well, since the girl kept saying it would be better to go to my husband's food storage house and birth the child, I said, "no matter what, give birth in the (normal) house," but the girl (said) she went to the storage house her husband used when trapping and birthed the child. (She said) she birthed a small infant boy.' (Murasaki 2001: 388)

Folkloric material. In this scene the female protagonist is questioning whether to give birth in the storage house or in the normal house. She refers to the specific storage house so it's in the affiliative form. The narrator refers to the house as a type of building so it's in the conceptual form.

(24) nipaapo ka nukara koh ras-uhu mesu, caru wooden.trav too see and piece-POSS peel.off.SG mouth oh-ta kasuh nukara koh rasu-hu ama, ka mesu. place-LOC put piece-POSS peel.off.SG spoon too see and caru oh-ta ama, nah taa kii kusu an manu. mouth place-LOC put. so EMPH do and exist.SG REP.EVID '(They say) (it) saw a wooden tray, tore off a piece, and put it in its mouth; (it) saw a large wooden spoon, tore off a piece, and put it in its mouth; and it was doing such things.' (Murasaki 2001: 140)

Folkloric material. In this scene, the protagonist is secretly watching a monster tearing off pieces of wooden dishes and eating them. What is important here is that the monster is putting tools not into a toolbox but in its "mouth". The monster could even put the protagonist in its mouth! Whether the mouth is specified or not is not important. So here the conceptual form *caru* is used.

5.8 Place name as locative nouns

Place names have both ordinary noun and locative noun properties. When it is clear that the word is a place name, it is used without addition as a locative noun, immediately followed by a locative case particle. When the word is a relatively unknown place name, it is followed by a locative case particle compounded with *oro*. However, there are no examples of place names followed by *ene* from the dialects of the northern part of the Karafuto west coast.

mah-saa-ha (25) ku-unu-hu hemata Giriyaaku naa suv 1SG.A-mother-POSS female-sister-POSS what Nikvh too just hee merekopo naa tura-hci teh kito ta-hci kusu or girl go.with-PL and wild.garlic gather-PL in.order too ariki-hci Riyonay ta okay-ahci Riyonay manu. tah teh come.PL-PL REP.EVID that Riyonay LOC exist.PL-PL and Riyonay nah vee kotan oh-ta okav-ahci teh orowa... COMP say village place-LOC exist.PL-PL and then '(I heard that) My mother's older sister and the daughter of a Nivkh (=Gilyak) came together to pick wild garlic. They lived in Riyonay and, they lived in a village called Riyonay, and then, . . . '(Murasaki 1976: 36)

This is the opening to a personal remembrance. The speaker is very well acquainted with the place name Riyonay. After the speaker said *Riyonay ta*, treating it as a locative noun, she noticed that the listener was unfamiliar with the place name Riyonay and restated, saying *Riyonay nah yee kotan ohta* 'in a village called Riyonay'. Following that, she used *Riyonay ohta* as in the following.¹²

(26) omantene or-o-wa tani Aynu kotan on-ne paye-hci and.then place-POSS-ABL now Ainu village place-LOC go.PL-PL nean Riyonay oh-ta paye-hci taata ya-p-ahci, that Rivonav place-LOC go.PL-PL there land-INTR.PL-PL tani weepeker-ahci. ya-p-ahci teh land-INTR.PL-PL and now explain-PL 'And then, after that, this time they went to an Ainu village, they went to that Riyonay place and landed there, landed there and they now explained the circumstances.' (Murasaki 1976: 40)

¹² The whole story is available in Dal Corso (Chapter 21, this volume).

5.9 The special characteristics of the words cise 'house' and kotan 'village'

The words cise 'house' and kotan 'village' are ordinary nouns, but, as in the Hokkaido dialects, they can be used as locative nouns in their affiliative forms, see Nakagawa (Chapter 14, this volume). In other words, the conceptual forms are followed by compounded locative case particles, but the affiliative forms can be followed by simple locative case particles without an accompanying or-o. In that case, the affiliative form suffixes are not affixed (that is, it has the same phonetic form as the conceptual form).¹³ Furthermore, there are no examples of the simple form wa of or-o-wa immediately following a noun affiliative form.

5.10 cise 'house' as a locative noun (affiliative form of cise + locative case particles ta and ene)

When the spatial or relative locative relationship is important, the conceptual form cise is followed by a locative noun and a locative case particle (or by a compounded locative case particle). However, when the possessor is important, the affiliative form cise-he is used. In the latter case, unlike normal ordinary nouns, a locative case particle directly follows, and the affiliative form suffix is either pronounced extremely lightly or, in many cases, is dropped. Especially when the person form an- is attached, the result is almost without exception, *an-cise ta*.

(27) *kon-te* teh taa orowa taa, horokewpo uta reusi-hci. have-CAUS and EMPH and EMPH young.man PL stay-PL reusi-hci ike taa, sinkevke-he taa renne numa stay-PL and EMPH next.day-POSS EMPH three.persons get.up okore tura-hci teh monimahpo ike taa paye-hci and girl all go.with-PL and EMPH go.PL-PL manu. cise-he ta paye-hci ike tani taa REP.EVID house-POSS LOC go.PL-PL and now EMPH acahcipo reekoh e-yay-konopuru manu. old.lady APPL-onself-be.pleased.with REP.EVID much

¹³ In the case of ASAI Take, the conceptual form is always followed by a compounded locative case particle and an affiliative form is always followed by a locative case particle. However, in the case of FUJIYAMA Haru, there are a very few examples of the affiliative form followed by compounded locative case particles.

'(They say) the old lady gave it to them and then the young people stayed over. The next day after they stayed over, three woke up together and the girls all went and depart with them. When the (young people) went to (their own) house, the old lady was tremendously pleased with herself.' (Murasaki 2001: 428)

Folkloric material. In this scene, the three brothers who are the protagonists take with them three sisters to be their brides. What is important is that the possessors of the house they are going to are the brothers. That is why the parent is happy. Accordingly, 'house' here is not in the conceptual form *cise* but is in the affiliative form *cise-he*. Furthermore, as far as I have been able to ascertain, in all such examples the word appears as the object of a motion verb (semantically allative case).

horokewpo! (28)"iineahsuv. an-cise ta sa-n waa! well young.man 4.A-house LOC front.place-INTR.SG SFP ku-an." kuani sineh Imuu monimahpo tura 1SG Imuu girl COM 1SG.S-exist.SG 'Well, young man! Go down to my house! I am living with an Imuu girl.' ("Imuu" is a nickname for a young woman based on a certain action characteristic of hysteria.) (Murasaki 2001: 318)

Folkloric material. The scene is one in which the woman (probably a shaman) makes the protagonist young man go to her house to try to get him to marry her foster daughter. 'My house' is realized as *an-cise ta*. Since the possessor is important, it is not the conceptual form.

- (29) neeteh tani horokewpo nii, acahcipo niina taa taa, and EMPH voung.man EMPH wood old.ladv gather.wood now ike tah acahcipo cise taa. taa see teh orowa taa EMPH old.lady and EMPH that EMPH carry and then house ta sa-n manu. LOC front.place-INTR.SG REP.EVID '(They say) and, then, the young man, the firewood, the old lady gathered the firewood, and (he) carried it on his back and then he went down to the old lady's house.' (Murasaki 2001: 318)
- (30) monimahpo sipini omantene horokewpo taa tura EMPH young.man go.with girl prepare and then teh horokewpo cise taa, ene sa-n manu. and EMPH young.man house ALL front.place-INTR.SG REP.EVID '(They say) the girl made her preparations (for marriage) and went with the young man and they went down to the young man's house.' (Murasaki 2001: 322)

The pronunciation of *cise* in *cise* ene is always just /cise/ and the suffix -he is never pronounced. 'The young man's house' would be expected to be horokewpo cise-he but the affiliative suffix is not pronounced.

5.11 Sound elision in connection with cise-he-hcin

As with the singular affiliative form *cise-he*, the plural affiliative form *cise-he-hcin* can also be directly followed by the case particles ta and ene. 14 In such a case the affiliative suffix drops out giving cise-hcin. In addition, before the case particles ta and ene, the final -n of -hcin drops, leaving -hci. Concerning the affiliative plural form, see Sections 6.2, 6.6, and 6.7.

5.12 kotan 'village' as a locative noun

Like *cise* 'house' the affiliative form *kotan-uhu* is treated as a locative noun and, even though possessor person affixes may be attached, the affiliative suffix drops.

However, in the examples below, unlike the elision of the affiliative suffix in the case of *cise*, it is difficult to interpret any as the affiliative form.

- (31) sine kotan ta re monimahpo okay-ahci. village LOC three girl exist.PL-PL one 'In one village, there lived three girls.' (Murasaki 2001: 184)
- (32) *"anihi* taa tuyma kotan un horokewpo." 4.SG EMPH far.away village live.in young.man 'I am a young man who has come from a village far away.' (Murasaki 2001: 172)

In these examples, kotan 'village' can only be thought, semantically at least, to be in the conceptual form, not the affiliative form. However, since an ordinary noun cannot be followed without any addition by a locative case particle, *kotan* is different from other ordinary nouns (and different, also, from cise 'house') and has probably become a locative noun or a place name in its conceptual form.

¹⁴ There are no examples of the case particle wa following. There is just one case of the compounded form of oro with wa, orowa appearing after cise-he-hcin in which the affiliative form suffix -he does not drop.

6 Marking for plurality on verbs and nouns

6.1 Showing multiple occurrences by stem alternation

As in the Hokkaido dialects, see Nakagawa (Chapter 17, this volume), several verbs in Karafuto Ainu show a singular-plural difference through stem alternation. The plural form derived through stem alternation fundamentally shows multiple occurrences, but the concrete meaning varies. With verbs of existence and motion verbs, the alternation shows whether the things existing are singular or plural (roughly, more than 4 or 5). Thus, they match with the singularity or plurality of the subject. With verbs expressing actions directed at an object, the plural form shows that the action takes place multiple times (multiple occurrences). Thus, the plurality of the verb may not match that of the subject or object.

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an (sg), okay (pl) 'exist, be'; oman (sg), paye (pl) 'go'; eh (sg), ariki (pl) 'come'; sa-n (sg), sa-h (pl) 'descend'; nas-a (sg), nas-pa (pl) 'break, tear'; ris-e (sg), ris-pa (pl) 'pull out'
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There are cases in which the plurality of verbs or the word formation of verbs in Karafuto Ainu do not match that of Hokkaido dialects.

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res-ke (same form for sg and pl) (K), res-u, res-ka (H sg), res-pa (H pl) 'raise, bring up'; numa (K sg), payki (K pl), hopun-i (H sg), hopun-pa (H pl) 'get up'
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The first-person form in the dialects of the northern part of the west coast of Karafuto are: singular form ku-, plural forms an- (transitive verb person affix), and -an intransitive verb person affix), but, as will be explained later in Section 7.4, the plural forms are sometimes used in place of the singular form.

- (33) ku-oman 'I go'
- (34) paye-an 'we go, I go'
- (35) ku-sa-n 'I descend'
- (36) sa-p-an 'we descend, I descend'

With verbs expressing action directed toward an object, the plural form expresses multiple occurrences.

```
uh 'take, pick' (sing)
uyna '(he/she/they) take repeatedly, take several' (multiple occurrences)
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nas-a '(he/she/they) break something once' nas-pa '(he/she/they) break something into small pieces'

- unkayoh pahkay monimahpo ahcahcipo (37) taa taa uh monster shoulder girl EMPH grandmother EMPH get.SG teh taa tura hosipi manu. and EMPH bring return REP.EVD '(They say) the old lady took the girl the monster was carrying on his shoulder and brought her home.' (Murasaki 2001: 168)
- (38) acahcipo suke teh sah-ke teh taa taa san-ke ta grandmother EMPH boil and EMPH dry-CAUS and near-place LOC imi-v-ehe rasi-v-ehe kusu an uvna manu EMPH clothing-EP-POSS lice-EP-POSS take.PL and exist.SG REP.EVID (They say) the old lady was boiling them and then hanging them up to dry and next to that place she was **repeatedly taking (picking)** the lice from the clothes.' (Murasaki 2001: 110)

With verbs expressing an action on an object, the plural form shows multiple occurrences of the action. If the subject is the first-person plural an-, in many cases the action is also repeated or the same action is performed at different locations, and in such cases the plural form is used.

(39) *cara-puy-ehe* kaari tuhse-an wa ahu-p-an wa mouth-hole-poss through run-4.S and inside.house-INTR.PL-4.S and emuyke nean an-henke i-kon-te i-ampa-re all that 4.A-grandfather 4.O-have-CAUS 4.O-grasp.PL-CAUS ani hon-ihi an-kahkawe an emus wa an-**nas-pa** exist.SG sword INS belly-POSS 4.A-stab and 4.A-tear-TR.PL an-kii yayne taa tani siroma humi wa suy and 4.A-do then EMPH again already be.quiet NONVIS.EVID an kusu tani neya hon-ihi an**-nas-a** teh kaari exist.SG cause then that belly-POSS 4.A-tear-TR.SG and through an-nukara koh ramma ka asi-p-an-ihi, ene exit-INTR.PL-4.S-POSS 4.A-see and again also like.this ovasi. an exist.SG monster

'I entered jumping in from the mouth and, with the sword my grandfather gave me and caused me to grasp, I hacked and hacked all around me and in the process, it became quiet, so then I cut the stomach and went out through the cut; when I looked, it was the same kind of monster again.' (Murasaki 1976: 109)

6.2 Expressing plurality with the suffix -hci/-ahci

Another way to express plurality, other than stem alternation, is with the verb suffix -hci and the noun suffix -hcin, which express plurality of participants. The noun suffix only attaches to the affiliative form. It may have the same origin as the verbal suffix -ci expressing plurality found in some Hokkaido dialects, see Nakagawa (Chapter 17, this volume). After a word ending in a vowel, the suffixes take the forms -hci/-hcin and after words ending in consonants, the forms -ahci/-ahcin. With the vowel-following forms, if the preceding vowel is long, it becomes short, and with the consonant-following forms, if the final consonant is a derived -h, the underlying p, t, or k surfaces.

```
ipe-hci < ipe 'eat' + hci
sa-p-ahci < sa-h 'descend' + hci
e-hci < ee 'eat something' + hci
```

6.3 Existence and motion verbs with the pluralizing -hci

In the case of existence and motion verbs, the plurality of the subject matches.

san 'he/she descends', sap-ahci 'they descend'

(40) **horokeypo utah** taa mah-wa taa young.man PL EMPH deep.in.mountain-ABL EMPH **hecire-hci** wa **sa-p-ahci** haw-ehe an manu. sing-PL and front.place-INTR.PL-PL voice-POSS exist.SG REP.EVID '(They say) the voices could be heard of **the young men singing (plural)** deep in the mountains and **descending (plural)**.' (Murasaki 2001: 80)

If the *-hci* attaches to an auxiliary verb that follows the main verb, it does not attach to the main verb.

(41) nii kasi-ke poka ahkas kusu, mac-ihi-hcin tree top-place LOC walk.around cause female-POSS-PL taa paye koyaykus-ahci kusu hosipi-hci EMPH go.PL can.not.AUX-PL cause return-PL 'Because (they proceeded to the top of the tree, the girls were unable to go (after them) and went back.' (Murasaki 2001: 134–135)

In an adnominal modification structure, -hci is often used, but there are a few examples of its not being used.

- (42) *tah horokewpo taa-ta okay-ahci cise nee manu* this young.man here-LOC exist.PL-PL house COP REP.EVID '(They say) this is the house where the young men were living.'
- (43) *cise* oh-ta **okay** utah
 house place-LOC exist.PL people
 'the people who were in the house' (Murasaki 2001: 286)

When co-occurring with a conjunction, the -hci is omitted from the first verb.

(44)nanna nanna utah taa tu-h pis taa elder.sister elder.sister PL EMPH two-thing.CLF each EMPH niina kusu maka-p-ahci manu gather.firewood in.order inland-INTR.PL-PL REP.EVID '(They say) the two older sisters went into the mountains to gather firewood.' (Murasaki 2001: 42)

6.4 Plural subject, singular object

(45) inoskun monimahpo neewa haciko monimahpo tura middle girl and little girl COM tani sine hekaci **uk-ahci** teh taa. pick.up.SG-PL and EMPH then one child 'The middle daughter and the youngest daughter then picked up a child.' (Murasaki 2001: 46)

One child was picked up; since the verb form used is the (single occurrence) *uh* rather than the (multiple occurrence) *uyna*, the act of picking up was just a single occurrence act. The plural marker *-ahci* here agrees with the subject "the middle daughter and the youngest daughter".

6.5 Singular subject, plural object

(46) ku-mici-hi-hcin tu-h pis pateh an-i-ike 1SG.A-grandson-POSS-PL two-thing.CLF each only exist.SG-EP-and ku-sik-ihi ku-ahu-n-ke on-ne vahka naa 1SG.A-eye-POSS place-ALL 1SG.A-inside.house-INTR.SG-CAUS but not.vet ku-e-yaynu. ampene ku-mic-ihi-hcin hayta pah-no enough till-ADV 1SG.A-APPL-think very 1SG.A-grandson-POSS-PL

ku-raanupa-hci.

1SG.A-love-PL

'I had two grandsons and it wouldn't have been sufficient even had I put them in my eyes. I loved my grandsons very much.'

(Murasaki 2013: 26)

The subject is singular first person ku-'1' and the object is the plural ku-mici-ihi-hcin 'my grandsons'.

6.6 Plural possessors, singular possessee

When there are multiple possessors and the thing possessed is singular, -hcin is suffixed after the affiliative form suffix on the possessee.

(47) *cise* oh-ta monimahpo utah taa an nean house place-LOC exist.SG girl PLEMPH that nanna-ha-**hcin** kun sa-n elder.sister-POSS-PL front.place-INTR.SG going.should.COMP teere-hci yahka koyaykus-ahci manu how.long wait-PL but can.not.do-PL REP.EVID '(They say) no matter how long the girls who were in the house waited for the older sister to come down from the mountain, it was a waste of time.' (Murasaki 2001: 26)

This is a story about three sisters; the younger two sisters are waiting in the house for the older sister who has gone into the mountains. Since the older sister is one person, the verb *sa-n* 'descend' is in the singular form. The plural form *nanna-ha-hcin* 'older sister plural' agrees with the two younger sisters who are the possessors.

6.7 Single possessor, multiple possessees

(48) monimahpo neampe ehah-taa nah taa kii vavne tani taa girl TOP EMPH lilv-dig COMP do and then EMPH nanna-ha-**hcin** u-w-e-oman-te kusu taa cis manu. elder.sister-POSS-PL RECP-EP-APPL-go-CAUS because EMPH cry REP.EVID '(They say) the girl was digging for Kamchatka lilies when she started reminiscing about her older sisters and started to cry.' (Murasaki 2001: 192)

This example is also from the story about three sisters and relates a scene in which the youngest sister is thinking nostalgically of her older sisters and starts to cry. The plural marker -hcin in nanna-ha-hcin 'older sister plural' agrees with the two older sister possessees.

7 Person affixes

7.1 The person affix paradigm

The paradigms for person affixes for intransitive and transitive verbs are given below in Tables 1 and 2.

Table 1: Intransitive verb person affixes.

	Singular	Plural
First person	ku-, an-/-an	an-/-an
Second person	e-	eci-
Third person	Ø-	Ø-
Fourth person (indefinite person)	an-/-an	

Table 2: Transitive verb person affixes.

Object	1sg	1pl(4)	2sg	2pl	3sg	3pl
Subject						
1sg			eci-	eci-/-an	ku-	ku-/-hci
1pl(4)			an-e-	eci-/-an	an-	an-/-hci
2sg	en-	i-			e-	e-/-hci
2pl	en-/-an	i-/-an eci-i-			eci-	eci-/-hci
3sg	en-	i-	e-	eci-		-hci
3pl	en-/-hci	i-/-hci	e-/-hci	eci-/-hci	-hci	-hci

7.2 Fourth person affixes

Unlike the Hokkaido dialects, Karafuto Ainu has no first-person exclusive affixes ciand -as. The fourth person (indefinite person) affixes an-/-an do not have a separate first-person inclusive function, but are used as first-person singular forms, in addition to ku-. Hattori (1961) and Murasaki (1979) treat this as a stylistic difference with the "elders' speech style" corresponding to the "elders' language" in the lexicon. The affixes *an-/-an* have the following uses in Karafuto Ainu, cf. their uses in Hokkaido dialects in Bugaeva (Chapter 1, this volume).

7.3 Use of the fourth person affixes for first person singular

When speaking with an elder, young people use an-/-an as first-person affixes. This can be regarded as a kind of honorific language. Murasaki (1979) claims this usage is found in "elder \rightarrow younger, elder \rightarrow elder, and younger \rightarrow elder" utterances. ¹⁵

```
e-kiiki-hi?"
(49) "e-tek-ihi
                         mayayki
                                    kusu
      2SG.A-hand-POSS itch
                                    because 2SG.A-scratch-POSS
                 mayayki, an-kiiki."
      "siina'an.
      really
                 itch
                            4.A-scratch
      "Are you scratching because your hand itches?"
      "Yes, it itches, that's why I am scratching it."
      (Murasaki 2013: 50)
      (A grammar confirmation example. On the tape it is actually uttered by one
      person.)
```

7.4 Use of fourth person affixes for first person plural

As mentioned, unlike Hokkaido dialects, there is no distinction between inclusive "we" including the addressee (= 'you and I') and exclusive "we" excluding the addressee (= '(s)he and I'). 16 The forms an-/-an can be used for both.

(50) kuani neewa eani tura u-san-ke-ta rok-**an**.

1SG and you COM RECP-near-place-LOC sit.PL-4.S

'You and I are sitting together.'

(Murasaki 2016: 74)

¹⁵ If this were strictly followed, among young people only ku- would be used and it should be impossible to find examples of the two styles (an- and -an with ku-) being mixed. However, one does occasionally find mixed examples. In addition, in stories, an-/-an is preferred and in daily conversation, ku- is more common.

¹⁶ There are cases of characters appearing in stories using *ci-/-as* as the first-person singular form.

(51) tara aynu eh teh u-neeno pave-**an**. anoka this man come.SG and RECP-same.as go.PL-4.S 4PL ariki-an-ihi. come.PL-4.S-NMLZ 'This man came and we went out together. We will come together.' (Murasaki 2016: 40)

They are used for indefinite persons.

(52)husko oh-ta tan Rayciska nah an-vee ree nevke place-LOC this Rayciska QUOT 4.A-say name TOP old 'The name that (people) called this Ravciska long ago . . .' (Murasaki 1976: 9)

They are used for the subject in an impersonal passive sentence. The agent is shown by the ablative case.

(53) *ahci* oro-wa an-reske pon monimahpo grandmother place-ABL 4.A-raise little girl 'the girl (who) was raised by her grandmother' (Murasaki 2001: 36)

They are used to show person in quoted sentences.

(54)"senra cuk-i-i-ta hacuhceh suv eh always autumn-EP-NMLZ-LOC hacuhceh.fish again come.SG anah suv ee-he ka **an**-e-iranahka uwasi" if again eat-NMLZ even 4.A-APPL-feel.troublesome EMPH ta'ah ka nah ve-hci manu. ku-e-ocis. QUOT say-PL REP.EVID this also 1SG.A-APPL-resent '(They say) always when the hacuhceh fish come in the autumn that (people) say they are such trouble to eat. That also irritates me.' (Murasaki 2001: 212)

This is from a folkloric conversation and the speaker is a *hacuhceh* fish (Japanese and scientific name unclear). It is "people" who are bad mouthing the fish calling it bothersome to eat. The person that appears in "people's" lines is not third person, instead the *an*- form is used.

7.7 First person and second person pairings in the person affix paradigm

There is a pattern that Karafuto Ainu shares with Hokkaido eastern and Saru dialects. Hattori and Murasaki describe this saying that in Karafuto dialects (Esutoru) an- appears when a first person and a second person plural are participating in a subject-object relation or an object-subject relation. In other words, when a first-person plural (an-) is combined with a second person, in Hokkaido eastern dialects, second person plurality is shown by e-/es-, see Nakagawa and Fukazawa (Chapter 8, this volume), but in Karafuto dialects the plurality of a second person objective case noun is shown by the presence or absence of -an. Observe Table 3, where K stands for Karafuto Ainu and H for Hokkaido Ainu.

		2sg (e-)	2pl (eci-)
1sg	K	eci-	ecian
(ku-)	H (Saru)	eci-	eci-
	H (eastern)	ean	esan
1pl (4)	К	an-e-	ecian
(an-/-an)	H (Saru)	a-e-	a-eci-
	H (eastern)	ean, an-e-	esan

Table 3: First person and second person pairings.

8 Nominalizing affixes

8.1 Formation of the nominalizing affix -hV

Unlike Hokkaido dialects, in Karafuto Ainu a verb can be nominalized by the addition of -hV to the verb. 17 If the verb ends in an open syllable, the suffix is formed using the final vowel, giving the forms -ha/-he/-hi/-ho/-hu. If the verb ends in a closed syllable, -ihi is added.18

```
yee 'say' → yee-he
kara 'do, make' → kara-ha
oman 'go (SG)' → oman-ihi
```

¹⁷ In Hokkaido dialects, a verb phrase can be followed by the formal nouns hi and pe. The former has the same origin as the Karafuto nominalizing suffix.

¹⁸ In Murasaki (2001: 194), there is one example of the verb ahun 'enter' being nominalized as ahun-uhu.

A noun formed with this nominalizing suffix expresses an individual, specific event, while a noun formed not using the nominalizing suffix (treating an unmodified intransitive verb as a noun) expresses a general concept. Bugaeva (2016) points out that this nominalizing suffix is used in presuppositional contexts.

- (55) **ku-vee-he** sunke 1SG.A-say-NMLZ lie 'I told a lie. (lit. What I said is a lie.)' (Murasaki 1979: 95)
- (56) *e-ramu-hu* neeno kii wa 2SG.A-think-NMLZ same.as do SFP 'Do as you thought.' (lit. 'Do as what you thought.') (Murasaki 1979: 95)

As in Hokkaido dialects, an intransitive verb (or a 1-valence verb phrase) can be used as a noun expressing a general concept.

(57) tura ipe-hci omantene okay taa tani, pirika exist.PL COMeat-PL and.then EMPH now good ki-hci manu. do-PL REP.EVID '(They say) (they) ate together and then spent a good life.' (Murasaki 2001: 32)

8.2 Cooccurrence of the nominalizing suffix with neanpe

In combination with the topical conjunctive particle neanpe, nominalization with the nominalizer -hV forms an expression that is used like a conjunction expressing a sequence of events 'when ~ happened, the next event happened'. However, unlike the conjunction anah, the construction does not have a condition contrary to fact use.¹⁹

(58)kema ani sitayki-**hi neanpe** kema-ha kotahma. foot INS hit-NMLZ TOP foot-POSS cling 'When I kicked it with foot, my foot got stuck.' (Murasaki 2001: 62)

¹⁹ In present day Karafuto dialects anah is a conjunction and the preceding verb does not take the nominalizing suffix, but historically it can be thought to have the same origin as the Hokkaido topic particle anak. Perhaps the preceding verb was nominalized with no modification.

(59) *ohkayo* hunara anah, nee ohkayo hunara-hci male find if anv male find-PL kusu nevke, niina oh-ta **DEMO** in.order TOP gather.wood place-LOC also ceh-kovki oh-ta DEMO e-vwanke kusu i-ki APPL-be.useful in.order ANTIP-do fish-kill place-LOC also 'If you search for a man, if you were to search for any sort of man, either a wood gatherer or a fisherman would probably be useful.' (Murasaki 2001: 76)

8.3 Sentence final particle use of the nominalizing suffix

A verb in its nominalized form with -ha/-he/-hi/-ho/-hu is sometimes used like a final particle. Bugaeva (2016) points out that this presents old information and occurs in presuppositional contexts.

8.4 Interrogative sentences with the nominalizing suffix

(60) *ahci* tani uwasi e-numa-ha? siina'an grandmother now just 2SG.S-get.up.SG-NMLZ truly 'Grandmother, did you just get up now? Yes.' (Murasaki 2016: 90)

8.5 Emphasis with the nominalizing suffix

"nak-ene kusu?" (61) e-oman TTEKOU nah vee manu. where-ALL 2SG.S-go.SG intention QUOT.Jap OUOT sav REP.EVID "nanna-nanna nah vee ike taa taa oman OUOT say and EMPH elder.sister-elder.sister EMPH go.SG w-o-oneka-ha" ru-w-ehe-hcin nah vee manu track-EP-POSS-PL RECP-EP-patrol-NMLZ QUOT sav REP.EVID '(They say) he said, "Where are you going?" Since he said that, she answered saying, "I'm going to follow the trail of where older sister went." (Murasaki 2001: 82)

The *w-o-onwka-ha* [RECP-EP-patrol-NMLZ] 'follow' here is explaining a particular plan one is going to carry out.

9 Conclusion

Although Karafuto dialects and Hokkaido dialects have much in common, they differ in details in a broad range of areas, including phonology, lexicon, person affixes, plurality, and locative nouns. There are differences in grammatical phenomena beyond the existence of an elder speech lexical stratum and the decimal number system.

While, on the one hand, plurality becomes vague with the use of *an-/-an* for the first person singular, on the other hand, the complementary, so to speak, use of the plural suffix -hci/-hcin clarifies the expression of plurality and multiple occurrences. The affiliative form suffixes and the nominalizing suffix have been simplified morphologically, but there are also usages that differ from the Hokkaido dialects. Morphological simplification and a rich variety of uses captures the overall differences from the Hokkaido dialects.

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10 Ainu oral literature

1 Outline of Ainu oral literature

Most of the linguistic works expressed by the Ainu themselves in the Ainu language are oral literature. In modern times, there have been many written works of Ainu literature, such as the *tanka* poems by Yaeko Batchelor and *Kusukup Oruspe*, Memories of my Life, by Kura Sunazawa (1983), but, because traditional Ainu culture did not use writing, a variety of oral literature has been nurtured and passed on. In general, these were not created or performed by specific professionals, but were told, listened to, and passed down in each community and household.

After the Meiji era, the Ainu language was no longer used in daily life due to the great pressure of assimilation and modernization that took the use of Japanese as a matter of course, and the opportunities to relate oral literature in Ainu decreased.

In the midst of this, there were people who tried to record and preserve the Ainu language and Ainu oral literature, which were their own culture. One of the earliest published examples is Yukie Chiri (1903–1922)'s *Ainu Shin'yōshū* (1923), a collection of oral literature she had learned and published with Japanese translations. Others, such as Matsu Kannari (1875–1961), Tasuke Yamamoto (1904–1993), and Tatsujirō Kuzuno (1910–2002), recorded their own oral traditions, while Shigeru Kayano (1926–2006) recorded the oral traditions of his hometown, for details see Ōno (Chapter 12, this volume).

In addition, Ainu language researchers, with the help of the Ainu people, have documented oral literature. This is not only because of their interest in oral literature itself, but also because, in an age when it has become difficult to collect and record materials of natural Ainu conversational speech, oral literature has been collected in large quantities as material for recording the Ainu language.

Given the situation described above, although among the endangered languages, the Ainu language is now recognized as "critically endangered" by UNESCO, it is said that a relatively large amount of Ainu oral literature has survived.

For example, Kitahara (2019) provides an overview of the level at which the Ainu language falls within UNESCO's criteria for endangered languages. In terms of the "quantity and quality of linguistic descriptions" of Ainu, Kitahara notes that "some dialects in southwestern Hokkaido, such as Saru and Chitose", have "one good grammatical description, as well as grammatical materials, dictionaries, written materials, literature, and regularly updated materials on daily language use", and on these criteria, Ainu falls into the second category from the top of the five levels. However, Kitahara also states that "there is a bias toward literary materials and a lack of materials for daily conversation". In terms of the quantity of linguistic descriptions of dialects other than those mentioned above, it is one or two steps lower, stating that "written

materials may exist" and that "sound and video recordings are of both high and low quality, and some are transcribed, and some are not".

Today, there are few people who can relate or understand Ainu oral literature, but audio recordings and written records of Ainu oral literature have been collected and preserved by museums and other institutions, and some of them are available in print (for details see Nakagawa and Fukazawa (Chapter 8, this volume) and on websites.¹

In this chapter, Section 2 provides an overview of the genres of Ainu oral literature. In Section 2.5, regional differences in genres will be discussed. In Sections 3 and 4, I will explain the differences between poetic (elegant) language and everyday language, especially the characteristics of poetic genres. The last section, Section 5, is a summary of this chapter.

2 Genres of Ainu oral literature

The Ainu oral tradition consists not only of stories, but also broadly includes songs, incantations, and even greetings in daily life. This is a view shared by many researchers.

On the other hand, there are several ways to classify the genres, and there is no common theory. Some classify them based on their form (the way they are narrated), while others classify them based on the function of the story being told.

In this section, I will introduce the classification of oral literature by function and purpose proposed in Hiroshi Nakagawa (Nakagawa 2001b, 2009). This classification divides various genres of oral literature into four major categories according to their functions: songs, word games, chants, and narratives.

2.1 Songs

The first category, "songs", is "mainly allowing the listener to hear the melody rather than conveying the content of the words" (Nakagawa 2001b: 5). Therefore, compared to other genres that involve melody, songs are highly technical in terms of vocalization and versification. Singing technique is an important element in singing to the extent that it has been said, "Traditional Ainu songs are full of elements such as melodic embellishments, the transition between one's natural voice and falsetto, and elements like glottal stops, and if these are not inserted in the right places, they will not be rec-

¹ Websites where Ainu oral literature is available include, for example, Asia-Afurika Gengo Bunka Kenkyūjo (2016) (https://ainugo.aa-ken.jp/), Biratori-chō-ritsu Nibutani Ainu Bunka Hakubutsukan (2015) (http://www.town.biratori.hokkaido.jp/biratori/nibutani/culture/language/), Kokuritsu Ainu Minzoku Hakubutsukan (2017) (https://ainugo.nam.go.jp/), and Nakagawa et al. (2016–2021) (https://ainu.ninjal.ac.jp/folklore/en/) (as of January 20, 2022).

ognized as "Ainu songs", at least by those who were born in the period 1900–1910." (Nakagawa 2009: 327)

There are many kinds of songs, such as seated songs, dance songs, improvisational songs, lullabies, and work songs. There are also different ways of singing, such as solo singing, choral singing, and round singing.

On the other hand, the song category is characterized by the lighter weight of lyrics compared to other genres. Regarding this, Nakagawa writes:

Many of them have little message and are just a series of meaningless *hayashikotoba* 'utterances added to maintain or complete the rhythm of a song'. The *yaysama* in lyric songs are supposed to be improvised and sung as one thinks, but if no lyrics appear, one may continue to sing only *hayashikotoba* like *yaysamanena* or *horennahore* repeatedly for a long time. Lullabies, too, often consisted only of the repetition of the refrain *hororse*, and, while some have narrative content, considering that the person to whom they were sung is an infant, it is safe to say that they were not intended to convey a message to the other person, but more for the purpose of relieving one's own distraction and boredom. There are many seated and dancing songs whose lyrics consist only of *hayashikotoba* with no real meaning, or which may have had a clear meaning in the past, but which have been transformed over the years and whose meaning is no longer clear.

(Nakagawa 2009: 328)

The lyrics are generally fixed for each song, but the singing style may be adjusted from time to time by adding improvised shouts, etc.

The following is a general description of the singing style.

In addition to the high and low notes, the combination of tone qualities associated with the way the voice is produced seems to be an important factor.

In a song, for example, you will hear a variety of tone qualities, such as a voice that is not so different from that of normal speech, a growling voice, and a thin falsetto. In some cases, the sound of breathing in and out is used. There are also ways to create unique sounds, such as quickly switching back and forth between a normal voice and a falsetto or using the back of the throat to make a tremulous voice. There is also a trilling of the tongue-tip making a "rrr" sound, which is used as a bird call in dances that include bird gestures, as a shout in other dances, and as a sound to soothe babies in lullables.

(Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 13)

The following is an overview of the genre "songs".

Seated songs are songs without musical instruments or dancing. In the Ainu language, such songs are called *upopo* (Hokkaido) or *heciri* (Sakhalin), and are mainly sung by women on ritual occasions. Several people sit in a group around the lid of a lacquered vessel (*sintoko*² in Ainu), and all sing together, tapping the lid lightly and keeping the beat. The main focus of these songs is to enjoy the variety of voices. Each song is very short. The lyrics are fixed, but in many cases the meaning of the lyrics is now unknown. For example, the following is a traditional Chitose seated song.

² Concerning the origin of the word *sintoko*, see Shiraishi and Tangiku (Chapter 7, this volume).

(1) ororo-pinne owahiya owa cisnere
?-male ? ? ?

apka topa owahiya owa cisnere
male.deer herd ? ? ?

While some of the words in the song can be assigned meanings in Ainu, such as *pinne* 'male' and *apka topa* 'herd of stags', there are also words and phrases that do not make sense as currently known Ainu words, making the lyrics unintelligible as a whole. Another Chitose seated song, given below, consists entirely of *hayashikotoba*, and the lyrics are completely unintelligible.

(2) hororoka sankoessa ? ? hororoka sankoe ? ?

When singing, the same song is sung several times, and then the singer moves on to another song when the timing is right. There are several different ways of singing the seated songs, some of which are sung in unison, and some of which are sung by one person leading the singing, followed by all the others singing the same song and repeating it in turn. One of the most distinctive forms of singing is a kind of round singing called *ukouk* in Ainu, which literally translated means 'to take together'. This is a form of singing in which "one person or group of people sing the same song starting at fixed regular intervals. By singing the same melody offset by small intervals, a complex yet coherent sound is created".

(Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 10)

A dance song is a song accompanied by dancing. In Ainu, they are called *upopo* (northern Hokkaido), *horippa* (Hidaka, Saru), *rimse* (Iburi region), and *heciri* (Sakhalin). These songs are also sung by women. "There are songs that are accompanied by a specific choreography and songs that are not. In recent years, however, it has become common for certain songs to be danced to a specific choreography" (Nakagawa 2009: 323). There are various types of dance, such as one in which all the members stand in a circle facing the center and proceed in a circular motion while singing, and one in which "movements imitating animal gestures are incorporated into the dance". (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 13)

In the former, in which many people form a circle, "the dance is generally a combination of simple footwork and handwork that is repeated" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 11) and is called *rimse* (Shirao), *horippa* (Saru), or *upopo* (Asahikawa), depending on the region. The lyrics, like the seated songs, are often unintelligible or are based on shouted words such as *hoyya*.

The latter, in which the gestures of animals are imitated, "include songs handed down from region to region and vary. There are dances of cranes, snipe, swallows, sparrows, rats, foxes, grasshoppers, and so on, and the lyrics use words that repre-

sent the names and sounds of these animals" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 13).

An impromptu song (lyrical song) is one in which the singer sings about old memories and the feelings of joy, sorrow, love, etc. that he or she felt at the time. The lyrics may include shout-outs such as yaysamanena or ayororope or phrases such as "two pure tears / three pure tears / I shed" to express sadness and tears. The melody varies from person to person, and sometimes people learn other people's songs and sing them" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 15). In Ainu, they are called *yaysama* (upper reaches of the Saru River), *yay*samanena (lower reaches of the Saru River), yaykatekar, iyohay(o)cis, etc., depending on the region. The lyrics are said to be "basically improvised songs about one's feelings, but there are many cases where people use formulaic expressions and chant lyrics with fixed content that have been handed down. Those called *yaysama* repeat hayashikotoba such as yaysamanena and horennahore and, when the singer comes up with lyrics to sing, they insert them into such refrains. iyohay(o)cis are mainly songs about suffering related to love and have a unique melody" (Nakagawa 2009: 323). They are songs about family, love, memories, etc., in which the singer improvises lyrics to express his or her own feelings at the moment and include a direct message. They can be sung by a soloist without the need for a partner. There is a high degree of freedom in both melody and lyrics. Although they are an improvisational songs, once it is composed, one may learn them by oneself and sing the same song over and over again. For example, there is an improvised song like this one.

yaysamanena

yaysamanena

From here

I'd fly off

I want to be a bird

I want to be the wind.

(3) *yaysamanena* yaysamanena

RFN

yaysamanena

RFN

yaysamanena

RFN

cikap ta ku-ne

bird EMPH 1SG.A-COP

rera ta ku-ne.

wind EMPH 1SG.A-COP

tap-an te wa-no

this-exist.SG here ABL-ADV

ku-ki-ho-pun-i,

1SG.A-do-bottom.PF-lift-TR.SG

ku-kor kotan un To my village

1SG.A-have village ALL

ku-arpa rusuy.	I want to go.
1SG.S-go.SG DESI	
tan-an-to or ta	Today
this-exist.SG-day place LOC	
ku-kor hekattar	My children
1SG.A-have children	
nekon yaynu kor	What are they thinking
how think and	
nekon i-ki kor	What are they doing
how ANTIP-do and	
oka nankor y_a?	I wonder.
exist.PL probably Q	
ku-kor hekattar	My children
1SG.A-have children	
u kes-to an kor	Everyday, everyday
RTM every-day exist.SG and	
ku-esikarun	I miss them
1SG.A-recall	
ku-nukar rusuy	I want to see (them).
1SG.A-see DESI	
hoy ya hoy	hoy ya hoy (remainder omitted)
RFN RFN RFN	
(Tamura 1996: 8–10)	

This is an impromptu song sung by Sada Hiraga of Biratori town. "The song is about a working mother who is thinking about the children she has left behind in her hometown", she said, adding the refrain *yaysamanena* at the beginning and end of the song. The first part of the song, 'I want to be a bird, I want to be the wind.' (*cikap ta ku-ne* / *rera ta ku-ne*) is a formulaic phrase used in improvised songs.

Lullabies are "songs that are sung to babies while they are being cuddled or put to sleep" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 14). In Ainu, they are called by terms such as *iyonruyka* (lower reaches of the Saru River) and *iyonnokka* (upper reaches of the Saru River), depending on the region. For example, there is one like the following.

(4)	oho	rr	hao	hao		oho rr hao hao
	RTM	RTM	RTM	RTM		
	oho	rr	hao	hao		oho rr hao ha
	RTM	RTM	RTM	RTM		
	iteki	cis	no			Don't cry
	PROH	cry	and			

mokor mokor hani. Go to sleep. sleep sleep **EXCL** evtasa e-cis vak If you cry too much 2SG.S-cry if very wen-kamuy patek Only the evil spirits be.bad-god only e-eramasu. Will like you. 2SG.O-love oho rr hao hao oho rr hao hao RTM RTM RTM RTM oho rr hao ha oho hao hao rr RTM RTM RTM RTM The cradle i-res-u sinta ANTIP-raise-TR.SG cradle Above the cradle sinta kurka cradle above kamuv o-ra-n The gods descend, na god on.APPL-low.place-INTR.SG SFP kamuy o-inkar A god-watched god on.APPL-look kus nispa e-ne fine person you are going to be. ne na. rich.man 2SG.A-COP intention COP SFP oho hao oho rr hao hoy rr hoy RTM RTM RTM RTM oya hao hao oya hao hao RTM RTM RTM (Tamura 1996: 23–24)

This is a lullaby by Sada Hiraga of Biratori Town. The *oho rr hao hoy* that is inserted at the beginning and end of the lyrics is a refrain with no particular meaning. The part written as *rr* is a trilling sound made by vibrating the tip of the tongue and is called *hororse* in Ainu. This *hororse* is inserted in many lullabies. The lyrics vary, ranging from simply repeating the *hororse* or refrain, to directly telling the baby to 'go to sleep' as quoted here, to having a narrative content that does not seem to have anything to do with putting the baby to sleep. In particular, those with narrative content range from songs about real-life resentments (which have been handed down), such as "your father went to a Japanese woman and never came back", to those that seem to have taken their subject matter from heroic epics (Nakagawa 2009: 323).

Work songs are songs sung to accompany a task or an activity associated with a task. There are songs for pounding a mortar to thresh and mill grain, for paddling boats, and for woodcutting. However, "except for pounding songs, there are few recorded examples, and work songs not sung in labor situations nowadays" (Nak-

agawa 2009: 323). Such songs are "songs to create the rhythm of communal labor, or to ease the pain of labor" (Nakagawa 2009: 323). The lyrics "range from simple shouts of encouragement for work to those with a certain degree of coherent lyrics" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2001: 12).

2.2 Word play

The second type, "word play", consists of the "enjoyment of mouthing the words themselves" (Nakagawa 2001b: 5), and includes *kikinashi* 'imitation', "tongue twisters", and "riddles". Word play does not take place in a specific situation or for a specific purpose but is intended to bring enjoyment or amusement through the saying of the words out loud.

Kikinashi, a Japanese term, refers to matching meaningful words to the cries of birds or other animals. The imitations are matched to a melody, but, unlike a song, the verses and vocalization are not emphasized. They have no particular purpose, but the enjoyment is simply in the saying of them.

The following is a *kikinashi* about the Himalayan Cuckoo (Japanese *tsutsudori*) that has been passed down in the Horobetsu area of Iburi (now Noboribetsu)

```
If the Sikot (Chitose) River is full
(5)
     Sikot pet
                   cep ot
     Sikot river fish be.in.abundance of fish.
      Tus
                                          The Tus River has no fish.
            pet
                   cep sak
     Tus
            river fish lack
      Tus
            pet
                   cep ot
                                          If the Tus River is full of fish,
     Tus
            river fish be.in.abundance
     Sikot pet
                   cep sak
                                          The Sikot (Chitose) River has
     Sikot river fish lack
                                          no fish.
     (Chiri 1955: 107-08)
```

Since the Himalayan Cuckoo is said to be an omen that signals fish, the song was created in this way. The actual call of the Himalayan Cuckoo is said to sound like *tutu* in Ainu and *popo* in Japanese. It is thought that the rhythm and meaning of the words were connected to the sound of the bird, and that, from these, the above *kikinashi* was created.

Tongue twisters are games in which players compete to say a certain phrase as quickly as possible, but rather than competing in the speed of one phrase, they compete in how many times they can say it in one breath. As an example, there is a tongue twister that is said to be created from the cry of a lark (*kikinashi*). The text differs slightly from region to region, but here is one version.

(6) pistarimpo pistarimpo sirkun tuwate tuwate makunmakun kururun kururun kina toy kurka kokenratki cikopararat (Nihon Hōsō Kyōkai 1965)

The version given here is by Toshizō Shiiku of Yakumo Town.

Riddles is a game in which one answers a question with an answer with a twist. Below are two examples.

- (7) Arpa arpa ni tom osma p? -- mukar go.SG go.SG tree middle get.into/enter thing/person axe
 'What are the things that bump into trees everywhere they go?' 'Axes'
 Tamura (1984: 54–55)
- (8) Retar seta u-koyki-re p?
 be.white dog RECP-fight-CAUSE thing/person
 -- a-mimak-i a-u-tomosma-re hi
 4.A-tooth-POSS 4.A-RECP-meet-CAUS NMLZ
 'What causes white dogs to fight?' 'making one's teeth clash with each other'
 Tamura (1984: 54–57)

2.3 Chants

The third type, "chants", are "for making requests, thanks, protests, instructions, etc., to the person to whom they are addressed" (Nakagawa 2009: 320). These are words used to convey one's will, such as "prayers" or "incantations" directed to the gods, "arguments" or "conferencing" directed to human beings, and "words of funeral rites" to be said regarding the dead.

Both prayers and incantations are words used by humans to express their will to the gods, but there are many differences in form between the two.

Incantations are used by both men and women in their daily lives to call for good weather or in case of minor health problems. They are very short and can be said in a few tens of seconds. The words to be chanted are determined in response to the situation, and no matter who is speaking, if the content of the chant is the same, the same words are always repeated word for word and phrase for phrase. Even if the meaning of the words is not clear at first glance, this is because of the use of metaphorical expressions, etc., and there are few Ainu incantations that contain words such as "abracadabra" whose meaning is not clear. The reason for this is that "the message must be conveyed to the other person, and they must carry it out" (Nakagawa 2009: 332).

For example, the following incantation is from Niikappu in Hidaka.

(9) cep-po nupki tuy tuy Muddy water of the small fish, break, break. fish-DIM dirty.water cut cut kamuy nupki tuy tuy Muddy water of the gods, break, break god dirty.water cut cut (Chiri 1955: 10)

This is an incantation to be chanted when trying to fetch water, to clear the muddy water. In this case, "muddy water break" means "make the muddy water disappear", and the overall meaning is, "Please clean the muddy water, and also clean the water that has become muddy due to the movement of small fish." In this way, the incantation "attempts to achieve some effect" (Nakagawa 2001b: 5).

Chiri gives several incantations for clean water from different regions. In Horobetsu in Iburi (now Noboribetsu), they chant,

(10) nupki sa-n Muddy water, recede dirty.water front.place-INTR.SG pe sa-n Water, recede water front.place-INTR.SG

and in Bihoro in Kitami, they chant,

(11) wakka rak rak Water, be cleansed, be cleansed water clarify

and in Ushiro on Sakhalin, if, when they have scooped up water, they find it to be a little muddy, they wait for the water to clear by chanting,

(12) kamuy nupki sa-n sa-n good dirty.water front.place-INTR.SG front.place-INTR.SG 'Muddy water of the gods, recede, recede' pe nupki sa-n sa-n water dirty.water front.place-INTR.SG front.place-INTR.SG 'Muddy water of the waters, recede, recede'

and then take the next scoop of water (Chiri 1955: 10–11). Thus, the wording of each incantation has been fixed and handed down, although the wording varies slightly from region to region.

On the other hand, "prayers" can be expressed differently depending on the time, occasion, or narrator, even when praying to the same god and for the same content. It is "not something to be memorized and recited like the words of the Bible or Buddhist

scriptures. It is a text that is spun out by improvisation according to the situation of the moment, and naturally the content and expression are different each time" (Nakagawa 2016: 16). They are also longer than incantations, often lasting from a few minutes to several tens of minutes. In addition to ceremonial occasions, there are specific occasions when they are chanted, such as when praying for safety when entering the mountains.

Both prayers and incantations are spoken to a melody, but the melody of the incantation is the same regardless of who is speaking. On the other hand, the melody of a prayer belongs to the individual speaker, and the melody of one person will not be said by another person. Also, while incantations can be uttered by men and women of all ages, prayers are said to be uttered only by adult males. In some cases, the prayers are said so quietly that no one can hear them, while in other cases, they are said in a voice that can be heard by everyone present, and the rules vary from region to region.

Below is an example of a short prayer. This is a prayer recorded by Motozō Nabesawa (whose Ainu name is Motoanrek) of the town of Monbetsu (present-day Hidaka Town) and is a prayer to the god of fire during an ancestral memorial service.

(13) *mosir kor huci*! Grandmother god (= fire god) who rules

land have grandmother the land!

tap-an tonoto With this sacred wine

this.exist.SG liquor

inaw tura-no Together with these willow prayer sticks (a

willow.prayer.stick INS-ADV kind of ritual implement)

ku-e-ko-pase- I respectfully

1SG.A-with.APPL-to.APPL-be.heavy/important onkami siri Pray to her

worship VIS.EVID

ne hi tap-an na, And so it is.

COP NMLZ this-exist.SG SFP

tap-an tonoto This sacred wine,

this.exist.SG liquor

tap anak-ne Certainly,

this TOP-COP

Motoanrek Motoanrek

Motoanrek

ku-ne wa tap-ne is (who) I am,

1SG.A-COP and this-COP

ku-kor tonoto With my sacred wine

1SG.A-have liquor

kamuv k-e-ko-onkami I worship the god

god 1SG.A-with.APPL-to.APPL-worship

ne hi tap-an na, I am the one

COP NMLZ this-exist.SG SFP

sam-a ta And, furthermore na yet near-POSS LOC ku-kor rok sinrit My ancestors 1SG.A-have PRF.PL ancestor ku-ra-p-pa rusuv Since I want to worship them. 1SG.A-low.place-INTR.PL-PL DESI Therefore, tap-an-pe kusu this-exist.SG-thing because i-res-11 (The words to) the nourishing god kamuv ANTIP-raise-TR.SG god (= fire god) ku-e-si-kotcain front of myself 1SG.A-at.APPL-REFL-front I tell nu-re itak hear-CAUS speech To the god's heart kamuv kewtum or god spirit place Words of thankfulness asoun itak gratitude speech ku-ve hawe I sav 1SG.A-say REP.EVID I am the one ne hi tap-an na, COP NMLZ this-exist.SG SFP mosir kor huci! Grandmother god (= fire god) who rules the land! land have grandmother Momentous god! pase kamuy! be.heavy/important god (Monbetsu-chō Kyōdoshi Kenkyūkai 1966: 106–07)

The fire deity is an important deity because the deity carries the words of human beings to the other gods, and during rituals, we first pray to this fire deity to convey our words. In this text, it is the fire god who is invoked as 'the god who controls the land' *mosir kor huci*. This kind of expression is not found in any other genre and can be considered to be unique to the language of prayer. The basic structure of the language of prayer is that after calling out to the gods, as in the text given here, the speaker states who is speaking to the god and what he or she is going to do (or what he or she wants them to do) by making an offering of wine or something.

The language of negotiation is recited at a *caranke*, which is a ritual of disagreement caused by a conflict of interest, like a trial. This is also done only by adult males. There are few records of the actual text, but it is said that the exchange continues until one side is defeated. It is also a poetic text that is spoken to a melody.

"Words of meeting" are words chanted during formal greetings. They are mainly said by men to each other and are also spoken to a melody.

2.4 Narrative

The fourth type, "narrative", is for "telling people stories" (Nakagawa 2001b: 6). In terms of enjoyment, it is the same as word play, but in this case, the purpose is to enjoy the content (the story), and not only to enjoy saying it oneself, but also to listen to it. In the story, there are times when wisdom and lessons from life are discussed, but these are not essential.

Three major genres are often mentioned: prose tales, divine epics, and heroic epics. Although there are some exceptions in each of them, in principle, the entire story is told in the form of a first-person narrative from the viewpoint of the protagonist, such as "I am so-and-so" or "I went to such-and-such a place." Then, at the end of the story, the formulaic phrase "... and so-and-so told the story" makes it clear to the listener who the character who had been referred to as "I" was.

However, the first person, i.e., "I", in this case is different from that in daily life. In everyday speech, the first-person singular nominative is ku- as in (3), but this is not used in "narrative". For example, in the Saru and Chitose dialects, the affix employed in "narrative" is a- /-an, which represents the first-person plural inclusive or indefinite in everyday speech and is glossed as fourth person (4.S/A/O), for details see Bugaeva (Chapter 1, this volume). This is the same for both singular and plural protagonists.

Even within the same "narrative", the word used as the personification of "I" differs according to genre and region (Nakagawa (1993), Satō (2004), Satō (2008), etc.). For example, in Yukie Chiri's $Ainu Shin'y\bar{o}sh\bar{u}$, in the text of a $shin'y\bar{o}$ (see below) from the Iburi region, the exclusive first-person plural personal affix ci- / -as is used as the first-person singular and plural personal affix.

The following sections provide an overview of each of these genres.

2.4.1 Prose tales

In Ainu, "prose tales" are called *uepeker* (southwest Hokkaido), *tuytak* (central and northeast Hokkaido, Ishikari, Teshio, Kitami, Kushiro, Tokachi, Hidaka area east of Shizunai, etc.), *isoytakki* (Samani), *ucasikoma* (Sakhalin), and *tuytah* (Sakhalin), depending on the dialect. (Chiri 1955: 170–171, among others). As the term "prose tale" suggests, they are stories told without verse. Some people use a tone of voice similar to that of daily conversation, or even a little more monotonous than that, while others use a slightly more inflected tone. Many of the stories can be finished in a dozen or so minutes or some tens of minutes, but some are shorter, and some are as long as several hours. It is said that they are mainly told by women.

The prose tales can be further divided into four subcategories: "human prose tales", "kamuy prose tales", "Japanese prose tales", and "Pananpe-Penanpe tales".

Human prose tales make up the majority of prose tales, so when we simply say "prose tales", we mean these. Human beings (Ainu people) are the main characters. The protagonist is often unnamed and is presented as "the chief of _____ (place name)" or "the lady of _____ (place name)". In longer stories, the protagonists who say "I did it" may be replaced in the middle of the story.

The story begins with the protagonist's family structure and lifestyle, as in, "I had a father and mother, and an older brother, and my father went hunting in the mountains and caught lots of bears and deer, and we lived a full life, not wanting for food nor wanting for anything more". The story basically develops in the following way: One day, the protagonist is involved in some kind of incident, but solves it with his own ingenuity and help from the gods (*kamuy* in Ainu). After that, he is blessed with children and spends his life happily, and as he is getting old and about to die, he tells his story leaving his experiences to his children. In particular, the beginning and end of the narrative have a set pattern.

As an example of a prose tale, here is a plot outline of one story. This is a story told by Wateke Hatozawa of Biratori Town in 1959 (Tamura 1985: 48–53).

I was raised by my grandfather in the upper reaches of the Ishikari River, and he and I lived together. Somehow, the whole village was full of broken houses. Grandfather would go out every night.

One day, as I was following my grandfather, a large object fell from the sky, and he carried it home. He knew I was following him, and the next day he told me what had happened. "You are the son of the chief of the village that owns the upper reaches of the Ishikari River, and when you were a baby, an epidemic broke out in the village. Just before he died, your father hid you under an altar and said, 'I don't care which god it may be, please raise my baby. The gods didn't want to, so I, the god of famine, came down from heaven to raise you. Because I am the god of famine, there is a famine in the middle reaches of the Yubetsu River because I am taking the souls of food. You should go to the Yubetsu River.

Following his words, I caught a deer on my way to the Yubetsu River and arrived at a village in the middle range of the river. When the village chief saw me, he shed tears of joy and prayed to the gods, saying, "This means that the soul of food will be returned. He was right, and from then on, the souls of the food returned, and the village prospered. I lived there for a couple of years, and when I became a full-fledged young man, I returned to my original village, built a house, and lived there. Rumor had it that my village was particularly good at catching food, and the number of people increased, so I became the village chief there. This is the story that the chief of a village in the upper reaches of the Ishikari River told me.

Thus, the basic structure of the story is that the protagonist is raised under mysterious circumstances or suddenly encounters a strange event one day, and with the help of the gods, he solves it and lives happily ever after. The story of the prose tale is said to be an actual event. However, unlike the "legends" described below, they do not necessarily relate to land or people that are directly related to the narrator.

The protagonist goes through various hardships and crises, but in the end, he is blessed by the gods for his good intentions and has a happy ending. On the other hand, people and *kamuy* with bad intentions are punished by dying a horrible death,

resulting in a happy ending for the protagonist; there are many stories rewarding good and punishing evil.

"*Kamuy* prose tales" are prose tales in which a deity is the protagonist. In the *shin'yō* 'divine epics' (to be taken up later) as well, *kamuy* are the protagonists and, since the story development of *kamuy* prose tales also resembles that of *shin'yō*, it could be said that *kamuy* prose tales are *shin'yō* put into prose.

The "Japanese prose tales" are prose tales in which the main characters are Japanese people (the majority ethnic group in Japan). These are not stories that were originally handed down among the Ainu people. They are stories that were handed down by the Japanese and then transmitted to the Ainu, who then began to tell them in their own language. Unlike human prose tales, the stories are told in the third person, as in, "In a certain town there lived a young lord . . .". The development of the story basically tries to maintain the original story, but issues and developments that are outside the worldview of the Ainu prose tale are transformed into the Ainu style (Endō 2002).

The main characters in "Pananpe-Penanpe Tales" are Pananpe (literal translation: 'one who lives downstream') and Penanpe (literal translation: 'one who lives upstream'). The stories are mainly about how Penanpe, seeing Pananpe's success and wealth, imitates him and fails. Unlike "human prose tales", which are short stories that can be narrated in a few to ten minutes and are full-fledged stories that adults can enjoy listening to, "Pananpe-Penanpe tales" are said to have been recognized as a genre for children.

Formally, the story begins with the standard phrase, "There was *Pananpe*; there was *Penanpe*." Typically, the story is told in the third person.

For example, the plot line of the *Panampe–Penampe* tale (Tamura 1985: 66–69), told in 1961 by Wateke Hatozawa of Biratori Town, runs as follows.

There were *Pananpe* and *Penanpe*. One day, when *Pananpe* went down to the beach, he saw a large sea lion. *Pananpe* said, "I'll pick your lice, sea lion," and ate the flesh of the sea lion's neck, pretending to pick lice. As the sea lion returned to the sea, *Pananpe* called out to him, "Hurry up and go, you headless bastard!" The angry sea lion turned and started to chase *Pananpe*. As *Pananpe* ran away, he came to a fork in the road. Hearing the crows cawing, "From the narrow valley, from the wide valley, caw, caw", *Pananpe* fled down the narrow valley. The sea lion that was chasing him couldn't get through the narrow valley, so *Pananpe* killed the sea lion, brought the meat home, and lived a wealthy life.

One day, *Penanpe* came to *Pananpe*'s house and asked, "How did you become wealthy?" Before *Pananpe* answered, he (=*Penanpe*) angrily left, saying that he had already heard. *Penanpe*, like *Pananpe*, went down to the beach and tricked a sea lion into letting him eat the flesh of his neck, and was chased by the angry sea lion. As he fled, *Penanpe* came to the fork in the road and fled up the wide valley. The sea lion was able to get through without difficulty, so *Penanpe* was caught by the sea lion and died a horrible death.

This is a story in the form of *Pananpe* succeeding and *Penanpe* failing at the same thing. The difference between the success or failure of *Pananpe* and *Penanpe* has nothing to do with the goodness or badness of their hearts or the cleverness of their minds. In the story given here, the two end up differently because of the different

choices they made at the fork in the road, but in some stories, even if *Pananpe* and *Penanpe* do exactly the same thing, they may end up with opposite results. In "human prose stories", which are told from the same worldview as daily life, the success of the protagonists is based on the goodness of their hearts, but the *Pananpe–Penanpe* tales are different, in that what is amusing is the successful *Pananpe* and the unsuccessful *Penanpe*. In some regions, the names *Pananpe* and *Penanpe* are changed, or the roles are switched, with Penanpe succeeding and Pananpe failing.

In Hokkaido, prose tales are described with the above terminology, but in Sakhalin, prose tales have different names according to the prose tale subcategory, such as ucaskoma for "orthodox prose tales in the first person" and tuytah for "prose tales in the third person" (Chiri 1955: 171–172). Another description of tuytah is that it is "a relatively formal folktale. (...) Often songs with verses and rhyme are inserted into the narration" (Murasaki 1989: 5–6). The form of the tuytah in Sakhalin varies considerably from person to person and from story to story" (Nakagawa 1996: 157). The formal characteristics of the tuytah include: "(1) A mixture of verse and prose forms. (2) In some cases, there are parts that can be regarded as being sakehe (a repeated refrain).³ (3) They are third person narratives" (Nakagawa 1996: 157).

2.4.2 Shin'yō 'divine epics'

In Ainu, divine epics are called *kamuy yukar* (southwestern Hokkaido), *oyna* (eastern Hokkaido and Sakhalin), menoko yukar (middle reaches of the Saru River), and tuytak (Samani, etc.). They are said to be told mainly by women, and some stories are short, lasting only a few minutes, while others are longer, taking more than an hour.

Typically, the protagonist is a kamuy 'god'. Kamuy are "things that provide us with the blessings of nature, such as plants and animals, things that are essential for human life, such as fire, water, and daily utensils, or things that are beyond human power, such as the weather" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 1999: 2).

However, in the *oyna* on the west coast of Sakhalin, the male protagonist is named Yayresuupo, and the female protagonist is his sister named Herimotanke (Murasaki 1989: 6), indicating that the protagonists of the stories differ between Hokkaido and Sakhalin. "This person *Yayresuupo* (. . .) is a cultural hero who brought culture to the people and is regarded as a human god. A difference can be observed such that "While the protagonists in divine epics in Hokkaido are many and varied, including various nature gods like plants and animals, (. . .) the protagonists in the oyna of Sakhalin are limited to so-called human gods" (Nakagawa 1996: 158).

³ More detail concerning *sakehe* will be presented in Section 2.4.2.

Formally, *shin'yō* are verse forms composed of verses made up of 4 or 5 syllables per line narrated to a melody, and the melody is fixed for each story. One characteristic is that refrains called sakehe (or saha) are inserted into the narration. Sakahe are meaningless phrases and do not contribute to the story. The sakahe are fixed for each story, but, depending on the people and the region where they are handed down, even a story with the same content may be narrated with different sakahe. For example, in the Saru River area, a number of shin'yō with a marlin tuna as protagonist have been recorded with the sakehe "tusunapanu". In Horobetsu tradition, the same story uses the sakehe tussay turi tussay matu (Chiri 1955). In the Chitose version of the same story, the protagonist is replaced by a mysterious fish called *okina*, and the *sakehe* is *nissō*. This is an example of how story type is not necessarily connected to sakehe.

The way in which sakehe are inserted varies from story to story, from every single line to every few lines. The beginning of the verse in which the marlin tuna self-narrates introduced above is as follows. For the sake of clarity, the Ainu words in the text of the story are written in lower case, and the sakahe, tusunapanu, is written in upper case.

(14)	TUSUNAPANU	Okikurmi	Okikurmi (name of
	RFN	Okikurmi	human god) with
	TUSUNAPANU	Samayunkur	Samayunkur (name of
	RFN	Samayunkur	human god)
	TUSUNAPANU	u-tura hine	Accompanied
	RFN	RECP-go.together and	
	TUSUNAPANU	repa kusu arki	Came to go offshore
	RFN	go.out.to.sea.to.fish for go.PL	fishing
	TUSUNAPANU	ki hi kusu	Since
	RFN	do NMLZ because	
	TUSUNAPANU	etok-oho ta	Before that
	RFN	before-POSS LOC	
	TUSUNAPANU	kan-pe kurka	On the water's surface
	RFN	surface-water above	
	TUSUNAPANU	c-o-si-pusu	I, floating,
	RFN	RES-at.APPL-REFL-draw.out	
	TUSUNAPANU	arki hine	Came, and
	RFN	come.PL and	
	(Kayano 1998: 5	6)	

As shown above, the form of the narration has the sakehe TUSUNAPANU inserted in every line. This story is a *shin'yō* narrated by Nebuki Nabesawa, who lived in Biratori Town.

The *sakehe* is not connected to the story type but is determined by each story. For example, the *sakehe* of a *shin'yō* in which a cuckoo self-narrates, as told by Fujino Hatozawa of Biratori Town, is *han kakkok kakkok* (Tamura 2000). It is easy for the listener to predict that this is related to the cry of the cuckoo (expressed as *kakkok* in Ainu). Thus, there are *sakehe* that imply the self-narrator of the *shin'yō*, and some think that the *sakehe* originally had the function of indicating who the protagonist is (Nakagawa 2001b: 7). On the other hand, there are many *sakehe* whose relationship with the protagonist is not clear.

In the above $shin'y\bar{o}$, Okikurmi and Samayunkur, the first of the two human deities who often appear in pairs in the story, later appear, Samayunkur thrusts his harpoon into "I" (= the marlin tuna). However, I continue to run away with the harpoon in my body, and Samayunkur, who has been holding the rope at the end of the harpoon in his hand for a long time, gets tired and collapses. Next, Okikurmi thrusts a harpoon in, and "I" continue to run away in the same way. Then Okikurmi finally said, "You scoundrel. If you run away so much, I will cut the rope of this harpoon, but you will be stuck with nettles (the material used for the rope attached to the harpoon) and shiurizakura (a kind of cherry wood, the material used for the harpoon handle), and the sound of your bones and steel (the material used for the harpoon blade) will echo in your body, and you will rot with the earth." The "I" laughs unconcernedly, but later, as Okikurmi told him, he dies in a bad way, and it ends with him leaving behind the words, "Marlin tuna, don't be afraid of being caught by humans like I was."

Some *kamuy* stories, like this one, are set in the world of humans and involve incidents between *kamuy* and humans, while others are set in the world of *kamuy* and involve stories of interactions between *kamuy*.

2.4.3 Heroic epics

Heroic epics are called *yukar* (southwest Hokkaido), *sakorpe* (east Hokkaido), *yayerap* (Samani), and *hawki* (Sakhalin). They are poetic stories, like the divine epics, and are narrated to a melody. However, unlike the divine epics, there are no *sakehe*. It is also said the melodies are not fixed to each story, but each narrator has his own melody, and that even if he heard a story from someone else, he will narrate it in his own melody when he tells it. The story is told repeating a short melody, but the melody is not held to only one pattern but may change in the middle of the story. In the narrative, both the narrator and the listener tap the rim of the hearth with a stick called a *repni* to create a rhythm while speaking and listening. In addition, the listener often adds a chorus called *hetce*. Another formal characteristic is that the stories are generally long and take from several tens of minutes to several hours or even longer (one night or several nights) to complete.

The narrator is basically a man. Although there are regional differences, it is often said that women do not tell heroic epics, or do not tell stories with verses. For

example, in Chitose, it is said that the heroic epics were "originally limited to male narrators, and women were not allowed to tell them. However, *irupaye*, which tell the content of a heroic epic in the style of a prose narrative, were considered acceptable for women to tell" (Satō 2008: 259). However, as the number of people who can tell heroic epics has decreased due to the decreasing opportunities to narrate Ainu oral literature, there are also records of women who can narrate these stories, narrating the stories in verse, with the full knowledge that traditionally women do not tell these stories, in order to preserve the stories they had learned for posterity in cooperation with researchers and others.

The protagonist of the heroic epic is a youth. Depending on the region, the youth is called *Poy-ya-un-pe* (*Pon Sinutapka-un-kur*) (Saru region), *Pon Otasam-un-kur* or *Pon Otasut-un-kur* (eastern Hokkaido), or *Pon Otasut-un-kuh* (Sakhalin). The main character has no real parents and is often described as being raised by a brother or sister of a family that has adopted him. In other stories, he is said to have been raised by his aunt and uncle. However, this youth is not just a human being, but is described as a hero with superhuman powers such as flying through the sky, diving into the sea, and moving through the earth.

The principal story of the heroic epic is that of a youth protagonist with superhuman powers fighting various battles with enemies who also have superhuman powers.

The protagonists and other characters fly through the sky and travel long distances in a flash. With swords in their hands, they engage in fierce battles, saying, "The sword that passes underneath burns like a flame that burns, and the sword that passes above burns like a flame that burns down." His superhumanness is such that even when he is cut down by an enemy and his torso is connected only by his spine, he is still able to stand and fight.

Not only youths, but also women play an active role. The female heroes, whether friend or foe, have a mysterious power called *tusu* in Ainu, which allows them to see the future and distant events, and to heal the heroes who are in critical condition by breathing on them. Some of the heroines fight "woman-on-woman" battles, in which the women on both the allied and enemy sides ascend to the heavens and roar across the sky, or pick up weapons to fight alongside the men.

However, unlike the world of prose tales, these battles have nothing to do with good and evil. The protagonist is never righteous, and the enemy is never evil. It is quite common for the hero to lose his temper and annihilate an entire village, including ordinary people who have nothing to do with the battle. Therefore, the worldview of heroic epics is different from that of prose tales or *shin'yō*. Of course, it is also very different from everyday life. The heroic epics are stories of battles by superhumans, and they are entertainment.

For example, there is a heroic epic recorded by Motozō Nabesawa of the town of Monbetsu (present-day Hidaka Town) that tells the following story.

I was raised by my grandfather. He gave me armor and told me to go to the land of the demon gods and fight on their side. When I went outside, I learned for the first time that I had been raised in a cave. When I went to the battlefield, an elderly man from the enemy side told me that he was from a village called Sanput and that he was fighting with Kamuy'otopus and Ciuseresu of Sinutapka to find his missing nephew, and wondered whether I might be the nephew. I was so angry that I challenged him to a fight and cut him to pieces. Then Kamuy'otopus told me the story of how his brother (me) had been kidnapped.

I was so angry that I challenged him to a fight, but before I could do anything, some god swooped down from the heavens and my armor cracked and fell off. I dropped down to the ground and tried to get my armor back, but someone grabbed me and took me to the heavens. It turned out to be Aynurakkur. He then entered a magnificent gold house, told the young woman, his sister, to tell me well, and left. I tried to attack and cut the woman but could not. Eventually, Aynurakkur came back, and angrily took me in his arms again and led me underground to the valley country, the wet country. He sat me down among the valley priests. When I was unable to move, a demon old man and a demon old woman came and asked me if I wanted to be a valley priest or a standing tree.

When I shed tears and expressed my regret, the demon old man gave me his black armor and told me to defeat Nitaypakaye Nitayparama (the name of the old man who raised me). I rode back to earth on the wind of the possessing god, turned my sword to Nitaypakaye, and finally defeated him. Then I joined my brothers and fought the demon gods. When the battle was over, Kamuy'otopus returned my armor to me, and I took off my black armor and stepped down into the underground country to return it.

We went back to Sinutapka, but I was in agony, worrying about the fact that I had been deceived by Nitaypakaye and had offended Ainurakkur's sister. One night, I put on my armor, flew to the heavens, entered Ainurakkur's house, and fell asleep aside the sleeping girl. In the morning, when she noticed me, she blamed me, and Aynurakkur decided to give his sister to his younger brother, the god of thunder. Then the god of thunder came and taunted me and tried to fight me. Aynurakkur (=Aeoynakamuy) sent a shout to both me and the god of thunder. Along the way, the girl offered me a golden fan. I used it to send a rain of mercury, which defeated the god of thunder. Then 60 gold huri (mysterious birds) and 60 ordinary huri, the possessions of the god of thunder, attacked me. I made 60 sticks to fight them off, and after finally defeating them all, I returned to the house at Sinutapka.

After a while, the sister of Aynurakkur came down from heaven with a set of bridal goods. We became husband and wife and were living happily. Eventually, my brothers discussed the matter and decided to hold a festival to rebuild the altar of our ancestors. Many people were invited, and my uncle Sanput, whom I had killed (was resurrected and) also came. As a ritual of exorcism, my uncle split my forehead open, and I was able to relax. (Nakagawa 2016: 29-30)

The story begins with the protagonist living in a cave being raised by his grandfather. Eventually, it turns out that the reason for his strange upbringing is that the old man who raised him was actually a demon god named Nitaypakaye who kidnapped the protagonist when he was a baby. The hero was tricked by the demon god into turning on his own brothers, so he was taken to the heavens and the underworld, where he reformed and fought together with his brothers against the demon gods. As in this story, the heroes of heroic epics come and go not only in the same human world but sometimes even in the heavenly or underground worlds.

In some heroic epics, the protagonist is a woman. In some regions, such epics are called *menoko yukar* (literal translation: 'female heroic epic'). It is not only that the main character is changed from a youth to a girl, but also that the main theme of the story is not a battle but the marriage of the female protagonist, and although these share the same format and worldview as the heroic epic with a youth as the protagonist, the contents and development are different.

2.4.4 Other narrative forms

In some areas, in addition to these three major genres, other genres such as "sacred biographies" and "legends" may be established.

The sacred biography is a poetic narrative in which a culture hero, referred to by such names as *Aeoynakamuy*, *Aynurakkur*, and *Okikurmi*, is the protagonist and speaker. Here, *sakehe* are not used. In Ainu, this narrative form is called *oyna*. They have been recorded mainly in southwestern Hokkaido (Hidaka and Iburi regions from Horobetsu to Higashi Shizunai).

Legends are called *upaskuma*, *ucaskuma*, *ikopepeka*, etc. in Ainu. They are stories of experiences. They are told in prose, but unlike prose tales, they do not have fixed beginning and ending patterns.

For example, a story introduced as *ikopepka* told by Sute Orita of Shizunai Town (present-day Shinhidaka Town) is a "story of hardship when she was a small child". However, Orita herself recognizes that this is only a part of *ikopepka*, and that the series of stories "starting with the experiences of her ancestors as far back as she can go and ending with her own hardships" is the *ikopepka* "from the beginning" (Okuda 1998: 103).

There is another kind of legend that can be called "folklore". These are tales of the origins of places and things, such as place names and topography, that have a direct connection to the narrator or listener. In many cases of such folklore known today, the original Ainu text has not been recorded, and only the Japanese translation exists, so there is much that is unknown about the actual content and form.

2.5 Regional differences in genres

The genres listed here are not common to the entire Ainu culture. In addition to the names of the genres mentioned above, although there are some general similarities, there are also differences in the way the genres are differentiated among regions, as in the case of the "narratives" in which "sacred stories" are told in some regions and not in others. It has also been pointed out that there are differences in the content of the stories depending on the region (for example, Okuda (2010 [2005])).

Regarding songs, Nakagawa (2009) pointed out that seated songs are characteristically sung in *ukouk* 'round singing', while dancing songs are not sung in *ukouk*. In the eastern part of Hokkaido, such as Kushiro, Shiranuka, Bihoro, etc., however, both dancing and seated songs are not sung as round singing but are usually sung by turns or in chorus. In other words, unlike other regions, there is no difference in singing style between seated songs and dancing songs" (p. 325).

There are also discussions on the origins of genres based on these differences, especially the distribution of regional differences in names. For example, Chiri (1955: 58–60) discusses the emergence of seated songs and dancing songs, and Nakagawa (1996) examines sacred biographies from the perspective of linguistic geography.

3 Poetic language and everyday language

The language used in daily life is not exactly the same as the language used in oral literature. The Ainu language scholar Kyōsuke Kindaichi states, "In the language that is used, there is a distinction between everyday language and elegant language, just as there is [in Japanese] between colloquial language and literary language, and in special cases, such as formal occasions, the language used is quite different from that used in everyday conversation" (Kindaichi 1992 [1935]: 381).

In this way, it has been pointed out that the language used in poetry, i.e., heroic epics, divine epics, prayers, etc., uses elegant language (Ainu: *atomte-itak*, literal translation: 'decorated language'), and that there is a phase difference between it and everyday language (Ainu: *yayan-itak*, literal translation 'normal language') (Kindaichi 1992 [1935]).

Kindaichi (1992 [1935]: 381) lists the following five genres in which elegant language is used.

1) Words of greeting (*uwerankarap itak*)

2) Words of prayer (*kamui nomi itak*, *inonno itak*)

3) Words of incantation (ukewehomshu itak)

4) Words for negotiation (charanke itak)

5) Epic poetry (*yukar*)

These are all genres that are narrated in verse. In addition, there is a special vocabulary "for the names of things, monsters, places, verbs, and adjectives" (Kindaichi, 1992 [1935]: 382). He adds, concerning the genres above, that the frequency of use of elegant and archaic language is higher "for 2 than for 1, for 3 than for 2, for 4 than for 3, and especially, for 5 than for 4", suggesting that even within the five genres in which elegant language is used, there is a degree of variation in the use of the language.

Regarding this, Nakagawa (2001a [1987]: 219), summarizes previous research on elegant language and identifies the style of "ritual speech" and "poetic narrative" as "typical elegant language" and then summarizes its characteristics. According to him, the following four characteristics serve to characterize elegant language.

- 1) It is a style developed in verse and is based on expressions in units of five or four syllables.
- 2) In order to realize 1), formulaic phrases and forms to match syllable count are highly developed.
- 3) Compared to everyday language, it is often more complex and comprehensive (polysynthetic) in its expression.
- 4) It uses vocabulary that is different from everyday language.

Concerning the second characteristic, he adds as ways to create forms of expression:

- Formulaic description of certain situations
- Fixed forms to express formulaic descriptions
- Couplet forms
- Forms that develop expressions that could be expressed by one phrase into multiple phrases
- Forms adding expletives to adjust syllable count and forms that make expressions more complex

Satō (2008) summarizes the specific characteristics of elegant language as it appears in oral literature, saying that descriptions of person indicators can be distinguished using the terms elegant language and everyday language. In addition, as grammatical differences from everyday language, the author mentions number agreement and the frequent use of applicative prefixes in elegant language. In everyday language, for example, when we say, "I'm coming" or "we're coming," the personal affix -an is never used with the singular ek 'come (SG)', but always with the plural arki 'come (PL)' as in arki-an. In the elegant language of the Saru and Chitose dialects, however, -an is used with singular verbs, as in ek-an for 'I am coming' and arki-an for 'we are coming'. The rhetorical techniques in elegant language include metaphor, circumlocution, understatement, couplets, and exaggeration.

However, especially in narratives, even genres that are usually narrated in verse are sometimes narrated in prose. In addition to the five genres mentioned above, Chiri (1960) points out that among the sub-genres of prose narratives, *kamuy* prose tales *kamuy uepeker*, in which a deity is the narrator, are also told in elegant language. Nakagawa (2001a [1987]) also points out that *rupaye yukar*, in which heroic epics are told in prose, show similar elegant expressions, and that "elegant language and everyday language are not two distinct stylistic levels, but should be captured as stages in relation to whether they are in verse or prose, and whether they are highly improvisational or not" (Nakagawa 2001a [1987]: 222).

Therefore, "since heroic epics have their own phrases, and prayers to *kamuy* have their own phrases, to put it more precisely, elegant language can also be divided into several varieties according to genre" (Nakagawa 1997: 204). Furthermore, "if we think of styles with a focus on vocabulary and formulaic phrases, instead of the dichotomy of elegant language and everyday language, it may be more effective to use a classification system of *yukar* and prayer words" (Nakagawa 1997: 222). It is necessary to examine the characteristics of styles in each genre.

In response to the need for specific discussions on the differences in vocabulary and usage in each genre, Endō (2009), in her summary of the characteristics of expressions in prayer verse, found that the expression *iresu huci* 'goddess of fire' occurs frequently only in prayer verse in reference to the name of the fire goddess, and that the word *kamuy* is used as a modifier meaning 'splendid' in heroic epics but not in prayer verse, touching upon a few of the lexical similarities and differences between heroic epics and prayer verse. Endō (2015) also analyzes the differences in conjunctive phrases in heroic epic, *shin'yō*, and prayer language. However, there are still not many specific discussions on the differences of *atomte itak* in each genre.

4 Various rhetorical techniques in verse

There are many different rhetorical techniques in verse in which elegant language is used. In the following, I will give an overview of the rhetoric found in heroic epics in particular.

Tamura (1996: xv-xvii)) lists the following as "techniques often used to make the material be more verse-like" (Tamura 1996: xv).

- (1) Use many couplets.
- (2) Use formulaic expressions for verse

In addition, she also lists the following techniques for adjusting the syllable count (Tamura 1996: xviii–xxi).

- (1) Use formulaic expressions for verse
- (2) Change to expressions that fit the rhythm well
- (3) Choose words that are appropriate for the syllable count
- (4) Insert ki 'do' between the verb and the following particle
- (5) Use or non-use of particles and other short words
- (6) Do not elide the vowels of prefixes whose vowels elide in speech
- (7) Do not pronounce line-final syllable

In addition, Satō (2008: 264) summarized rhetoric in elegant language as follows.

The language of oral literature (elegant language) is rich in rhetorical techniques (literary expressions). The most common are exaggerated expressions using metaphors (direct and implied).

They are often longer than colloquial language, and in a sense, they are more circuitous, so-called "elaborate" expressions (periphrasis). In addition, a technique of understatement called litotes ("not bad = good") is sometimes incorporated, in which a deliberate understatement is used to express a larger quantity or degree. As is usual in literary works, some phrases can be regarded as fixed formulas, including couplet phrases (antithesis), such as "life is short, art is long". There is also a tendency to use words with complex morphological structures. Some of these formulaic phrases and long words may have originated from the formal requirements of heroic epics and $shin'y\bar{o}$, which are recited using five syllables per line as the basic unit. It is also thought that these formulaic expressions help to make recitation of long oral literature by rote easier.

Among these, as periphrasis, he cites the example of 'going outside' being said as *soyne* in everyday language, but in the elegant style of expression, $soynasanma_1 o_2$ - si_3 - ray_4 - e_5 (literal translation: 'to let₅ oneself₃ be pushed₄ [towards₂] outside₁'), and the example of god (kamuy) being expressed as $kamuy_1 ne_2 manu_3 p_4$ (literal translation: 'what₄ is₃ said₃ to be₂ god₁') (Satō 2008: 264).

As for exaggeration using metaphors (direct and implied), for example, expressions like the following may be used to refer to a respectable young man.

(15) *tuk-no pinni* A Manchurian Ash that has grown

grow-very ash.tree

si-kopa-yar Like

REFL-mistake-INDEF.CAUS

aynu pito A fine person

human god

(Nakagawa and Endo 2016: 106)

This is a formulaic phrase used mainly in heroic epics. The complex word used here, *si-kopa-yar*, means "like" and is not used in everyday language. There are other formulaic phrases, such as that below, which indicates that the stitching is well done.

(16) tu imeru kur Two shinings

two lightning shade

re imeru kur Three shinings

three lightning shade

kotuytuyke Cross over

cross

(Nakagawa 1995: 45)

This is a formulaic expression used at the beginning of a story in which the protagonist is a woman and is described as living a peaceful life sewing. It is used as a metaphor, including exaggeration, to describe the beauty of her embroidery with its neat stitches. In addition, 'two ~/three ~' is a common expression meaning "many" rather than a real number and is often used in divine and heroic epics.

Here, the couplet uses "two ~/three ~", but there are no rules or restrictions on how to create a couplet in Ainu oral literature. Therefore, for some of the lines to necessarily match or rhyme is not a requirement for a couplet.

For example, in heroic epics, we find couplets like the following.

(17) *tomi-ka nuy-e* Carve the scabbard of a sword

sheath-top carve-TR.SG

ikor-ka nuy-e Carve the scabbard of a treasure sword

treasure-top carve-TR.SG

(18) *hanke nispa* Chief of a close (village)

be.close rich.man

tuyma nispa Chief of a far (village)

be.far rich.man

(19) *hanke kotan* In the close village

be.close village Sent the message flying (lit. 'make message

sonko-kama-re go over the close village')

message-go.over-CAUS

tuyma kotan In the far village

be.far village Run into the message (lit. 'make message

e-sonko-ciw-re pierce the far village')

to.APPL-message-pierce-CAUS

As mentioned regarding complex morphological structures, "In the colloquial language, case is often indicated by case particles, but in elegant language, case indication by the applicative prefixes⁴ *e-*, *o-*, and *ko-* is relatively common. In addition, elegant language generally uses longer and more complex lexical structures" (Satō 2008: 263). As a concrete example of this, he cites the examples below, in which location is expressed using the locative case particle *ta* 'to [place]' in everyday language, but *ko-sirepa* 'arrive at [place]' including the prefix *ko-* (Satō 2008: 263–264).

Everyday language:

(20) a. tan-to Ukurmem ta ku-sirepa. this-day Ukurmem (place name) LOC 1SG.S-arrive 'I arrived at Ukurmen today.'

 $^{{\}bf 4} \ \ {\bf For\ details\ regarding\ applicatives,\ see\ Bugaeva\ and\ Kobayashi\ (Chapter\ 15,\ this\ volume).}$

Elegant language:

(20) b. *kamuy menoko uni-hi tane anak-ne a-ko-sirepa na.* god woman house-POSS now TOP-COP 4.A-to.APPL-arrive SFP 'Now I arrived at the house of a beautiful woman.'

The couplets listed here are often also formulas. It is said that "formulaic phrases are often easy to put into melodic form to fit the melody being narrated, and by learning many of them and being able to use them in different situations, one becomes able to tell stories more skillfully" (Hokkaido-ritsu Ainu Minzoku Bunka Kenkyū Sentā 2000: 15). The use of such formulaic phrases is not only a characteristic of Ainu oral literature but is also widely observed in oral literature in general.

5 Concluding remarks

In recent years, it has become almost impossible to collect new Ainu oral literature materials. This is because, as mentioned in Section 1, there is no longer any opportunity to speak Ainu or relate Ainu oral literature in daily life due to modernization and the pressure to assimilate using the Japanese language as a matter of course. In addition, there is a large regional bias, with a relatively large number of known Ainu oral literature materials coming from the Hidaka and Iburi regions, but very few from the northern and eastern regions of Hokkaido. In fact, most of the texts discussed in this chapter are from the Hidaka and Iburi regions.

The current situation is that studies and research are being conducted limited to materials from these regions. However, there are many materials recorded and transcribed by researchers and Ainu themselves that have not yet been made public or published. It is hoped that organization of these materials will lead to the release of new texts that have not been previously known.

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Okuda Osami

11 Meter in Ainu oral literature

1 Introduction

The existence of a technique of arranging a line in Ainu verse such that one line "usually has four, or five, or six syllables" or "basically one line is five syllables" has long been noted. If this metric for arranging the number of syllables in a line is termed "syllable count orientation", the present author has in recent years pointed out that the fact that there also exists in the tradition of Ainu verse, a metric that arranges the placement of accent within a line, termed "accent orientation", that is a technique that cannot be attributed to random chance. These two orientations are used differently depending on the genre of the work and on the musical rhythm, and they have each spread across different regions and thus offer a means of clarifying the history of verse in Ainu.

In this chapter, I first present the results of this research in an organized fashion and then argue that these two types of meter are not limited to Ainu alone, but are found in a general typology of meter and raise new questions both synchronic and diachronic about the genres and expressions of Ainu poetic literature.

2 Previous research

2.1 Number of syllables in a line

In Ainu oral literature, such genres as heroic epic poetry, divine epic poetry, and lyric poetry are performed with the rhythm of the verse regularized and set to a short, repeated melody. It has been pointed out in the past that a technique has been observed in which the number of syllables in a line are kept within a fixed range. For example, Kindaichi (1931: 165) states:

A four-syllable word is pronounced slowly giving each syllable the same length, a five-syllable word is said a little more quickly, and even a word of six or seven or more syllables is sung rapidly staying within a tetrameter. Each verse is generally made up of four, five, or six syllables with a maximum of seven, and good verse is that which matches the tune well.

Tamura (1973: 56, 1987: 9) makes the following statement with a concrete description of techniques for adjusting the number of syllables.

The basic form for many Ainu songs is a line of five syllables. Among Ainu words, there are many of one, two, or three syllables and even for longer words, since they are composed of shorter elements, a line can be divided between such elements. Accordingly, it is not too difficult to

create lines of five syllables, however various kinds of techniques are employed in order to maintain this number of syllables and to adjust the rhythm: 1. formulaic expressions used in verse, 2. selection of words with a suitable number of syllables, 3. use or non-use of sentence final particles, 4. insertion of auxiliary verb ki 'do' between verbs, auxiliaries, and final particles, 5. use of uncontracted form of person marker ku-, 6. addition of |u| at the beginning of lines when reciting, 7. adjustment in rhythm, 8. other techniques, e.g., division of a long line into two 5-syllable lines using the above techniques.

Okuda (2012, 2017) termed this meter "syllable count orientation". The so-called "seven-and-five meter" of Japanese, although the unit is moras rather than syllables, is a meter that is similar in that it attempts to adjust the number of units in a line to a fixed number.

However, in actual Ainu verse, as already pointed out, lines of different numbers of syllables do appear. As Tamura (1973, 1987) notes, five-syllable lines are the most common, but four-syllable lines also often sung.

2.2 Alliteration and rhyme

The verse of Classical Chinese and European verse from Greek and Latin on are known for the existence of fixed rhyming rules that the final vowels and consonants in a line must follow, in addition to rules concerning the number and type of syllables (stressed-unstressed, long-short, tone, etc.) in a line. In addition, alliteration, in which the consonants and vowels at the beginning of a line are aligned, is frequently found in poetry in Mongol and Tungusic languages (Kara 2011; Kazama 2011).

Philippi (1979) examined alliteration and rhyming in Ainu poetry and concluded that the former is "sporadic" while the latter is "quite accidental".

In Ainu poetry rhyming occurs quite accidentally, as it does in Japanese poetry, but it is not prosodically relevant and not cultivated per se. Alliteration occurs sporadically, and there sometimes appear to be conscious attempts on the part of the reciters to cultivate it, although it is by no means obligatory.

In the Hokkaidō dialects of Ainu, there are five vowels and 12 consonants, including the glottal stop, that can appear as the onset of a syllable, and nine consonants that can appear in the coda position. Accordingly, even if left entirely to chance, repetition of the same sound can certainly be expected to occur with some frequency. For example, if one takes a sequence of four lines, the frequency of finding two lines with the same first vowel or finding a couple of pairs is roughly two out of three. That is to say, if one were to take four lines of verse, it would be more difficult not to have even one repetition of the initial vowel on a line. In addition, in word formation in Ainu, a single root may be reduplicated and reduplication of a vowel is common in word derivation, so repetition of the same sound in a line or in a word is expected to occur frequently unrelated to any technique of versification.

Accordingly, unless one can show that repetition occurs with a frequency much higher than probabilistically expected and is not due to morphological or structural reasons, reduplication of the same sound at the beginning or end of a line cannot be taken as deliberate alliteration or rhyming, but must be understood to be accidental or sporadic as stated in Phillipi (1979).

Of course, human cultures do assign meaning to random distributions (as with constellations in the night sky, for example). However, if one is attempting to restore "cultural meaning that can be found in randomness", not only external observation but also "testimony from within" from the speakers and listeners is needed.

3 "Syllable count orientation" and "accent orientation"

Based on Okuda (2012, 2017), this section shows that, in addition to the "syllable count orientation" meter pointed out in previous research, in the verse recited by multiple speakers of the Hokkaidō Saru dialect there also exists an "accent orientation" meter that arranges the placement of accent within a line of verse.

3.1 Accent in Ainu: Preliminary to analysis

Many Hokkaidō dialects of Ainu have an accent distinguishing between high and low syllables. As a general rule (1) if the first syllable is an open syllable, the second syllable is high, and (2) if the first syllable is a closed syllable, the first syllable is high. However, there are words in which (3) the first syllable is open, but, exceptionally, the first syllable is high. These are exemplified below, marking a high syllable with an accent mark.

Example of (1): *kamúy* 'god' Example of (2): *áynu* 'person' Example of (3): *húci* 'grandmother'

Preliminary observations by the present author found that words with the accent on the first syllable, combining (2) and (3), comprise about 20 ~ 30% of the Ainu vocabulary. In the analysis below, only the first accent on each line is marked.

3.2 Examples of oral performances in which five-syllable lines are most common

In the performance of a lyrical poem by HATOZAWA Wateke from Monbetsu-chō (Now Hidaka-chō) in the lower reach of the Saru River (Tamura 1973, 1987) there are 34 lines, not including *kakegoe*, conventionalized semantically empty interjections, of which 33 are 5 syllables in length and one is 6 syllables.

In the performance of a lyrical poem by HIRAGA Sadamo, also of Monbetsu-chō (Tamura 1973, 1987), there are 26 lines, excluding *kakegoe*, of which 25 are 5 syllables in length and one is 6 syllables.

In the performance of a lyrical poem by KAIZAWA Koyuki, from Biratori-chō in the mid-reach of the Saru River (Kōchi 1997), there are 102 lines, excluding *kakegoe*, of which one line is 4 syllables in length, 88 are 5 syllables, 10 are 6 syllables, and 3 are 7 syllables.

3.3 Examples in which many four-syllable lines also appear

In performances of divine epic poetry by Hatozawa, Hiraga, and Kaizawa, whose performances of lyrical poems hardly used any lines of four or fewer syllables, many more lines with four syllables were recited.

In the divine epic poem *Amamecikappo* 'The Sparrow's Drinking Bout' recited by HATOZAWA Wateke (Tamura 2001), other than refrains, 90 lines are sung, of which 14 were 4 syllables in length, 49 were 5 syllables, 23 were 6 syllables, and four were 7 syllables. Of the 14 four-syllable lines, the accent fell on the first syllable in the line in 12.

In the divine epic poem "The Strange Bird *Furi* and the White Fox" recited by HIRAGA Sadamo (Kayano 1998) there are 72 lines other than refrains, of which 21 are 4 syllables in length, 48 are 5, one is 6, and two are 7 or 8 syllables long. All of the 21 four-syllable lines are accented on the first syllable in the line.

In the divine epic poem "A Spider-deity's *Kamuyyukar*" recited by KAIZAWA Koyuki (Kōchi 2000), there are 80 lines, other than refrains, of which 24 are 4 syllables in length, 42 are 5, seven are 6, and seven are 7 through 9 syllables long. Of the 24 four-syllable lines, all were accented on the first syllable of the line.

3.4 "Syllable count orientation" and "accent orientation" meters

As observed above, three performers have all left recordings of oral performances in which they often used four-syllable lines and of performances in which they hardly used any four-syllable lines at all. There is an imbalance by genre in whether or not four-syllable lines appear; all the three examples of lyrical poetry disfavor four-syllable lines while such lines occupy 15 ~ 30% of the total lines in all three examples

of divine epic poetry. In addition, the vast majority of four-syllable lines begin with a word in which the first syllable is a closed syllable or an exceptional word which, even with an open first syllable, receives accent on the first syllable so that the accent is placed on the first syllable of the line.

The imbalance in the syllable count by genre and the uneven distribution of line-initial accent in four-syllable lines cannot be explained as a phonologically natural tendency of Ainu or as a matter of chance, but can only be explained as the expression of a deliberate rule, of a metrical rule as a technique in composition. Okuda (2012, 2017) considered examples like those in Section 3.2 requiring lines of five or more syllables, in other words, examples that do not allow four-syllable lines, to be following a "syllable count orientation" meter. Okuda further claimed that examples that allowed four-syllable lines, provided the accent is placed line-initially like those shown in Section 3.3, follow an "accent orientation" meter that specifies the placement of accent within a line. Since accent placement in a five-syllable line follows the rules given in Section 3.1 and places the accent on either the first or the second syllable, if it is hypothesized that placement of the accent on the line-initial syllable of a four-syllable line and placement on either of the initial two syllables of a five-syllable line are metrically equivalent, in both the four-syllable case and the five-syllable case, the placement of the first accent is equivalent. As a consequence, in actual oral performances, the accentuated syllables are placed within a fixed range, e.g., the first disyllabic foot, of rhythmic lines, regardless the number of syllables in the line. See the table below.

From Hatozawa's Amamecikappo					syllable count
0	•	0	0	0	
si-	né	a-	mam	pus	5
0	•	0	0	0	
ci-	tá-	ta-	ta-	ta	5
	•	0	0	0	
	kí	wa	tap-	ne	4
	•	0	0	0	
	c-é-	a-	hun-	ke	4

English gloss: One ear of grain I crushed and crushed And then I invited into our house

From Hiraga's "The Strange Bird Furi and the White Fox"						
0	•	0	0	0		
u	wén	ka-	su-	no	5	
0	•	0	0	0		
ci-	kí	hi	ku-	su	5	
•		0	0	0		
pís		ta	sa-	p-as	4	
•		0	0	0		
án-		ra-	ma-	su	4	
	accent					

English gloss:

Too much

I do and therefore

I go down to the beach

Great joy

From Kaizawa's "A Spider-deity's <i>Kamuyyukar</i> "						
0	•	0	0	0		
0-	ká	a-	s i-	ke	5	
0	•	0	0	0		
si-	né	an	to	ta	5	
	•	0	0	0		
	kót	tu-	re-	si	4	
	•	0	0	0		
	yá	0	u-	sat	4	
	acce	nt				

English gloss: While I am living One day His sister Charcoals in front of him

4 The geographical spread of accent orientation meter: The Chitose example

Okuda (2019) analyzed two divine epic poems by SHIRASAWA Nabe, who lived in the Chitose area of Hokkaidō (Nakagawa and Katayama 1995) and pointed out that the same "accent orientation" meter found in the performers from the Saru region could also be observed in these poems.

First, in the divine epic poem titled Wawo kamuy, there are 226 lines, other than the refrains, of which one line is 2 syllables long, two are 3 syllables long, 62 are foursyllable lines, 132 are 5 syllables long, 25 are 6 syllables long, and four are 7 syllables in length. Of the 62 four-syllable lines, 56 had the accent placed on the first syllable of the line, as did all the two- and three-syllable lines.

In the divine epic poem titled *Apehucikamuy*, there are 220 lines, other than the refrains, of which 79 are four syllables in length, 130 are 5 syllables, nine are 6 syllables, and there are one each of seven- and eight-syllable lines. Of the 79 four-syllable lines, 71 have the accent placed on the first syllable of the line.

In both these examples as well, four-syllable lines occupy 27 ~ 36 % of the total lines and the vast majority have accent placed on the first syllable of the line. Observing actual performances, the accent throughout is placed within a fixed rhythmic range, i.e., on the first or second syllable.

In addition to the "syllable count orientation" meter that has long been pointed out, Ainu oral literature also has as a technique of composition an "accent orientation" meter that shows a spread geographically. In what regions is this meter realized and in what genres is a major topic for future descriptive research in Ainu oral literature.

From Shirasawa's <i>Wawo kamuy</i>					
	•	0	0	0	
	kés	to	an	kor	4
	•	0	0	0	
	án	an	kor-	ka	4
0	•	0	0	0	
si-	né	an	to	ta	5
•	0	0	0	0	
sí-	sam	a-	nak-	ne	5

English gloss: Every day While I live One day

As for Japanese

	•	0	0	0	
	kún-	ne	he-	ne	4
	•	0	0	0	
	tó-	kap	he-	ne	4
0	•	0	0	0	
a-	sík-	ko-	te-	su	5
	0 •	0	0	0	
	a-kár	wa	an	pe	5
•	0	0	0	0	
rán-	ke	ka-	ken-	ca	5

English gloss:
Even in the evening
Even in the daytime
I am watching
Thing I am working with
Lower dress hanger

5 Implications of "syllable count orientation" and "accent orientation" meters

In what follows, I wish to extend the observations made thus far and examine how the "syllable count orientation" and "accent orientation" meters proposed here fit into general typologies of meter in the various languages of the world. I also argue that the fact that there exist different types of meter in Ainu has implications both for research into Ainu oral literature and for research on poetry in general.

5.1 Metric typologies

Lotz (1960) was a pioneering work on the typologies of meter that divided meter in the languages of the world into the following types.

- A. Pure-syllabic: Only the number of syllables in a given syntactic unit is controlled.
- B. Syllabic-prosodic: In addition to the number of syllables, such features as accent, tone, or syllable weight are controlled.
 - B1. Durational: The length of segments in specified positions is controlled.
 - B2. Dynamic: The weight of syllables in specified positions is controlled.
 - B3. Tonal: The tones of syllables in specified positions are controlled.

Within this typology, Ainu "syllable count orientation" meter is type A, and the "accent orientation meter belongs to type B2.

Fabb (1997), in his comprehensive work on the relationship between language and literature, described different kinds of meters in various languages. Among them Ainu "syllable count orientation" meter belongs to the 'Counting' meters and the "accent orientation" meter to the Accentual meters, a subtype of the Patterning meters.

Aroui (2009) classified meters taking supra-syllabic elements in language as units "prosodic metrics" and proposed four elements for the prosodic module (mora, accent, tone, syllable) and two elements for the metrical module (arrangement and count) giving seven possible types, omitting the theoretically impossible [syllable-arrangement] type. Within this typology, Ainu "syllable count orientation" meter is classified as being the [syllable-count] type meter and the "accent orientation" meter is classified as being the [accent-arrangement] type of meter.

Thus, there exist in Ainu poetry more than one pattern among the types of meter found in languages of the world and they are used differentially by one and the same reciter. To the best of my limited knowledge, no similar examples of such techniques have been reported for any other language or culture.

5.2 Meter and the history of Ainu oral literature

As reported in Section 2.1, previous research has shown "syllable count orientation" meter to be a characteristic of Ainu oral literature without any geographical limitations. How widely, then, is the "accent orientation" meter spread in Ainu beyond the Saru and Chitose areas? Observations of meter offer a new tool for research into the geographical distribution of Ainu oral literature and elucidation of its history, taking a different perspective from the traditional ways of research, e.g., naming of genres, types of tales, or characters appearing.

In the examples given earlier from reciters from the Saru and Chitose regions, the meter used differed between the genres of lyric poetry and divine epic poetry. On the other hand, in an example of the heroic epic titled *Tumi suykere wenpe suykere* recited by HATOZAWA Wateke, in a single oral performance, both the "syllable count orientation" and the "accent orientation" meters appear, differentiated according to the musical rhythm (Okuda 2012). If the simultaneous existence of the two types of meters in heroic epic poetry is recognized to have some degree of geographical spread, such a technique of oral performance can be supposed to have arisen after the "syllable count orientation" and the "accent orientation" were each established.

Studies of the distribution of Ainu dialects and studies of the distribution of meter share a perspective. For example, there are said to be dialects of Ainu that do not have a distinction in accent. Even though they are separated geographically, the Saru and Chitose dialects are known to have non-metrical characteristics in common. To what

extent do the distributions of phonological and grammatical characteristics and the distribution of meters in oral literature overlap?

Looking at languages other than Ainu, in Japanese, located to the south, a pattern of "arranging the number of mora within a line" that is quite similar to the "syllable count orientation" or what Aroui (2009) calls a "mora count" pattern is dominant. On the other hand, in the poetry of the Tungus languages to the north, while alliteration is widely observed, the number of units in a line is comparatively free. In addition, since many Tungus languages do not have oppositions in accent, it would be difficult to establish an "accent orientation" meter as a poetic technique. Although I have no evidence to support it at the present time, one possible hypothesis would be that the "accent orientation" is a metrical technique original within Ainu, while the "syllable count orientation" was picked up through contact with the meter of Japanese. Going a step further, the "syllable count orientation" and "accent orientation" meters in Ainu respectively appear to have a high affinity with the syllable-timed and stresstimed categories of isochrony in language described in Abercrombie (1967). Linguistic isochrony and metrical categories do not always appear in the same combinations cross-linguistically, but when considering the problem of isochrony in Ainu, the metrical categories in poetry are highly suggestive.

(This chapter is based on an article by the same author (Okuda 2020) and is expanded and revised in order to provide some detailed information and clarification.)

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Tetsuhito Ōno

12 The history and current status of the Ainu language revival movement

1 Introduction

This chapter is a report on the progress and current status of the Ainu language revival movement.

It should be noted that not all Ainu people live in Japan at present, but they also live in other countries such as Russia and the United States. However, in this chapter, I will focus on the Ainu language revival movement in Japan.

In Section 2, I will discuss the history of the decline of the Ainu language, in Section 3, I will discuss the history of the recording of the Ainu language by the Ainu themselves, in Section 4, I will discuss the early history of the Ainu language revival movement, including the Ainu language classes, and the people who played a major role in the movement, and in Section 5, I will discuss the relationship between researchers and the Ainu. Section 6 discusses the new social changes concerning Ainu and the Ainu language since the 1990s, including the enactment of the Ainu Culture Promotion Act. Section 7 discusses the revival of the Ainu language in the 2000s, and Section 8 discusses technical issues in the revival of the Ainu language. Finally, Section 9 discusses future challenges.

2 Decline of the Ainu language

In modern times, the Ainu people, as a clearly identified ethnic group, were settled in Hokkaido, Sakhalin, and the Kuril Islands.¹

In the twentieth century, as a result of the Russo-Japanese War (1904–1905), the southern part of Sakhalin and all of the Kuril Islands were placed under Japanese rule.

The Japanese state adopted a policy of incorporating the Ainu as Japanese citizens and then assimilating them linguistically and culturally. In terms of language, the Japanese state required the Ainu to learn Japanese as part of their education and pressured them to refrain from using the Ainu language (Komatsu 2000: 50–51).

¹ In the Edo period (before the Meiji Restoration), documents confirm that there were Ainu in the northern part of Honshu (the Tōhoku region), and it is believed that there are still descendants of Ainu there today, but it is difficult to trace their footsteps in modern records. However, as will be discussed in Section 4.4, there are many Ainu and their descendants who moved to Tokyo and other places outside of Hokkaido after the war, and they have formed organizations and carry out various activities.

Although there is no record of any legal prohibition of the Ainu language, it is clear that the use of the language was restricted in various aspects of daily life. In particular, in many cases its use was banned or restricted in schools, and children were required to learn Japanese.

As a result of the daily discrimination and persecution against the Ainu, they began to avoid passing on their traditional language and culture to their children and grandchildren, and by the second half of the twentieth century, the situation had arisen in which the Ainu language was already not being used in many households.

3 Recording history

In this context, Ainu people who feared that their language and culture would be lost began the work of recording the Ainu language in the early twentieth century. Originally, Ainu was not a written language, but, devising means to write their language, Ainu began to write down the Ainu language.

Prior to their endeavors, many *Sisam*² and Western researchers and travelers recorded Ainu words and sentences using the Japanese *katakana*, Roman, and Cyrillic scripts, and several dictionaries had been compiled. However, these were compiled only as records, and were not done with the aim of reviving the Ainu language.

Since the early seventeenth century, there were many records by Westerners writing the Ainu language in Roman or Cyrillic characters and Sisam writing it in *kana* characters (for details see Satō (Chapter 3, this volume) and Majewicz (Chapter 4, this volume)), but it was not until the latter half of the nineteenth century that the Ainu themselves began to record their language. For example, John Batchelor, an English missionary sent by the Anglican Church, taught Roman letters to Ainu people who gathered at a school in Hakodate, and records show that his students recorded their language.

Yukie Chiri (1923), a famous Ainu woman from Noboribetsu, wrote down thirteen Ainu divine epics (*kamuy yukar* in Ainu) in Roman characters and published them. This was the first book that the Ainu themselves recorded and published as a collection of Ainu texts.

² In this paper, I will refer to Japan's ethnic majority, non-Ainu people as *Sisam*. *Sisam* is originally an Ainu word meaning 'neighbor' and Westerners are called *Hure-sisam* 'red neighbor'. *Sisam* is a general term for the Ainu's neighbors, the majority Japanese people, and does not have a particularly positive connotation. The word *Samo* (*Shamo*), which seems to have been derived from the older word *Sam*, is also often used to refer to them. They are called "Wajin" in Japanese. The term is similar to *Pakeha* used by the Maori of New Zealand or *Haole* used by the native Hawaiians, both to refer to non-native peoples.

Yukie Chiri's mother, Nami (Ainu name Nokaante), studied Christianity and Western culture at a school for Ainu youth established by the Anglican Church in Hakodate.

In her preface, Yukie Chiri wrote that the Ainu people, who once lived freely and happily in Hokkaido, found it difficult to survive in the modern era, and that she hoped that the Ainu would rise from their downfall amidst the suffering and drastic changes in their lives. Her words showed that the Ainu had lost many things due to the colonization of Hokkaido and had been forced to live in hardship. She also lamented the loss of the Ainu language and culture.

And Yukie Chiri (1923: 2) said the following.

But, . . . , the many sayings that our beloved ancestors used to communicate with each other, the many beautiful words that they used and left to us, will they all be lost along with the weak ones that are dying? Oh, that would be too tragic a thing to leave behind.

Yukie Chiri, a speaker of the Ainu language, loved the Ainu language and the various traditions that had been handed down through it. It was this love for the Ainu language and the various traditions that had been handed down through it that led her to take up recording the Ainu language. The publication of this work by Yukie Chiri, an Ainu speaker rather than a non-Ainu researcher, had an impact on many people, including her fellow Ainu compatriots.

Mashiho Chiri, Yukie Chiri's younger brother and an Ainu researcher himself, apprenticed himself to the Sisam linguist Kyōsuke Kindaichi, studied the Ainu language, accumulated original research, and wrote many books (see Nakagawa and Fukazawa (Chapter 8, this volume)). However, he himself never advocated for the revival of the Ainu language as a living language, at least not in the public record. He was a man of indigenous origin who lived with much anguish and contradiction as an elite member of Japanese society.

However, Mashiho's passionate approach to the Ainu language and culture, and his life as an intellectual in Japanese society, influenced many Ainu. In addition, Yukie's aunt, Matsu Kannari (whose Ainu name was Imekanu), is famous as the author of many Ainu stories, including heroic epics called yukar and prosaic folktales. In addition, Tasuke Yamamoto (1904–1993), an Ainu speaker from Kushiro, and Hiroaki Yamaji (1910–2008), a Sisam linguist, published 18 issues of Aynu-mosir, a journal written almost exclusively in Ainu, from 1957 to 1965. The magazine contained stories in Ainu written by Ainu elders themselves as well as stories that Yamamoto and others had heard from the elders and letters in Ainu.

These activities were focused on "recording". They did not explicitly aim to use the Ainu language as a living language. At the time, the Ainu people were referred to as a "dying people", and the Ainu language was referred to as a "dying language". However, it can be said that these activities led to the Ainu gaining a positive view of their language and culture, and later became the basis for activities to preserve the Ainu language as a living language.

4 From "recording" to "revival"

What has been described so far is the recording of the Ainu language by the Ainu themselves. This is only a record, an activity of putting word and phrases on paper.

Later, activities aimed at reviving the Ainu language as a living language emerged. These activities were linked to the Ainu's own efforts to restore their rights and improve their lives.

For example, the Ainu Association of Hokkaido was established to improve the lives of the Ainu people. It was established in Shizunai in 1946, after the end of World War II, and has its headquarters in Sapporo. The Ainu Association of Hokkaido has also established branches throughout Hokkaido and has played a major role in the revival of the Ainu language and culture.³

In addition, there have been other relatively small organizations that have been active in various parts of the country, and even if not organized, there have been movements by individuals to improve the status of the Ainu and to preserve the language.

4.1 Shigeru Kayano

For example, Shigeru Kayano (1926–2006), a native of Biratori, played a major role in this process. Kayano was born and raised in a village called Nibutani⁴ in the town of Biratori. There were many Ainu residents there, and the Ainu language and culture were still strong in the area when Kayano was born and raised. He lived with his Ainu-speaking parents and grandmother and grew up listening to his grandmother's tales and became an Ainu speaker.⁵

However, as he grew older, he became unhappy with being Ainu and came to resent the Ainu scholars who came to his house to study the Ainu language.

However, in the midst of all this, Kayano came to realize the importance of the Ainu themselves preserving their culture, rather than having it appropriated by non-Ainu scholars, and began to visit the Ainu in the area, buying their folk tools, and preserving them (Kayano 1980: 128–129).

He also later decided to record spoken Ainu and bought a tape recorder and began visiting old people to record the Ainu language.

Kayano also got to know Mashiho Chiri, who had the same Ainu origins as himself, and had the opportunity to witness his research. After that, he began to help him with

³ As of December 2021, there were 50 local organizations in all of Hokkaido. Some of them are large organizations with more than 300 members, while others are small organizations with only two members, and their activities vary widely.

⁴ In the original Ainu pronunciation, it is called *Niptani*.

⁵ Kayano's life history is detailed in Kayano (1980) and its English translation, Kayano (1994).

his research. He was encouraged to work on recording the Ainu language and culture. This had a great impact on Kayano in the following years.

In addition, Kayano began working at a tourist attraction presenting Ainu culture, where he met Kyōsuke Kindaichi, an Ainu language researcher. Since Kayano was already exceptionally knowledgeable about the Ainu language for a young man of his age, he was asked by Kindaichi to help him translate heroic epics, yukar, and began to assist him in his work.

Later, he began translating Ainu folktales and writing about Ainu culture (Kayano 1974, 1977, 1980a, among others). Kayano then began to aim to preserve the Ainu language in a living form.

In 1974, Kayano published a book called *Uepeker: A Compilation*. ⁶ This was a collection of Ainu folktales that Kayano had collected and recorded in Ainu, transcribed in *katakana*, with Japanese translations and commentary. A cassette tape containing the audio of the stories was included with the book.

Kavano (1974: 1) wrote in his preface:

As an Ainu, the most important thing I thought about when I started to publish my own book on Uepeker was how much I wished that scholars of Ainu, from Prof. Kindaichi on down had written in katakana so that Ainu people, including myself, could read as a language of their own country. I wanted to make a book in which Ainu people could read, even if only a little. That was my dream. I hope that as many Ainu people as possible will read this book and use it to bring the Ainu language back into their own hands.

For Kayano, the main purpose of publishing this book was not to have the general public read it, but more importantly to have his fellow Ainu read it and to reclaim the Ainu language. It seems to indicate that Kayano was beginning to think about passing on the language in a living form, not just recording it.

This passage by Kayano shows that he was dissatisfied with the efforts of researchers so far. It also clearly shows that Kayano's goal was to preserve the Ainu language as a living language, which is a different stance from the previous efforts of researchers who were merely documenting it.

Shigeru Kayano often stated that Ainu culture and language should not be "museumed". The meaning of this phrase is that Ainu people should pass on and practice their culture and language in a living form. Recording the culture in writing, photographs, and video, and storing the materials in a museum are not enough to pass on the culture in a living form.

It is not enough to preserve a language in a living form by writing it down or recording it on tape. It is also necessary to preserve the Ainu language in a living form by the Ainu using it themselves.

⁶ The word *uepeker* means 'old story' or 'folk tale' and is sometimes written as *uwepeker*.

⁷ Meaning that they are only stored in museums as materials but are not actually used in a living way.

Kayano was the author of many books, some of which have been translated into English, including his autobiography, Our Land was a Forest (Kayano 1994) and a collection of Ainu folktales Romance of the Bear God (Kayano 1985). Kayano is also known for his efforts to revive the Ainu language and has published many Japanese translations of Ainu stories (Kayano 1979, 1998) and compiled an Ainu dictionary (Kavano 1996).

Kayano later became a member of the Diet in 1994. Soon after becoming a member of the Diet, Kayano is also known for having given a speech in the Ainu language. It was the moment when the Ainu language was first spoken on the floor of the Diet.8 Until his death in 2006, Kayano was actively involved in promoting the Ainu language and culture.

4.1.1 The beginning of Ainu language academies

One of Kayano's most notable activities was the establishment of the Ainu Language Academies (juku). Juku are places for children to study, are usually private, are found in every part of Japan, and are attended by children after school as a supplement to their studies at school.

In the 1980s, Kayano began to feel the need to teach the Ainu language to children and pass it on to the next generation and set out to create a place to teach the language to local children.9

Kayano started a movement with volunteers to establish a nursery school. One of their goals was to teach the Ainu language to the children. However, in order to establish a nursery school, they needed permission from the government. When they tried to get permission to open a nursery school, the government refused to grant it because nursery schools are not meant for language education. Therefore, Kayano and his colleagues had to give up teaching the Ainu language at nursery schools.

Kayano then came up with the idea of opening a private "Ainu language school". This was an attempt to gather local children and teach them the Ainu language. In 1983, Kayano started the Ainu language school and began to teach the Ainu language to local children.

This was the beginning of an ongoing effort to learn the Ainu language. However, in the 1970s, Ainu ethnic groups and museums had begun to teach courses in various places to learn the Ainu language, with the involvement of the Ainu themselves (Honda 1997: 353–354), but they were not designed to continue.

⁸ In the minutes of the Diet, the speech was recorded in katakana; in addition to being published in Emori et al. (1997: 175), it can also be viewed on the internet at: https://kokkai.ndl.go.jp/#/detail? minId=113114009X00319941109&spkNum=41 (accessed 17 January 2022)

⁹ This section is based on Honda (1997), Kayano (2005: 28–32) and others.

4.2 Tatsujirō Kuzuno

Another person who had a significant impact on the Ainu language revival movement is Tatsujirō Kuzuno (1910–2002), an elderly Ainu man from Tobetsu¹⁰ in Shizunai, Shinhidaka. He grew up in an Ainu-speaking community, absorbing the Ainu language and culture. Although he did not have an Ainu name, he grew up using both Ainu and Japanese. After the war, Kuzuno was hospitalized for a long time due to illness in 1965, and his eldest son begged Kuzuno to teach him the Ainu language, but Kuzuno, who had a negative view of the language, refused. In response, his son said, "If you can't speak Ainu, what is Ainu?" Shocked by these words, he decided to preserve the Ainu language for future generations.

He began writing down Ainu prayers and stories in notebooks and organized some of them into a booklet called *Kimuspo*, ¹¹ which he published in five volumes between 1978 and 1991 (Kuzuno 1978, 1979, 1983a, 1987, 1991).

He was also called upon to serve as a ceremonial priest in Ainu rituals around the country, conducting ceremonies and teaching the younger generation Ainu traditions. He also actively cooperated in research projects conducted by researchers and government agencies. It is known that he always asked the researchers who visited him whether they were interested in katsu-hozon 'living preservation' or shi-hozon 'posthumous preservation'. 12

For example, Kuzuno (1988: 164) stated the following in an interview.

Aynuitak (the Ainu language) is really a wonderful thing. Scholars have been writing and recording Ainu research, but this is posthumous preservation. Even if the national government and the provincial governments spend a little money to preserve the Ainu culture. I hope that future generations of Ainu children and young people, and this is only for those who wish to preserve it, will be able to hand it down to the next generation. I heard that Ainu language classes are being at last held in Asahikawa and Biratori. From now on, Aynuitak should also spread its wings. Young people should take the lead in *Aynuitak*. That's the beginning of living preservation.

In addition, Kuzuno (1983b: 192) says the following:

To return to the subject of preserving our native language, our native language is like a dying breed, and if we just write it down on a piece of paper and preserve it, it will be nothing. It will be nothing more than a piece of paper.

Kuzuno worked tirelessly to record and pass on the Ainu language, hoping that his own Ainu language would be passed on to his Ainu successors. This idea of Kuzuno's had an impact on many Ainu. For example, Shigeru Kayano in a newspaper interview, mentioned earlier, also said, "If you dig in the earth, you will find stone tools and

¹⁰ Said to be derived from the Ainu word *Toypet*.

¹¹ Meaning, 'a storehouse in the mountains where treasures are hidden'.

¹² katsu means 'living' and shi means 'dead'.

earthenware, but the language is not buried in the earth. The language is not stuck to tree branches. It is mouth to mouth. Please leave us the words of our ancestors."13

4.3 Ainu language classes

In 1987, the Ainu Association of Hokkaido, seeing the work of Shigeru Kayano and others in Nibutani, began to recognize the need to work as an organization to revive the Ainu language and started the activity known as Ainugo Kyōshitu. The term Ainugo Kyōshitsu 'Ainu language class' means "a place where the Ainu language is taught". There is no fixed organization or building like a school, but rather courses for learning the Ainu language held by organizations such as the Ainu Association in each district. As far as I know, there is no official English translation, so I will refer to it as Ainu Language Classes, but I don't think it can be called a school.

The first two sites were Nibutani in Biratori Town and Asahikawa. Asahikawa is an area with a large Ainu population, where activities to pass on Ainu culture have been carried out since early times. This project is an official one, financially supported by the Hokkaido Board of Education.

In some areas, committees have been formed to run Ainu language classes. However, most of the Ainu language classes have been held in public facilities called "community centers" so there is no special place for Ainu language classes. The operation of the Ainu language classes reflects local conditions, and the content and frequency differ from region to region.

In the town of Biratori, where Nibutani is located, two classes were run, one for adults and one for children, with assistance from the town. The number of Ainu language classes gradually increased to 14 as the demand from native Ainu for Ainu language learning increased.14

However, it was not only an opportunity to learn the Ainu language as a language, but also an opportunity to experience the culture and history of the Ainu people through the study of the Ainu language. In addition, learning the Ainu language brought together members of the Ainu ethnic community to learn together, which strengthened the bonds of the community and allowed each individual to rediscover his or her roots. This also helped to empower the community and the individuals who belonged to it.

¹³ Asahi Newspaper, Evening Edition 2 June 1993, "The world of Shigeru Kayano".

¹⁴ Specifically, they are: Biratori, Asahikawa, Urakawa, Kushiro, Sapporo, Shiraoi, Akan, Chitose, Shizunai, Mukawa, Obihiro, Shiranuka, Noboribetsu, and Tomakomai. In the early years, Noboribetsu was a joint project with Muroran, but the base of activities was in Noboribetsu. In 2000, the Ainu language class in Akan was discontinued and a new Ainu language class was opened in Samani, so the maximum number of Ainu language classes was 14, but the total number of places where classes were conducted is 15.

One of the members of the Ainu Association who used to attend the Samani Ainu language class once said at a training session, "I'm not young, and I am afraid I will not be able to master Ainu even though I am now studying it in the class, but I'm joining the class looking forward to seeing my fellow members."15

Yūko Yoshimoto, who has participated in and observed the Ainu language classes in Biratori Town, describes the activities of the Ainu language classes as follows. (Yoshimoto 2014)

The space of the Ainu language classroom, where people could come into contact with a language that was being lost and communicate freely through Ainu culture, functioned as a place for injured people who had been suppressed and discriminated against by assimilation policies to gain trust and approval and maintain a steady state.

Yoshimoto (2014) states, "It is not only a language class, but also a place where the Ainu people can find comfort and a place where the injured subjects can increase their resilience, and it is responsible for the transmission of traditional culture and the creation of new Ainu culture." This point is in line with what I have felt in my experience.

The Ainu language classroom is not only a place to learn the Ainu language, but it also has a function beyond that. In some cases, it can be said that the Ainu language revival movement was also a part of the Ainu social movement.

It should not be overlooked that the Ainu language learning movement had this aspect as well. In fact, this is probably the reason why the Ainu language learning movement has been able to attract a wide range of participants, despite its focus on language learning.

In reality, although Ainu language classes have been held in many places for many years, the number of people who speak Ainu as their mother tongue has not increased, and the number of fluent speakers is still small. The revival of the Ainu language in daily conversation may still take some time. I have even heard some people say that since Ainu speakers are not increasing even after investing so much public money, it is a waste of taxpayers' money to hold Ainu language classes. However, the purpose of this activity was not just to learn the language, but to go beyond that, and I believe that even if the revival of Ainu as a language is not immediately realized, this activity has had an important meaning.

In 2010, the Ainu language classes subsidized by the Hokkaido Board of Education underwent a review and were changed to courses on vocabulary for the sake of learning Ainu culture rather than Ainu language courses, and two years later the program itself was abolished.16

¹⁵ These were the words I heard at a training session for Ainu language instructors in Hokkaido in mid-2000. There is no recording, and it is based on my memory.

¹⁶ This has also been mentioned by Satō (2012: 33–34). In the background, there are problems with the government's formalistic policies and attacks from historical revisionists, but I cannot go into the

4.4 Ainu language revival outside Hokkaido

Today, the Ainu in Japan do not live only in Hokkaido, but also in Honshu and the many other islands. They are the mainly people who moved from Hokkaido, Sakhalin, and the Kuril Islands for work or other reasons and their descendants.

In particular, many Ainu from Hokkaido moved out of the prefecture after World War II, and it is known that many Ainu have moved to the Kanto region, especially to Tokyo, the capital of Japan.

The Tokyo Utari-kai,¹⁷ a group of Ainu living in the Kanto region, was established in 1973, but suspended its activities a few years later, and the Kanto Utari-kai was newly established in 1980, followed by the Rera no kai¹⁸ in 1983 and the Tokyo Ainu Association in 1996. In addition to traditional dances, ceremonies, cooking, embroidery, etc., they are also engaged in learning the Ainu language.¹⁹ For example, the Kanto Utari-kai started studying the Ainu language in 1989 by inviting linguist Hiroshi Nakagawa as a lecturer.

The Ainu Culture Center is the Tokyo office of the Foundation for Ainu Culture, which was established under the Ainu Culture Promotion Act of 1997, as described later. In addition to providing information about the Ainu to the general public, the center functions as a place for Ainu living in the Tokyo metropolitan area to learn about their culture and language (Watanabe 2018).

5 Relations with researchers

In considering the revival of the Ainu language, it is necessary to consider the role of the researcher in it; until the 1990s, with the exception of Mashiho Chiri, most of the research on the Ainu language was done by non-Ainu.

The records of researchers (many of whom specialize in linguistics) can be a very useful resource for the Ainu, but the way in which they conduct their research has often been criticized, and there has long been a conflict between the researchers and the Ainu that cannot be ignored. This is an issue that needs to be considered when thinking about the revival of the Ainu language.

details of these complex issues here, as it would require too much space. As far as I know, there are no other programs under the name of "Ainu language classes" at present, except for Biratori, which is funded by the town's own budget, and Chitose, where students take classes on their own initiative. However, the Foundation for Ainu Culture continues to offer courses in the Ainu language at various locations.

¹⁷ Utari means 'fellow countrymen'.

¹⁸ Rera means 'wind'.

¹⁹ For more information on Ainu activities in the Kanto region, see Rera no Kai (1997) and Watson (2014) in English.

In the study of minority languages, not only the Ainu language, the relationship between the researcher and the ethnic group is sometimes fraught with conflict and friction. It is sometimes very difficult to establish a trusting or cooperative relationship between a researcher and a member of a community, especially when the research is conducted by a non-member of that community.

For example, Hiroshi Nakagawa, who has been involved in the study of the Ainu language in Japan for many years, in his book Nakagawa (1995: 24-33), candidly discusses his own experiences in the study of the Ainu language and the numerous rebuffs and criticisms he received from Ainu people. Kyōko Murasaki also writes in Murasaki (1963) about her experience of being firmly rejected by the Kuril Ainu when she tried to research the Kuril Ainu language.

Criticism of Ainu studies by outsiders has been common since ancient times. For example, Samio Hatozawa is an Ainu novelist from Biratori. He has written many works on Ainu themes, but he has also written many social commentaries, and one of his most famous published works is a dialogue between Hatozawa and an anonymous Ainu woman entitled Dialogue with an Ainu. In this dialogue, he expresses his opinions on Ainu human rights issues and policies, and in the course of it, he sharply criticizes research on Ainu. He states the following (Hatozawa and Onna 1995 [1970]: 179):

I'm not trying to make an issue out of one scholar's example here. However, I would like to assert that all Ainu scholars and researchers are nothing more than a kind of pest that attacks pure plants! -- I'm sure you'll agree. The simpler the object, the more likely it is to decay and die. What's more, the corpses are also good food for them.²⁰

Why did they not leave even one thing to the hands of the Ainu themselves? Yukar is said to be one of the five great epic literatures of the world.²¹ The Ainu are also known for their ethnic cultural characteristics. There was a proper noun "Ainu!", but the name is dying out, the Ainu people are being raided and stolen from, appreciated only for their scarcity value, saying, "for the nonce, for the nonce". Once what is Ainu has been taken, they don't seem to care whether they die, become a slum in a hive of prejudice, or dance like monkeys in a tourist spot. If the Ainu culture is so valuable, why didn't they take steps to protect and nurture it in the name of scholars, in the form of preserving historical sites and passing on ethnic culture? If the Ainu people are deprived of their soul, and the noun "aborigine" is applied to them, where is left on earth for the Ainu people to stand?

These criticisms were not only directed at the linguistic study of the Ainu language, but at the term "Ainu Studies", which includes all studies of the Ainu.

²⁰ This may mean that anthropologists have collected Ainu bones in many places.

²¹ This is because Kyōsuke Kindaichi (1959: 10-11) said this of yukar, the Ainu epics, along with Greek, Roman, Indian, and Finnish epics. However, in addition to these epics, there are other stories called epics that have been handed down throughout the world, and these were not known in Japan at the time. Limiting the term to these five is not in accordance with the facts.

²² The original Japanese word is $ky\bar{u}$ -dojin 'former aborigines', which used to be an official name referring to Ainu used by the Japanese Government, as in "The Hokkaido Former Aborigines Protection Act", which was enacted in 1899 and abolished in 1997.

According to Masao Minato (1982: 60–61), who was a colleague of Mashiho Chiri, Chiri said this about his mentor, Kyōsuke Kindaichi.²³

What I am interested in is the way he was cool about the condition of the Ainu people who served him even after he became a great man and his life became easier, although I did not ask about the time when he was living a hard life. As he wrote in his works, he would grab any and all Ainu old people, listen to their stories, take notes, and even told them that it was for the sake of scholarship. This may have been true, but from the point of view of the Ainu people with whom he was dealing, it was the result of them taking time off from their day's work or dropping their work in the fields to serve him. My aunt, Matsu Kannari, also spent her whole life writing a large number of notes for him. However, my aunt has lived a very poor life. If you ask me, it's hard to tell who was the teacher.

Mashiho Chiri was known for his harsh academic criticism of other researchers in his writings, and he also wrote critically about the writings of his mentor Kindaichi, but he rarely made this form of emotional criticism in public.

In addition, Minato (1982: 39) also stated the following regarding other researchers.

Many scholars are only interested in researching the Ainu people, who have many social disadvantages and are subjected to unjustified discrimination, without any warm human consideration. In fact, they have made a complete mockery of us. . . . It is because of their lack of humanity that they cannot get any real cooperation from the Ainu.

Given this background, one can imagine that it was not so easy for the Ainu and researchers to have a friendly relationship.

In 1972, at the joint convention of the Japanese Society for Anthropology²⁴ and the Japanese Society for Ethnology in Sapporo, Hokkaido, Ainu social activist Shōji Yuki and two Sisam activists occupied the stage to read out a public question denouncing Ainu studies (Shin'ya 1977: 279–288, 1979: 103–124). Other Ainu in the audience also made harsh criticisms. For example, the aforementioned Tasuke Yamamoto criticized the scholars, saying that, while he understood their enthusiasm, they lacked warmth toward people, and their research had no soul (Shin'ya 1979: 119).

Mieko Cikap (1948–2010),²⁵ for example, famously²⁶ filed a lawsuit against Ainu researchers, objecting to the unauthorized publication of her photograph in a research book that contained numerous derogatory descriptions of Ainu.

²³ This was written more than 20 years after Chiri's death, and the words were reproduced based on Minato's memory. We cannot deny the possibility that it may contain some inaccuracies.

²⁴ At that time in Japan, "anthropology" mainly referred to physical anthropology, while "ethnology" referred to cultural anthropology, and the academic societies were divided.

²⁵ An Ainu woman from Kushiro. She has produced many works of Ainu embroidery and has also worked on Ainu human rights issues. She is the author of many books. She had a Japanese surname, Iga, but instead of using it, she used as her name Cikap, which means 'bird' in Ainu.

²⁶ Commonly referred to as the "Ainu portrait rights trial", the case was filed in 1985, and three years later the two sides settled, with the researcher and publisher apologizing to Cikap. For more details, see Cikap (1988) and Gendai Kikakushitsu, editorial department (1988).

In the midst of all this, there was a growing movement among the Ainu themselves to study and research their traditional culture and language. One of these movements was the establishment of the Yayyukar²⁷ Ainu Ethnic Association in 1973 (Shin'ya 1977: 288–290). The word *yayyukar* is explained as meaning 'to act on one's own' in the Ainu language (Shin'ya 1977: 288). The association's activities included holding study sessions on Ainu culture in the open air with old people and publishing research books on the Ainu language and culture.²⁸ The idea of reclaiming and studying their own culture and language, rather than being studied by others, is thought to have influenced many Ainu.

5.1 Building cooperation

In this context, there has always been conflict and tension between the Ainu and researchers. In response to criticism from the Ainu, as described above, researchers gradually began to reflect on their own practices and sought to rebuild their relationship with the Ainu, their research subjects.

In 1988, after the aforementioned suit by Mieko Cikap ended with a settlement, the Japan Society for Ethnology launched a research ethics committee to examine the state of research to date and issued a statement of reflection a year later.²⁹ This statement can be considered to have been influenced by the Cikap suit.

In this context, when the Ainu language revival movement became a full-fledged movement in the 1980s, the Ainu side began to request cooperation from Ainu researchers who had a great deal of knowledge and materials on the Ainu language, and their relationship began to change.

In 1991, a symposium on the future of the Ainu language was held at Hokkaido University to commemorate the 50th anniversary of the death of Mashiho Chiri. Not only Ainu language researchers but also Ainu activists participated in the symposium, which included not only linguistic presentations on the Ainu language but also presentations on practical efforts to revive the Ainu language.

In the forward to the report, Hoppō Gengo Kyōgikai (1994), Nakagawa (1994: 2), stated:

²⁷ The word may have been coined rather than originally existing. This word is not found in any other reliable Ainu language sources and lacks the structure that should be observed in Ainu word formation. I suspect that it was originally yayeyukar 'to talk about oneself'.

²⁸ For example, the activities of this group were introduced in "Learning from the Ainu People's 'Wisdom of Learning from Nature'" in the Asahi Shimbun, 13 June 1977. Looking at the trajectory of this organization's activities from past records, we can see that many of its activities were practical rather than academic research in the general sense, and that it did not publish any kind of research journal or bulletin.

²⁹ Nihon Minzoku Gakkai Kenkyū Rinri Iinkai (1989).

The issue of "the survival of the Ainu language" has rarely been approached proactively by researchers in the past.

How can Ainu studies be involved in the future of the Ainu language, a question that could not even have been considered 10 years ago, was clearly raised in a public forum, which I believe was the greatest outcome of this gathering.

In addition, Ainu language researcher Suzuko Tamura (1996a: 142–143) notes that the Ainu themselves have changed their thinking about the Ainu language as follows.

At a time when many of the Ainu people were choosing to abandon the Ainu language and live only in Japanese, I did not tell them to learn or pass on the Ainu language because they were Ainu people, I only went to those people who were willing to help me record and listen to their words and voices, hoping to preserve them. Now, the Ainu people themselves are saying that they want to regain and pass on their language and culture. This is the reason why we have to support the Ainu people in reacquiring their own language. It is not because scholars and many people say that multilingualism and multiculturalism are "good" things.

This indicates a change in thinking within Ainu society. However, this is not a mere change in the consciousness of the people concerned, but rather a change that has been achieved in an environment where the Ainu people are free to think as they wish and is not unrelated to the social oppression they had suffered.

Tamura also argues the important point that the basis for aiming for the survival of a language is, above all, the will of the people involved.

5.2 Ainu participation in research

As the momentum for the revival of the Ainu language grew, some Ainu themselves began to engage in academic research on the Ainu language.³⁰

In 1994, the Hokkaido Agency established the Hokkaido Research Center for Ainu Ethnic Culture, which has several research staff members, including Ainu, and has conducted research on the Ainu language in a variety of ways. 31 For example, Yōichi Ōtani, who was born in Hobetsu, used to live in the Kantō region, and as a member of the Kantō Utari-kai, he was engaged in learning the Ainu language. Ōtani was later hired by the center to conduct research on the Ainu language and oral literature and has published a number of research results.

³⁰ This is thought to be related to the fact that due to the large economic disparity, many Ainu have not had the same opportunities to receive higher education as the majority Sisam. In order to eliminate this economic disparity, the Hokkaido Government has long implemented support measures to increase the rate of Ainu people entering institutions of higher education.

³¹ In 2015, the Center merged with the Hokkaido Kaitaku Memorial Museum and became a division of the Hokkaido Museum.

Another Ainu with Sakhalin roots, Mokottunas Kitahara (Japanese name: Jirōta), who grew up in the Kantō region and became a member of the Kantō Utari-kai, studied the Ainu language and culture from an early age and is now an associate professor at Hokkaido University, where he is engaged in research and education on the Ainu language and culture. 32 Another Ainu with roots in Yakumo who grew up in Sorachi, Kamus Okkay Mitsuru Ōta (1967–2021), 33 worked hard to learn the Ainu language and culture, compiled an Ainu dictionary (Kawamura and Ōta 2005) and taught the Ainu language at universities and in courses for Ainu people.

6 The Ainu Culture Promotion Act and the revival of the Ainu language

Since the 1980s, there had been a growing movement for new laws concerning the Ainu. The United Nations' International Year of Indigenous Peoples began in 1993, followed by the enactment of the Decade of Indigenous Peoples.

This movement had a great impact on Japanese society, and from 1992 onward, the Ainu were increasingly covered in the mass media, and their own activities became more active.

Then, in 1992, Shigeru Kayano ran for the Diet in an effort to restore the rights of the Ainu people. Before Kayano, there had been other Ainu who had run for the Diet, but none of them had been elected. However, he was elected in 1994 following the death of a member of the Diet.

Kayano aimed to have a new law on the Ainu drafted by the Ainu Association enacted. As a result, in 1995, the government set up a round-table discussion group of experts to consider future legislation for a year, but not a single Ainu member was included in the group.

The committee members were reluctant to recognize the rights of the Ainu as an indigenous people, including the return of land and resources and compensation, and issued a report stating that the government should promote Ainu culture (Utari Taisaku no Arikata nikansuru Yūshikisha Kondankai 1996).

Based on this report, the Ainu Culture Promotion Act was enacted in 1997, and the Foundation for Research and Promotion of Ainu Culture (FRPAC) was established to carry out various projects related to the promotion of the cultural heritage of the Ainu people, including the Ainu language.

³² His experience is described in detail in Ōtani (1997a) and Ōtani (1997b).

³³ Kamus Okkay is his Ainu name and Mitsuru is his Japanese name. He studied in Russia and was baptized into the Russian Orthodox Church and also had the baptismal name Mark.

Specifically, the Foundation for Ainu Culture's activities related to the revival of the Ainu language include subsidizing research and publications related to the Ainu language, conducting Ainu language courses, dispatching Ainu language instructors, publishing books and other publications related to the Ainu language, and conducting Ainu language speech contests. The first Ainu speech contest by the Foundation, titled Itak-an ro 'Let's Talk', was held in 1998, and has been held annually in Hokkaido since then.

From 1993, Shigeru Kayano, mentioned earlier, and another Ainu, Kōichi Kaizawa, filed a lawsuit in Nibutani, Biratori Town, objecting to the fact that their land had been appropriated for the construction of a dam. They also complained about the unreasonableness of submerging their sacred Ainu land due to the construction of the dam.

The case was fought for four years, and the Ainu plaintiffs won. The ruling acknowledged that the Ainu were an indigenous minority as described in international treaties, that the construction of the dam was causing damage to the Ainu culture, and that the expropriation of the land was invalid.³⁴ This court case was a major achievement for Ainu rights. It is thought that this court case influenced the enactment and implementation of the Ainu Culture Promotion Act, which was enacted in the same year.

Although this policy was criticized by the Ainu and by Sisam supporters, it was not overturned, and subsequent Ainu policies in Japan were developed based on this law.

7 Movements in the 2000 decade

In the 2000s, the Ainu cultural heritage, including the Ainu language, continued to be handed down to the next generation through various systems based on the Ainu Culture Promotion Act, but at the same time, activities to seek recognition as an indigenous people also persisted. Ainu organizations participated in United Nations conferences and continued to work for recognition as an indigenous people.

However, the Japanese government did not actively seek to recognize the Ainu as an indigenous people.

As a result of global efforts, the Declaration of the Rights of Indigenous Peoples was adopted by the United Nations in 2007, and the Japanese government agreed to it. In 2008, the Diet adopted a resolution calling for the Ainu to be recognized as an indigenous people.35

In response, the Diet passed a resolution in 2009 stating that the Ainu are an indigenous people.

³⁴ However, removal of the already completed dam was not approved.

³⁵ This may have been influenced by the 34th G-8 Summit held in Toyako, Hokkaido in the same year.

After that, a panel of experts was organized by the government again. Only one member of the panel was Ainu. 36 There, discussions were held on the future of Ainu policies, and the promotion of the Ainu language was also discussed. Several Ainu representatives were included in the discussion.

A year later, a report was issued recommending that the government continue to implement Ainu policies, and an organization called the "Ainu Policy Promotion Council" was established.

As a future policy, a park named "Symbolic Space for Ethnic Harmony" was established, where Ainu culture would be promoted and disseminated. This park is called *Upopoy* in Ainu. The park includes a national museum, tourist facilities, and a memorial facility. This topic will be discussed in more detail in Section 7.3.

7.1 Project to foster leaders

In 2008, the Ainu Cultural Foundation launched a training program in Shiraoi Town called the "Project to Foster Leaders".

This is a training program where people who wish to become Ainu cultural heralds could intensively learn the Ainu language, Ainu history, and various elements of Ainu culture.

Young people from all over the country applied for the program, and about five people spent three years studying Ainu culture while receiving living expenses.

The training is coordinated by the Ainu Folk Museum in Shiraoi, commissioned by the Foundation for Ainu Culture, and training on Ainu culture is conducted daily.

Since the Ainu language is also taught during this training, many of the trainees have learned the Ainu language and are participating in the Ainu language revival movement.

This training program was conducted in Shiraoi for four terms from its inception until 2020, and 23 people studied there.³⁸ Many of them stayed in Shiraoi after the training, started working at the Ainu National Museum, and including many who are now working at the Upopov National Ainu Museum and Park, which will be described in more detail in Section 7.3.

From 2020, this training came to be conducted in Biratori Town. The reason for the change in location has not been officially disclosed, but it is thought to be because

³⁶ Tadashi Katō, who was the president of the Ainu Association of Hokkaido at the time.

³⁷ This ambiguous name is a literal English translation of the Japanese original name, Minzoku Kyōsei Shōchō Kūkan and used to appear in English documents of the government. However, recent documents issued by the government or the Foundation for Ainu Culture use the simple English term National Ainu Museum and Park.

³⁸ However, not all of them completed the course because some of them dropped out in the middle of the course due to circumstances.

the Upopoy National Ainu Museum and Park had been established in Shiraoi Town, making it difficult to continue this training program in Shiraoi.

7.2 Activities at Sapporo University

Sapporo University, a private university located in Sapporo, Japan, formed an organization called the Urespa Club starting in 2010, which launched a program specializing in the study of Ainu culture.³⁹

It accepts Ainu young people as scholarship students, provides them with scholarships, and creates a place where they can learn the Ainu language and other aspects of Ainu cultural heritage.

This program was initiated by Yūko Honda, a professor at the university and an expert on Ainu culture. Honda is a Sisam from Ishikawa and was Shigeru Kayano's assistant in Nibutani for many years.

While it is possible for children of the Ainu people to take advantage of the financial support system provided by the Hokkaido Government for higher education, such as high school and university, it is not enough to just subsidize school fees, especially since children from far away from Sapporo need to spend a considerable amount of money to go to Sapporo, secure housing, and live there.

Although classes on Ainu culture exist at several universities in Hokkaido, there are few educational institutions that offer comprehensive study of the Ainu language and culture. This program also devotes time to the study of the Ainu language and is working towards Ainu language revival.

Group learning can be expected to have a greater effect than individual learning. The creation of a place for Ainu youth to gather and learn together is a meaningful form of empowerment.

In addition, although the scholarship program is limited to Ainu children, it is possible to participate in this program and learn about Ainu culture regardless of one's origin. There is a place where Ainu youth and non-Ainu youth can gather and learn together, and many young talents are being nurtured here.

A number of graduates from this school have come to be involved in the Ainu language revival movement.

This initiative by Sapporo University is also noteworthy, and many of its graduates are working on the revival of the Ainu language and culture, either as employees of Upopoy, which was established in Shiraoi in 2021, or elsewhere.

³⁹ For more information on this activity, see Sapporo Daigaku Urespa Club (2013).

7.3 The new law and Upopov

In 2019, the Law for the Promotion of Ainu Policy⁴⁰ was enacted, and with it, the 1997 Law for the Promotion of Ainu Culture was repealed.

Under the new law, the government provides grants to local governments for projects that support the Ainu people or revive their culture, and various projects that utilize Ainu culture are currently being implemented in various regions.

The "Symbolic Space for Ethnic Harmony", which had been proposed in the 2010 report of the Expert Advisory Council, was established in Shiraoi as a result of discussions.

In order to operate this facility, the Ainu National Museum and the Foundation for Ainu Culture, which had been functioning as a center for the revival and study of Ainu culture in Shiraoi while also serving as a tourist attraction for many years, merged in 2018 to manage the park, and the new organization was named the Foundation for Ainu Culture (Ainu Minzoku Bunka Zaidan).

The facility was supposed to open in April 2020, but due to the spread of the new coronavirus, it was postponed and opened in July of the same year. The facility's common name is "Upopoy"41 in Ainu.

In the future, this facility will be used as a base for the restoration of Ainu cultural heritage, including the Ainu language. In the park, the Ainu language is used in a variety of ways, including being used on information guides. Research and practice for the revival of the Ainu language are being conducted here, but it has not been long since the start of the project, and various experimental activities are being carried out.

However, this is not enough. The Ainu do not live only in Shiraoi, but in many other places. Even if a huge facility is built in Shiraoi, it is unclear how and to what extent it will contribute to the revival of the language and culture of the Ainu communities in other areas. There is a danger that Japan's Ainu policy will become centered on Upopoy and other communities will be neglected, so it is necessary to pay attention to future developments.

⁴⁰ The official title of the law is "Act on Promoting Measures to Realize a Society in Which the Pride of the Ainu People Is Respected".

⁴¹ The official website describes it in English as "singing together in a large group" (https://ainu-upopoy.jp/en/facility/upopoy//). The name was chosen after an open competition and consideration by a selection committee. There is a problem with this description and this Ainu language naming that needs to be examined from an Ainu linguistic perspective.

8 Issues in the revival of the Ainu language

In this section, I will discuss some of the issues that need to be considered concerning the revival of the Ainu language, based on my own experience of being involved in the Ainu language revival movement.

8.1 Dialects

As already mentioned, the Ainu language, like other languages, has long been known to have dialectal differences. Records from the early modern period show that there are three major dialects divisions, Hokkaido, Karafuto (Sakhalin), and Kuril, and within each of these there are various dialects, for details see Nakagawa and Fukazawa (Chapter 8, this volume).

There is no common standard language for the Ainu language, and each region is learning its own dialect. At this point in time, there is no movement to create a common Ainu language, and efforts to revive the Ainu language are being made in the form of reviving the dialects of each region.

Individuals and organizations engaged in the study of the Ainu language generally study the dialect of the Ainu language of their own region. If one is a Kushiro Ainu, one studies the Kushiro dialect; if one is a Chitose Ainu, one studies the Chitose dialect.42

Learning the Ainu language is not just learning a language, it is also an act of confirming one's roots and getting closer to one's roots. For this reason, learners may wish to learn the Ainu language of their own birthplace or that of their ancestors, rather than their own place of residence. For example, an Ainu from Urakawa who lives in Obihiro may wish to learn the dialect of Urakawa, his roots, rather than the Obihiro dialect. However, many Ainu language courses teach the Ainu language of the region, and, in some cases, it is difficult to accommodate the wishes of the learner.

In such cases, the student would first learn the Ainu language of his or her own place of residence, and then learn the Ainu language of his or her own origin. In the case of Hokkaido, the basic vocabulary is often the same, so it is possible to apply the initial knowledge of one dialect to the study of another dialect.

Also, it is not always possible to learn the local dialect in each region. In many cases, due to a lack of teaching materials or instructors, students are forced to learn dialects from other regions.

Materials are lacking for quite a few dialects, for example, in regions like Hakodate, Erimo, Rumoi, Otaru, etc., it is almost impossible to reconstruct and teach the

⁴² When people who do not have Ainu roots learn the Ainu language, they learn the dialect of the region where they live or in which they have an interest.

Ainu dialect because the Sisam settled there at an early stage, and the Ainu language in that area declined before it was recorded, and there are no records of the dialects.

Therefore, even though we speak of trying to recover the Ainu language, we are only able to learn and recover the dialects for which limited records are available. If there is no record of the Ainu language in one's own region, then one must learn a similar dialect from a neighboring region.

There are also relatively large differences between the dialects of Hokkaido and Sakhalin. There are significant differences in phonology and word usage between the two dialects, see Tangiku (Chapter 9, this volume), and Ainu people living in Hokkaido who have Sakhalin roots may want to learn the Ainu language in order to revive the language of their ancestors. However, often there are no instructors available or no place to learn the dialect, and they have no choice but to learn the Hokkaido dialect, which is more accessible. In this case, after learning the basics of the Hokkaido dialect, they would have to learn the Sakhalin dialect anew.

Of the various dialects of Ainu, the Saru dialect is the one for which the most materials and teaching materials have been preserved. The word Saru is based on the Ainu word Sar 'field of reeds' and refers to the basin of the Saru River including the towns of Biratori and Hidaka, where one of the most famous Ainu settlements, Nibutani, 43 is located. This area has a large Ainu population and has long been visited by researchers from Japan and abroad studying the Ainu language and culture.

For dialects for which there are few or no records, there is a possibility that new materials will emerge in the future, and in some cases, new materials will be discovered for dialects that were thought to be impossible, which may provide a foothold for reconstruction.

For example, the Ainu language study program in Samani in the Hidaka region started in 1998, but at the initial stage, the materials left behind by researchers and broadcasters were not available to the public, and they could not use them, so the Ainu language was learned using materials in the Saru dialect. Later, however, through research, we were able to collect and use written and recorded records of the Ainu language in the possession of researchers and broadcasters, and we were gradually able to learn the Samani dialect (Komatsu 2000: 67–68; Kumagai 2015: 117–118).

In addition, even if there are records of the Ainu language of an area, they may not be available due to lack of public access, or if Ainu language instructors living in the area do not have sufficient knowledge of the local dialect, they may be forced to teach a dialect from another area.

As the number of Ainu language learners increases, it will be necessary to meet the various demands of the future Ainu language revival, and it will be necessary to further promote the maintenance and publication of materials.

⁴³ As mentioned above, it is also the birthplace of Shigeru Kayano (see Section 4.1).

As mentioned earlier, at this point in time, few Ainu see the need to go beyond dialects and establish a common Ainu language, and there have been no concrete efforts to do so. However, as the Ainu language revival continues, it is possible that this issue will be revisited. Depending on the circumstances, it is possible that more than one common language will be established, as is the case in other countries.

8.2 Dialect mixing

In some cases, the Ainu language taught by an instructor may be a mixture of different dialects as a result of the instructor having studied multiple dialects of Ainu. It is also possible that different dialects are mixed up in the Ainu language spoken by students who have learned multiple dialects in different places.

Many people also learn the vocabulary of other regional dialects through publications and the Internet.

For example, there is the word *ihunke*, which means 'lullaby', but this word is not used in all regions. In some regions, it means 'to curse someone', but it seems to have become widespread through being used in publications, music CD titles, and TV program titles, so even people from regions that do not use the word *ihunke* for lullabies know the word and don't know how to say 'lullaby' in their own region.

Another famous example is *irankarapte*, ⁴⁴ a polite greeting in the Ainu language and the most famous of all Ainu greetings. It is usually given by a man who is happy to see someone again, while performing the traditional manner of showing respect (*onkami* or *onkamuy*). In other words, it is not a casual greeting to friends and acquaintances in everyday life. ⁴⁵

However, when Shigeru Kayano came up with the interpretation that the meaning of this phrase is 'Let me touch your heart gently', as explained in Kayano (1996: 82), it caught the attention of many people and spread through publications and the mass media.⁴⁶

Even people who usually live in Japanese, at Ainu festive gatherings, gatherings, and ceremonies, and sometimes in their daily lives, more and more people are using this greeting in the same sense as 'hello', even though it may not be the way it is said in their own hometown.

⁴⁴ Depending on the region, there are different forms of the word, such as *inankarapte*, *iankarapte*, and *irankarapte*. There are also completely different forms of greetings such as *ikatay*, *isiorore*, and *issorore*.

⁴⁵ It seems that there was no greeting used as casually as the modern Japanese *konnichiwa* or the English *hello*. When villagers met each other, as they do every day, they would ask each other, "Have you eaten?" or "Where are you going?"

⁴⁶ However, this interpretation is Kayano's own, and the current author and many other linguists do not agree with it.

However, it is being used in a gender-neutral way, away from traditional usage and without traditional mannerisms, and this is a transformed usage.

Some Ainu people have criticized this use of this word, which ignores traditional usage and regional differences.⁴⁷

The mixing or transformation of words is an ongoing process.

8.3 Textbooks

There are a variety of instructional materials available for learning the Ainu language, 48 but they are far from sufficient. In order to learn the Ainu language, it is necessary to have materials that meet the needs of each learner.

Researchers and others have published a number of instructional materials for learning the Ainu language, but it must be said that many of them are problematic.

One of the main reasons for this is that many of the books are written by researchers and others who are not native speakers of the Ainu language.

If there are many native speakers of a language, it is possible to have a native speaker look at example sentences made by a non-native speaker and correct any mistakes. In the case of the Ainu language, however, this is almost impossible at present. First of all, there are practically no native speakers who have enough knowledge of the Ainu language to check example sentences. In addition, the small number of speakers who learned the Ainu language through childhood experiences have not necessarily inherited all of the Ainu language as it was once spoken in daily life, and the vocabulary they know is limited and strongly influenced by the Japanese language.

That being the case, when a non-native Ainu speaker writes an Ainu textbook, the text created by the author is used in the textbook.

However, some of these materials contain material written by non-native speakers, such as researchers and activists, and should be used with caution. In addition, the National Institute for Japanese Language and Linguistics (NINJAL) has published a database based on Jinbo and Kanazawa's (1898) collection of conversational Ainu texts, digitized with the voice of a current Ainu speaker (https://ainu.ninjal.ac.jp/topic) (Bugaeva and Endō 2015).

⁴⁷ Although I have not been able to find this in any public publications, I have heard many critical comments at meetings of Ainu ethnic groups that I have attended and in personal conversations with those involved.

⁴⁸ For example, Tamura (1977) and its commentary Tamura (1984), originally produced for university classes, are excellent teaching materials with audio tapes by native speakers. Hokkaido Utari Kyōkai (1994), Nakagawa and Nakamoto (1997, with audio), Nakagawa (2013, with audio) are also available. Shigeru Kayano (1990) is another excellent video teaching material. Also available on the internet is the Ainu language radio course textbook published by the Foundation for Ainu Culture in four volumes per year since 1997, downloadable from (https://www.stv.jp/radio/ainugo/text/index.html). Radio broadcasts are also available on the internet (https://www.stv.jp/radio/ainugo/index.html). In addition, the Foundation for Ainu Culture publishes three textbooks in eight different dialects, which can be downloaded at (https://www.ff-ainu.or.jp/web/learn/language/dialect.html).

However, in such a case, care must be taken because there is a possibility that grammatical errors or expressions contrary to the original usage will be used.

This is not desirable, but it is practically unavoidable.

As mentioned earlier, the Foundation for Ainu Culture has been conducting radio courses in the Ainu language since 1997, and the textbooks are written by the instructors or by other researchers, most of whom are non-native speakers. ⁴⁹ Most of the example sentences in the textbooks are not written by native speakers. I myself have been involved in some of them and have written manuscripts.⁵⁰

Although it is possible in some dialects to create an Ainu language textbook using only the conversations and writings of native speakers in the past, in such cases the content of the textbook would be limited to the materials that have survived, which would greatly limit the content of the textbook.

For example, it would be impossible to create a textbook with an Ainu conversation on the theme of traveling abroad by airplane using only the records of the past.

That being said, if Ainu language revival is to be undertaken, the texts used will need to be created in a variety of ways that correspond to the times, but care must be taken to ensure that they do not contain errors, and the use of unnatural expressions that are far removed from the original Ainu language should be avoided as much as possible.

8.4 Writing

The issue of written notation is also important when considering the revival of the Ainu language.

As already mentioned, researchers in Japan and abroad came to write the Ainu language in Roman and *kana* characters, and it was not until the latter half of the nineteenth century that the Ainu themselves began to write their language in letters. Today, *kana* and Roman characters are mainly used.

Each of these has its own advantages and disadvantages, and at present not many people have the idea of unifying the scripts. The textbooks produced by the Ainu Association use both *kana* and romanization, and it is becoming customary for other publications to use both in parallel.

⁴⁹ However, in the early days, there were also texts written by native Ainu speakers such as Shigeru Kayano

⁵⁰ The textbook of the course on the Samani dialect taught by Kane Kumagai (four volumes) and the textbook on the Urakawa dialect taught by Taeko Kimura (two volumes). (The Foundation for Ainu Culture, Organization for the Promotion of Research 2006a, 2006b, 2006c, 2007, 2013a, 2014).

8.4.1 Kana characters

The Japanese language is basically written using three types of characters: kanji (Chinese characters), which were introduced from China, and *hiragana* and *katakana*, which were developed by transforming *kanji*.

There are two types of kana, which are phonetic characters created by abbreviating or transforming kanji: hiragana and katakana. Each is composed of about 50 characters, most of which represent a single syllable each.

Hiragana are used to write the native vocabulary of the Japanese language and foreign words of Chinese origin whose origins have long been forgotten and have become indigenous,⁵¹ while *katakana* are mainly used to write foreign words other than Chinese, such as European languages, and onomatopoeic and mimetic words.

In Japan, both hiragana and katakana were used to write the Ainu language in the documents written by Sisam in the Edo period.⁵² In modern times, both the Ainu and Sisam have mainly used katakana, characters used to write foreign languages, to write Ainu words.

As mentioned in Section 4.1, in modern times in Hokkaido, the Ainu received compulsory education from the Japanese government, and many of them began to write the Ainu language in kana.

8.4.1.1 Technical problems with writing in kana

In Japanese phonology, almost all syllables have a vowel at the end, and the kana script is structured in this way.

The Ainu language, like Japanese, has five vowels, and all consonants used in the Ainu language also appear in Japanese. In this sense, most of the syllables that appear in Ainu can be distinguished and written in *kana*.

However, there are some problems. For example, the Ainu word *hoku* (meaning 'husband') is written in katakana as ± 2 hoku. The \pm corresponds to ho, and the 2 corresponds to ku. On the other hand, when we try to write hok 'buy' in katakana, the katakana character for ho is \$\pi\$, but there is no character in katakana that represents only the consonant *k*.

Therefore, the letter \mathcal{I} , which originally corresponded to the syllable ku, was reduced to \mathcal{D} , and *hok* was written as \mathcal{A} .

This writing style was adopted at least in the book Hokkaido Ezo Chimei Kai published by Hōsei Nagata in 1891, and it is still widely used today with some modifica-

⁵¹ Many Chinese-derived words, such as the numbers ichi, ni, and san '1', '2', and '3', have been incorporated into Japanese, but few people are aware that they are words of foreign origin.

⁵² Early works include Matsumae no Koto 'Language of Matsumae', which is assumed to date back to the period of Kan'ei (1624–1645), for details see Satō (Chapter 3, this volume).

tions. There are more than ten small kana characters developed to write such Ainu words.

In addition, the syllable tu does not traditionally exist in Japanese.⁵³ However, it occurs frequently in the Ainu language.

Sisam, who recorded the Ainu language in the Edo period (1603–1868), knew of the existence of this sound, and developed the \mathbb{F} character, which is the kana character for *to* with a supplementary symbol " $^{\circ}$ ". 54 Also, the character $^{\circ}$ " was developed by adding "°" to the "" " tsu character.

After that, the character by was developed by adding a smaller version of the letter \neg for u to the \vdash for to in order to write tu in foreign languages such as English, and this character is also widely used these days.

Since this character \mathbb{F} was developed to represent the unique sound in the Ainu language, there were many Ainu authors and researchers who preferred to use this character. In addition, there are those who actively use the β instead of the β when their own Ainu names containing the tu sound appear in publications.⁵⁶

Although these notations are used in publications related to the Ainu language, there are some difficulties when processing the text on a computer, and printing technology sometimes prevents the use of the special, smaller *katakana*.⁵⁷

Tasuke Yamamoto, an Ainu from Kushiro, who was also an Ainu speaker, developed an Ainu script for writing Ainu characters (Yamamoto 1976), which was a significant modification of the Japanese kana script, but it did not become widely used.

8.4.2 Romanization

The Roman alphabet, which was developed in ancient Rome, has been used for a long time to write English and other languages around the world.

Westerners who came into contact with the Ainu after the Middle Ages used the Roman alphabet to write down the Ainu language. As mentioned above, there were the Ainu, like Imekanu and Yukie Chiri who came into close contact with Westerners and learned about Western culture through Christianity. There is also the Bible (the

⁵³ However, the syllable [tsu], which begins with an affricate sound is sometimes written as tu.

⁵⁴ This symbol is called *handakuon* and in Japanese is usually placed on *kana* that begin with the consonant h, which changes the consonant to p.

⁵⁵ Shigeru Kayano, for example, is known to have basically used the character \(\begin{aligned} \text{in his books.} \end{aligned} \) (Kayano 2005: 70–71)

⁵⁶ The musician Atuy. The name Atuy means 'sea'.

⁵⁷ However, in the 2000s, thanks to the efforts of concerned parties, the special Ainu kana characters were incorporated into the Japanese character code, and many of the personal computers currently in circulation in Japan are capable of typing the special Ainu characters.

New Testament) translated into Ainu and written in Roman characters, which were once used by the Christian Ainu.

Japanese people, including the Ainu, learn the Roman alphabet at school to write Japanese, and all people are expected to learn English as well, but the Roman alphabet is not familiar to most people, and it takes a lot of effort to learn it and to read and write freely with it.

For this reason, most Ainu who have written the Ainu language have used the familiar kana script, and those who have used the Roman alphabet have been limited to those who have been exposed to Western culture through Christianity.

As already mentioned in Section 4.1, Shigeru Kayano (1974: 1) and others have complained that publications written in romanized Ainu are difficult for them to use, and that books written by researchers in romanized Ainu are also difficult for them to use.

In addition, there have actually been cases where Ainu students have stopped coming to Ainu language classes taught by linguists in protest against a difficult grammar-centered approach using romanization.

However, romanization has its advantages. With kana, as mentioned earlier, there are special small letters used to indicate special pronunciations that are not found in Japanese, which can cause technical problems when used in publications or digital data.

On the other hand, for Ainu romanization, the 26 characters used in English and other languages are sufficient, and there is no need for special symbols such as the accent marks found in French and German. As a result, it is very easy to write Ainu texts in publications, Internet sites, and e-mails.

8.5 Providing places to learn and a system

The Ainu language courses offered by the Ainu Association of Hokkaido or the Foundation for Ainu Culture have been held on a one-off basis at public community centers and other facilities, and there are no facilities specializing in the study of the Ainu language.

In addition, although several universities in Hokkaido and Honshu offer classes in the Ainu language, there are no universities with departments specializing in the Ainu language. There are no schools where Ainu is studied intensively.

However, as mentioned in Section 7.1, the Ainu leaders training program, which was held in Shiraoi until 2020 and in Biratori thereafter, provides a relatively large amount of time to learn the Ainu language, but it is impossible to study the Ainu language intensively because there are many other things to learn.

In addition, the Ainu language instructor training program conducted by the Foundation for Ainu Culture only allows participants to meet several times a year to learn the language, and is not a continuous program, which is also not sufficient for the training of Ainu language specialists.

In order to promote the revival of the Ainu language in the future, it is necessary to establish a system that allows people to study the Ainu language intensively, and it is important to train Ainu language instructors in this system.

Many people work at jobs that have nothing to do with the Ainu language and earn their living through those activities, and it is impossible for them to devote much of their daily time to learning the Ainu language. In order for it to be possible for them to devote more time to learning Ainu, there must be a system in which Ainu language learners can learn the Ainu language while being guaranteed a living.

8.6 Instructors

Not only are there not many Ainu language learners, but there are also not many people who can teach the Ainu language.

There are no specialized schools for the transmission of the Ainu language, and there are only a limited number of people who can make a living teaching the Ainu language.

Those who teach Ainu language courses as part of their job are usually paid a fee for each course they teach, but they do not receive a fixed monthly salary, and it is almost impossible for them to live on the fees alone. Many of them have other jobs and teach after work or on their days off.

In addition, professional researchers who work as professors at universities are usually involved in the Ainu language revival by teaching classes to students, conducting their own research, and doing administrative work for the university, but sometimes they also serve as lecturers in courses for Ainu people to learn the Ainu language, or provide advice and supervise the development of teaching materials as partners.

Even if those who are currently learning the Ainu language were to acquire the ability to teach it in the future, under the current circumstances, it would be difficult for them to make a living from it.

Aside from professional researchers such as university professors, some of the people involved in the Ainu language revival movement work as curators or researchers at public institutions such as museums and research facilities, while others work as office workers or civil servants while they are involved in the movement.

In the future, it will be necessary to create employment opportunities for people who specialize in Ainu language education and research.

8.7 Teaching methodology

There has been insufficient practice and research on methods of Ainu language education in Japan. Most of the educational activities aimed at the revival of the Ainu language have been carried out by private activists who do not necessarily have scientific knowledge and theory, and by linguists who have described the Ainu language linguistically. The main work of linguists has been the scientific description and analysis of the Ainu language, and few researchers have specialized in the pedagogy of the Ainu language, and there has been little research on it.

There have been many efforts to revive the Ainu language in various areas, but unfortunately there are still very few people who can be called fluent speakers. One of the reasons for this is that there are not necessarily very many people involved in the Ainu language revival, and there has not been enough energy or money invested by individuals and organizations. However, we must also consider that there may be a problem of methodology as well.

I have taught Ainu myself in many places, and I have also observed Ainu language courses taught by others, but the content of these courses varies widely.

In some cases, students learn the meanings of local Ainu place names, in other cases they learn expressions related to rituals, and in other cases they listen to tapes of oral literature and learn its meanings. They may also learn grammar by reading books. They may not have many opportunities to practice conversation. However, with this approach, it would be difficult to increase the number of fluent speakers.

In Japan, English is taught in almost all junior high schools, mainly using textbooks and focusing on grammar. There is relatively little training in speaking and listening to oral English.

As a result, few people can speak English fluently, despite the fact that the majority of Japanese, at least, study English for more than six years in junior and senior high school. This is because foreign language education in Japan focuses on acquiring knowledge about English, and there is insufficient training to improve the ability to communicate in English.58

It is possible that this type of language learning in Japan has influenced the Ainu language revival.

The teaching method also depends on whether the person learning the Ainu language is a child or an adult.

As in the case of other languages, the direct teaching method is one way to acquire the ability to speak Ainu. However, the number of instructors who have the ability to teach in Ainu alone is very small, and since no one has mastered Ainu as a mother

⁵⁸ However, in most parts of Japan, Japanese is spoken, and if you live in Japan, there is no big problem even if you cannot speak English. This is probably one of the reasons why practical learning of English is not a priority.

tongue, teaching in Ainu, which may be heavily influenced by Japanese, may affect the Ainu language that students learn.

In the future, it will be necessary to examine the way things have been, and to analyze the successes and failures of various practices in order to achieve better practices.

For example, in the 2000s, there were quite a number of exchanges between the Ainu and the Maori, the indigenous people of New Zealand, and there has been a movement to incorporate the *Teata rangi* method, a direct teaching method that is said to have been effective in the Maori language revival movement, into Ainu language learning (Takeuchi 2015: 16–17).

There are many lessons for the Ainu language revival movement to be learned from the revival movements of endangered languages in other countries, and more information needs to be collected in the future.

8.8 Materials

As already mentioned, it is now extremely difficult to hear the Ainu language from native speakers.

From now on, the focus will be on the revival of the Ainu language, through organizing and analyzing past documents and audio materials.

In order to revive the Ainu language, it is important to promote the preservation and publication of past records. There are still unpublished written and spoken materials lying dormant in many places, and these are important for the future revival of the Ainu language.

Ainu language materials can be roughly divided into two categories: written materials and spoken materials.

There are many written Ainu language materials that have been preserved since former times, but many of them have not been made public. Some of them are field notes written by researchers, while others are records written by Ainu themselves.

Some of them have already been printed and made available to the public, but there are also many that remain in the possession of the families of the recorders and have not been made available to the public, and others that are stored in libraries, museums, and other facilities but whose use is restricted.

For example, Kyōsuke Kindaichi, one of the pioneers in the study of the Ainu language in modern Japan, left behind a large number of records, but even now, nearly 50 years after his death, many of them remain unorganized and stored in libraries.

One reason for this is that many of these recordings are related to personal copyrights and privacy and cannot all be unconditionally released.

In addition, there are many recordings made by broadcasters and researchers that have been stored without being released. Some of these materials have been forgotten and are lying dormant, while others are known to exist but cannot be accessed by others due to unresolved ownership and copyright issues. In some cases, the recorders have refused to make their recordings available to others because they want to monopolize them.

The Ainu language has been recorded not only by Japanese people, but also by foreigners. In the past, a number of foreign researchers visited Japan and recorded the Ainu language, for details see Majewicz (Chapter 4, this volume).

Some of them have been published, but many of them have not been translated into Japanese. It is also thought that some of the records were left in the form of field notes.

The records by foreigners are also valuable, but it is difficult to access them without knowledge of foreign languages, but they should be sought out in the future and used for the revival of the Ainu language.

8.9 The problem of neologisms

All languages are constantly changing in response to changes in the society in which they are spoken. If the internet were to be introduced to Ainu society, which had never had it before, it would naturally require a new vocabulary to express it.

In the Ainu language as well, there are a number of new words that have been acquired through contact with the Japanese language since the Middle Ages. For example, the word for 'horse', a domestic animal that did not originally exist in Hokkaido, was adopted and used in the form *umma*, based on the Japanese word *uma*. There are many words in the Ainu language that seem to have originated in Japanese.⁵⁹

The Sakhalin Ainu called wheat flour *moka*, which was adopted from the Russian term for wheat flour, *μγκα* (*muka*).

As of now, there is no known vocabulary in Ainu to express 'bank' or 'elevator'. Now, when speaking or writing Ainu, we usually use ginkō or erebētā 'elevator' as used in Japanese to describe these things.

In the Japanese language, new words are rarely coined using the native vocabulary of the Japanese language. Instead, they are often combined with words or morphemes of Chinese origin, or foreign words such as English are directly adopted and used. This is especially true these days. Recently, in particular, foreign words are often adopted without translation. Internet is *intānetto*, and laser is *rēzā*.

In English, new things are expressed by coined words or foreign words. In English, new expressions are created by using words or morphemes from the traditional Anglo lexicon or from the classical Latin or Greek languages.

⁵⁹ The Ainu language has been in contact with the Japanese language since the earliest times, and there are many words with similar forms that are difficult to determine whether they are of Japanese origin, such as kamuy 'god', which has a similar form to the Japanese word kami, but is difficult to determine whether it is of Japanese origin at this time.

For example, in German, 'television' is translated as *Fernsehen* (*fern* 'far', *sehen* 'see), and *Wörterbuch* (*Wörter* 'words', *buch* 'book') is used instead of the Latin-derived 'dictionary'.

In the Ainu language, how to express such things is rarely discussed, but it is an important issue that must be considered when using the Ainu language in modern society in the future.

For example, in Asahikawa, telegrams are called *tunas-kampi* 'fast letters',⁶⁰ but this is probably because telegrams became widespread in Japanese society after the Meiji era (1868–1912), and the Ainu people, who spoke Ainu at the time and lived in the area, adopted this expression and spread it.

Also, in some regions, the telephone is called *a-e-y-nu-p*, which is a coined word that can be broken down as follows: *a-* 'we', *e-* 'with which', *i-nu* 'to hear voices/ sounds', *p* 'thing' (Tamura 1996b: 4). This suggests that the Ainu language was still being used in daily life in the area when telephones became widespread, and that Ainu speakers at that time translated it, and that it became widespread in the area and was used until a certain time.

However, no Ainu vocabulary has been found to refer to televisions or computers. This means that during the period when these things became widespread, the Ainu language was rarely used in their daily lives, and no new ways to describe these things were created.

In recent years, however, there have been some cases where activists working to revive the Ainu language have devised new words and spread them.⁶¹

Most of the people who are learning Ainu in Japanese today are speakers of Japanese, including the Ainu, so when they want to express things that cannot be expressed in Ainu, they often incorporate expressions used in Japanese directly into the Ainu language. For example, 'I'm going to the museum' becomes *Hakubutsukan or en ku-oman* and 'My brother buys a lot of DVDs' becomes *Ku-aki DVD poronno hok*.

With regard to the Ainu language, groups and individuals in various regions are working to revive it, and at present there is no unified organization where these issues can be discussed.

However, at Upopoy, which was built in Shiraoi as mentioned in Section 7.3, new Ainu words have been proposed for the names of facilities such as 'museum' and 'store', as well as for signs such as 'no smoking' and 'no trespassing'. This is an experimental effort, created by Ainu language researchers and Ainu language revival activists from around the country.

⁶⁰ Ainu speakers in the Saru region use this word to mean postal 'special delivery'.

⁶¹ Kawamura and Ōta (2005), a dictionary of the Ainu language by Mitsuru Ōta, a resident of Takikawa City, includes new vocabulary invented by himself and others.

⁶² These two sentences were composed by the present author and are not sentences by native speakers.

In addition to the problem of words, there is also the problem of expressions. For example, when making a toast when drinking sake, each of the world's languages has its own set of expressions, such as *cheers* in English and *kanpai* in Japanese. In the Ainu language, it is thought that such a custom did not originally exist, and traditionally there is no such expression. However, there are many people who use the expression *Iku-an ro!* This phrase, which means 'Let's drink together', was already in use by the early 1990s at the latest and is widely used by Ainu even though they may live their daily lives in Japanese. This is probably a relatively recently created expression, but in order to use the Ainu language in modern life, it is necessary to come up with new expressions that correspond to a culture that did not originally exist.

8.10 Promoting research

In the future, as we move forward with the revival of the Ainu language, it will be necessary to conduct further research on the Ainu language.

In order to revive the Ainu language, it is necessary to know what kind of language it is.

In particular, research on the Ainu language in the past focused on the study of oral literature, and there are few records of expressions used in daily conversation. Because of the lack of records of everyday expressions, people who write or speak Ainu today sometimes face problems because they do not know such expressions.

For example, what is the Ainu expression for congratulating a friend on his or her marriage? There is no clear answer to this question. In English, there is Congratulations, and in Japanese, there is omedeto, but there may be no corresponding expression in Ainu.63

There may be no corresponding expression in the Ainu language, which may not exist due to cultural differences, or there may have been some kind of expression originally, but it may not have been recorded.

If there are no existing records, it is necessary to either find usable expressions from past records and use them or create new ones. Such practical research is necessary in order to modernize the Ainu language.

In such a case, it is necessary to make sure that it does not violate the grammar and word formation system of the Ainu language.

In addition, as already mentioned, the number of speakers who can speak Ainu fluently as their mother tongue is almost nil, at least as far as those involved in the

⁶³ Since there is no precisely fitting expression, the word ononno or onono, which is used to rejoice when there is a successful hunt in the mountains or a good catch of fish, are used by some people now to celebrate humans, but this is a divergence from the original usage.

Ainu language revival movement and researchers are aware. Therefore, it is already becoming impossible to conduct research in the same way as in the past.

However, there are still people in every region who have knowledge of the Ainu language in the form of words or short sentences, and these people often have information about the Ainu language that cannot be found in existing records. It is also necessary to record the knowledge and memories of the Ainu language that still remain in peoples' minds.

8.11 Securing students

In the Ainu language revival discussed here, it is the descendants of the Ainu people who originally used the Ainu language and their families who should take the lead.

In order to promote the revival of the Ainu language, the number of people learning the Ainu language must increase. However, although many organizations have conducted Ainu language study in the past, the number of participants with Ainu origins is not necessarily large, and many organizations are struggling to secure participants.

This does not mean that the Ainu language lacks appeal or that the efforts of the Ainu people are insufficient, but that we need to consider other causes.

Unfortunately, we cannot yet assume that Japanese society has reached a point where the Ainu people themselves can freely express their origins and do not need to feel hesitant about mentioning their roots.

There are still many Ainu people who live in fear of discrimination and prejudice, and while there may be less overt discrimination today than in the past, it is important to recognize that there are still many problems that need to be solved and to work towards solving them.

It is not only through individual efforts, but also improvement of social circumstances is an essential condition.

9 Conclusion

With the enactment of new laws in 2019 and the opening of Upopoy in 2021, the situation surrounding Ainu and the Ainu language is changing. While some areas can be considered progress, there are also issues that need to be resolved.

It must be said that not enough work has been done to examine and evaluate the policies and activities to date and identify areas for improvement.

In this section, I will write about what is necessary for the future, based on my own ideas.

First of all, we need to create an environment in which more Ainu can come forward, with the aim of eliminating further discrimination and prejudice, and reducing the difficulties of working on language and cultural revival. Such a social movement is necessary in the future.

It is also necessary to provide social support for the Ainu people so that their community activities, including the revival of their language and culture, can become more active. It is essential to establish a support system in which the will of the Ainu people is fully respected, rather than being led by the government. This is not a benefit but is based on the right of the Ainu people to revitalize their own language, as stipulated in the UN Declaration of the Rights of Indigenous Peoples. 64

It is above all the right of the Ainu people to regain their language, which was lost to them due to historical circumstances.

The Ainu language revival exists for the Ainu people, and its primary goal should be to realize the wishes and needs of the Ainu people, not to be led by a government composed of the majority ethnic group. To this end, a system should be established that guarantees the Ainu people's right to make decisions and respects their independent activities.

In addition, using large amounts of budget for ineffective things is inefficient, and we should solve the problem of bureaucracy that is one of the reasons for this. This is a negative factor for the Ainu language revival movement.

It is also necessary to find and maintain materials as a means to achieve this. We need to unearth materials that have been lying dormant or stored away in various places, and make them available to the public for use, while protecting the rights of the families that inherited them.

While solving these problems, more efforts are needed to develop more effective methods and to train human resources.

While the number of speakers of Ainu as a mother tongue has greatly decreased, the current situation in which the number of people who are interested in the language is increasing among the Ainu people, and in which the number of people who are working to revive the language is gradually increasing should not be viewed pessimistically. In fact, we can think of it as a positive opportunity.

⁶⁴ Article 13 states that "Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons."

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Part II: Typologically interesting characteristics of the Ainu language

Hidetoshi Shiraishi

13 Phonetics and phonology

1 Introduction

This chapter covers topics in Ainu phonetics and phonology by reviewing linguistic works since the introduction of modern linguistics into the study of the sound system of Ainu. This dates back to the first half of the 20th century. The chapter begins with a description of segments and segmental phonology, turning then to larger phonological units and phenomena which have such units as domain. These units are the syllable, prosodic word, phonological phrase, and intonational phrase. Some of these topics are described with emphasis from a specific viewpoint, such as Ainu linguistics, dialectology, typology, and areal linguistics. From the viewpoint of Ainu linguistics, this chapter takes up issues which can be seen as milestones in a century-long history of linguistic research. One such topic is the status of final /r/ (Section 3.2), which had been controversial until Yukie Chiri, a native Ainu folklorist, brought over her phonological insight to the linguist Kyōsuke Kindaichi.

This chapter deals with topics of on-going research as well. One such topic is vowel co-occurrence restrictions (Section 4.5). In the last decades a growing interest has arisen among linguists working on the languages in northeast Asia concerning the type of vowel harmony prevalent in this area (Janhunen 1981; Comrie 1997; Matsumoto 2006; Ko 2012; Ko, Joseph and Whitman 2014, etc.). It is fairly uncontroversial that tongue root harmony (RTR or ATR) is one such type, as exemplified by language groups such as Tungusic (Ard 1980, etc.) and Mongolic (Svantesson et al. 2005, etc.). The question is whether vowel co-occurrence restrictions in Ainu can be regarded as tongue root harmony, like many other languages in the region.

Most of the descriptions in this chapter are based on previous works which have a specific dialect of Ainu as a basis of their description. Many of these works are based on the dialects spoken in the southwestern part of Hokkaidō, especially Horobetsu and Saru. This is because these dialects have received the most extensive linguistic description among Ainu dialects to date, thanks to the following linguists: Kyōsuke Kindaichi (1882–1971), Mashiho Chiri (1909–1961), and Suzuko Tamura (1934–2015), among others.

This chapter is organized as follows. Sections 2 and 3 provide a description of the phonetic characteristics of vowels and consonants with some of their allophones, respectively. Section 4 describes the prosodic structures of words, including such topics as syllable structure, phonotactic restrictions, hiatus resolution, resyllabification, and co-occurrence restrictions of vowels. Sections 5, 6, and 7 deal with the accentual system, phonological processes, and intonation, respectively. Section 8 concludes.

Space limitations restrict us to touch only marginally in this chapter upon historical aspects of Ainu phonetics/phonology. We advise readers who are interested in related

topics such as sound change, loan phonology, accentual system in diachrony, and the development of writing conventions¹ to refer to relevant chapters in this volume such as Satō (Chapter 3), Alonso de la Fuente (Chapter 5), and Voyin (Chapter 6).

2 Vowels

Obata and Teshima (1933) were the first to measure Ainu vowel formants. They recorded elicitation of words and phrases from three male speakers, two from Asahikawa and one from Sakhalin. They reported the range of formants as shown in Table 1.

Table 1: Range of F1 and F2 (Obata and Teshima 1933).

	a	е	i	0	u
F1	600-740	320-440	340-440	480-520	380-460
F2	1260-1450	1850-2200	1900-2450	800-950	1050-1400

One of the aims of their investigation was to find acoustic evidence for the often made claim that Ainu vowels were auditorily difficult to distinguish from each other, especially between i/-e/ and i/-e/. Obata and Teshima's measurements support this claim at least for /i/ and /e/, as their formant values are very close.

The reason for the auditory similarity between /u/ and /o/ has often been claimed to be due to articulatory reasons. Kindaichi (1931: 4) claimed Ainu /u/ to be articulated lower than the Japanese /u/ ([w]). Tamura (1988b: 12) claimed it to be more back. Tamura's claim was based on a spectrographic analysis conducted by Ōhashi (1985), who measured formants in elicited words recorded from two female speakers of the Saru dialect. She compared the results with the Japanese vowels of her own speech and found the following: i) the acoustic distance between i/-e and i/-eis closer in Ainu than in Japanese, and ii) $\frac{u}{h}$ has a lower F2 in Ainu than in Japanese. Observation i) confirms the claim made earlier that /i/-/e/ and /u/-/e/ are auditorily difficult to distinguish in Ainu (to a Japanese ear, at least), an observation also made by Obata and Teshima for /i/-/e/. Observation ii) is suggestive of Ainu /u/sarticulation more in a back region than the Japanese [w], supporting Tamura's claim. Subsequently, Tamura and Motohashi (2002a) measured formants of the vowels of six female and three male speakers from the Saru, Mukawa, and Kushiro dialects and obtained similar mean F1 and F2 values as Ōhashi.

¹ De Boer (2010) provides an overview of studies on the accentual system of Ainu. Nakagawa (2006) provides an overview of writing conventions.

2.1 Vowel devoicing

The vowels /i/, /u/, and occasionally also /e/, often undergo devoicing when flanked by voiceless consonants (Kindaichi 1931: 25; Kindaichi and Chiri 1974 [1936]: 16; Tamura 1998: 51–54): *cise*, 'house', *sutu*, 'root', *seta* 'dog'.

Like vowel devoicing in Japanese, there is substantial inter-dialectal as well as intra-dialectal variation (for an overview of vowel devoicing in Japanese, see Fujimoto 2015). Both Kindaichi and Chiri report that vowel devoicing occurs more frequently in the northern dialects.² Tamura (1998) investigated vowel devoicing in the recorded speech of two female speakers of the Saru dialect, and found that one speaker (born in 1912) exhibited about 25 times more devoicing than the other speaker (born in 1890). The frequent speaker also exhibited a wider context of vowel devoicing, comparable to vowel devoicing in Japanese: vowel devoicing in a closed and accented syllable ('toyko-'kikkik' 'to strike violently', compare Japanese 'çitto 'hit'), and vowel devoicing in consecutive syllables (ecicisnupehe 'your tears', compare Japanese fukkuфukuu 'blessing').

Shiraishi (2003) conducted an acoustic analysis of the recorded speech of two female speakers of the Saru dialect by partially using the same recording as Tamura (1998), which is Tamura (1997).³ He found that i) *si* and *ci* were most prone to vowel devoicing, and ii) *tu*, *pi*, and *pu* were never devoiced (e.g. *Yupet putuhu ta* 'at the estuary of the river Yupet', *ene an pito* 'such a spirit'). The latter observation contrasts with Japanese, which has devoicing in *pi* and *pu* [pw]: *pikapika* 'in flashes', *resepwfoN* 'reception' (Kawakami 1977; Nippon Hōsō Kyōkai 1985).

The observation that vowel devoicing in Japanese applies in a wider context than in Ainu is supported by reported cases of L2 learning as well. According to Tamura (1998: 55), L2 learners of Ainu with a Japanese background tend to overuse vowel devoicing, especially when exposed to kana syllabary transcription: "Japanese speakers learning Ainu tend to devoice vowels [incorrectly], for instance, in a word like $h\acute{u}ci$ \mathcal{I} f'grandmother']. They devoice the [u] between h and c as they do in the Japanese word 付置 'be affiliated with' or 不治 'incurable' [ϕ utfi]."

2.2 Vowel lengthening

A monosyllabic CV form tends to undergo lengthening when uttered in isolation (Kindaichi 1931: 4; Kindaichi and Chiri 1974 [1936]: 7): *ka:* 'thread', *to:* 'lake', *ni:* 'tree'. In polysyllabic forms, an accented vowel tends to undergo lengthening (see Section 5 for word accent) (Kindaichi 1931: 4): 'nu:man 'yesterday', po'ro: 'big', 'a:yne 'and finally'.

² Kindaichi (1931: 25–26) mentions the following place names when he refers to northern dialects: Ishikari, Tokachi, Kitami, Kushiro.

³ The other speaker was a sister of the second speaker in Tamura (1998).

Kindaichi (1931: 4) reports this lengthening to be "not conducted consciously by the speaker" and contrasts it with a grammaticalized type of emphatic lengthening, which breaks up the lengthened vowel with a glottal stop.

(1)	Short form		Emphatic form		
	wen	'bad'	we?en	'very bad'	
	to	'over there'	to?o	'faraway'	
	teta	'a couple of days before'	te?eta	'long ago'	

A glottal stop is often used to break up consecutive vowels, not only in monomorphemic forms as in (1), but also at morpheme boundaries, thereby competing with other hiatus resolution strategies such as glide-insertion. We take up this topic in Section 4.3.

Another context in which a glottal stop appears is the onset (syllable-initial position) of a vowel-initial syllable. According to Kindaichi (1928: 85), "The Ainu close the glottis very often and tend to insert the so-called glottal stop at onsets of every vowel-initial syllable, something that we never do as speakers of the Tōhoku dialect [northern Honshū] of Japanese." (Kindaichi was a native speaker of the Tōhoku dialect of Japanese).4

There is disagreement in literature on the phonological status of glottal stop in Ainu. We discuss this issue in Section 4.3.

3 Consonants

Table	2. Con	conanta	l inventory.
lable	z: con	Sonanta	i inventory.

labial	coronal	dorsal	guttural
р	t	k	[7]
	ts (c)		
	S		h
	r		
m	n		
w	j (y)		
	p m	p t tc (c) s r m n	p t k ts (c) s r m n

In Table 2, at syllable-final positions, /p t k/ are unreleased implosives (Kindaichi 1931: 7). /s/ is often palatalized (Kindaichi 1931: 9; Tamura 1988b: 13), e.g., /sini/ [ʃini] 'to rest', /as/ [aʃ] 'stand'. /tɕ/ and /h/ (and [ʔ]) occur only at syllable-initial posi-

⁴ Citations from Japanese sources are all translated into English by the author of this chapter.

tion. The frication of /h/ is weak. According to Tamura (1998: 41), /h/ is only weakly affected by a following vowel, unlike Japanese, which has [çi] and [фш] for /hi/ and /hu/, respectively. Tamura reports this to be especially the case in the speech of the older generation who were born around 1900. Before /u/, /tc/ has an allophone [ts] (Tamura 1998: 40). This is reflected in some speakers' use of the *kana* syllabary transcription % [tsu], instead of the currently more conventional \pounds \pounds [tcu] (Kirikae 1997: 102). In this chapter, we use the symbol c following the conventional orthography of Ainu and for consistency with other chapters.

Of the two nasals /m/ and /n/, /n/ place-assimilates to the following plosive: hanku 'navel', ampe (< anpe 'something') (Tamura 1988b: 13). When followed by /s/ or /j/ (y), it undergoes a process of sandhi and changes to j(y), as we will see in Section 6.

In the literature, /j w/ at a syllable-final position are described either as a second vocalic element in a diphthong (Kindaichi and Chiri 1974 [1936]) or as a consonant (Nakagawa 1995). In this chapter, we regard them as consonants for the following reason. In the allomorphy of the nominalizer -p, -pe, -p is selected when it follows a vowel and -pe when it follows a consonant: ami-p 'wear-NMLZ' but an-pe 'be-NMLZ'. With morphemes ending in /j w/, the consonant allomorph is selected: okaj-pe 'be-NMLZ', siw-pe 'bitter-NMLZ' (for the allomorphy of -p, -pe, see also Section 3.2). In this chapter, we use the symbol y instead of j, following the conventional orthography of Ainu and for consistency with other chapters.

3.1 Voicing of consonants

The plosives /p/, /t/, /c/, and /k/ occasionally undergo voicing in the following three contexts: i) intervocalically (hapo~habo 'mother'), ii) following a nasal (tampe~tambe 'this one'), and iii) following /r/ (unarpe~unarbe 'aunt') (Kindaichi and Chiri 1974 [1936]: 8; Tamura 1998: 40). Yamashita (2000) investigated the frequency of voicing in the recorded speech of speakers of the Saru dialect and found that among the voicing contexts mentioned above, the post-nasal context triggered voicing the most, with an application rate of approximately 40%.

3.2 Final /r/

Ainu /r/ is most commonly realized as a flap, but allophones such as [l] or [d] are also reported (Tamura 1988b: 13). Its prosodic status at syllable-final position has been a topic of discussion since it is accompanied by a vocalic release, which is often perceivable as a full vowel. In fact, it was not distinguished from a full vowel in the transcription by Batchelor (1905) or in the early works by Kindaichi, in which a final /r/ was transcribed as being followed by a full vowel (e.g., *koro*, 'to have', *pirika*, 'good',

Ainurakkuru, 'name of a deific person', the vocalic release is in boldface). These authors were unaware of the fact that /r/ could be a syllable-final consonant in Ainu.

Since this vowel often resembles the vowel preceding /r/ (progressive assimilation), it has been described as "re-sounding" (Kindaichi 1931: 11), "parasitic" (Peng 1970), or "echoing" (Tamura 1988b: 13) the preceding vowel. Nevertheless, there are cases where it sounds different from the preceding vowel, as pointed out by Asai (1976), e.g., /citarpe/ [citarube] 'straw mat'. Tamura (1998: 48) reports cases where echoing applies regressively: [ariki] /arki/ 'to come'.

According to Nakagawa (2006), Kindaichi's first transcription of a final /r/ without a succeeding vowel was in 1923. At that time, he began to write Ainurakkur instead of *Ainurakkuru*, for instance. This coincides with the period when Kindaichi was able to obtain support from Yukie Chiri (1903–1922), an educated native speaker who helped Kindaichi with transcribing and translating Ainu oral literature. 6 According to Kindaichi (1960: 22-24), the phonological status of this vocalic release was first questioned by Yukie Chiri, who insisted that Ainu had words ending in /r/. She deleted the final vowels in Batchelor's dictionary that were erroneously transcribed as being a full vowel after /r/ (e.g., mokoro 'to sleep'). According to Kindaichi (1960), Yukie Chiri provided the following arguments to contrast /-r/ with /-rV/ (/r/ followed by a full vowel): i) when followed by another vowel, a release vowel easily undergoes weakening, while a full vowel does not, compare poro-an 'I am becoming big' with mokor-an 'I sleep'; ii) a final /r/ undergoes sandhi (Section 6), whereas /-rV/ does not, compare /a-kor-nispa/ [a-kon-nispa] 'my husband' with /poro nay/ [poro nay] 'big river'; and iii) in the allomorphy of the nominalizer -p, -pe, the allomorph which attaches to a consonant-final form is selected, compare mokor-pe 'the sleeping one' with poro-p 'the big one' (in parallel with pon-pe 'the small one' vs. takne-p 'the short one'). These arguments are convincing and the existence of a minimal pair like [etoro] /etor/ 'snot' vs. [etoro] /etoro/ 'to snore' is well established nowadays.

Nevertheless, there are cases where a release vowel is auditorily hard to distinguish from a full vowel, especially in running speech (Nakagawa 2006: 13). For instance, the northern dialects exhibit vacillation between /-r/ and /-rV/, e.g., kikir~kikiri 'insect', compare [kiki(n) rapu] /kikir rapu/ with [kikiri rapu] /kikiri rapu/ 'insect wings' (Asai 1976: 193). Asai (1976: 199) measured the length of the vowel preceding /r/ and found that it was significantly longer in /-rV/ words, thereby pointing to a possibility that the length of the preceding vowel might be functioning as a cue to enhance the difference ([eto:ro] vs. [etoro]).

Finally, there are also cases where a release becomes a clearly audible vowel for reasons of prosody. This is the case in emphatic lengthening or recitations of oral

^{5 &}quot;The vowel that is heard phonetically after the final /-r/ is somehow neutralized, but occasionally it is such a clear vowel that it is unreasonable to call it merely a kind of reverberation." (Asai 1976: 194). 6 Yukie Chiri (1903–1922) was an older sister of the famous Ainu scholar, Mashiho Chiri (1909–1961).

literature, e.g. [piri:ka] /pirka/ 'beautiful', [mokoro:] /mokor/ 'to sleep' (Kondō 1962; Tamura 1998: 48).⁷ A similar case is reported to occur in a pre-pausal repetition of a final vowel, which is inserted to fill in a pause between prosodic units as in the example below.

(2) sekor itak-an kor, [**o**:] a-huray-e QUOT sav-4.S and FILLER 4.A-wash-TR.SG 'I said that and washed.' (Satō 2000: 211)

Satō (2000) reports that such repetition of a final vowel is observed only with words ending in /-r/, but not with other consonants. Again, this points to the special status of /r/ among other consonants in Ainu.

4 The prosodic structure of words

4.1 Syllable structure

The syllable structure is either (C)V or (C)VC. A consonant cluster occurs only across syllable boundaries. There are no (C)VVC syllables. When an emphatic lengthening of a vowel is grammaticalized, VV is broken up by a glottal stop and becomes disyllabic (V.?V), as shown in Section 2.2.

4.2 Phonotactic restrictions

There are no sequences of the following type in monomorphemic forms: *vi, *wi, *wu, *ti, *uw, *iy (Kindaichi 1931: 13; Tamura 1988b: 14). In polymorphemic forms, [v i] and [w_u] may arise due to resyllabification (see Section 4.4).

- (3) a. *yayirwakikor* (<yay-irwaki-kor) 'to be an only boy, without brothers' (Tamura 1996: 851)
 - b. awun-mimtar (<aw-un-mimtar) 'entrance space in a house' (Tamura 1996: 36)

⁷ Okuda (1988) argues that even in such cases, a post-r vowel should be regarded as being absent at the underlying level, citing evidence from rhythm-syllable correspondences.

4.3 Hiatus resolution

In general, Ainu tends to avoid consecutive vowels and the language has various means to prevent them from surfacing. Glide insertion and vowel deletion are common hiatus resolution strategies (Kindaichi and Chiri 1974 [1936]: 13).8 The glides y and w are inserted when the preceding vowels are /i/ and /u/, respectively (inserted glides are in boldface in the examples below) (Kindaichi 1931: 5; Kindaichi and Chiri 1974 [1936]: 13-14; Kindaichi 1960: 20).

Glide insertion

(4) a. iyekarkar 'to do to me' b. iyoikir 'treasures'

> c. i**v**uta 'to grind grains in a mortar'

d. u**w**ekarkar 'to do to each other'

'folktale' e. uwepeker f. uwatte 'to increase' 'to divorce' g. uwosurpa

Vowel deletion

(5) a. *keran* (<kera-an) 'to be delicious'

b. *sisotta* (<siso or_ta) 'to be at the north seat of a house'

c. noya noya (<noye a noye a) 'twisting and twisting'

Glide insertion is affected by morpho-syntactic conditions as well. This was first pointed out by Satō (1996, 2003), who criticized previous descriptions in which the context of glide insertion was described as being restricted by phonological conditions alone. According to his observation, glide insertion is triggered only by a subset of prefixes such as i- (indefinite person), u- (reciprocal), or si- (reflexive), but not with eci- (2nd person) or ru- 'in a half way' (Satō 2003: 18), nor by an incorporated stem.

The relevance of non-phonological factors in hiatus resolution was noticed by other researchers as well. Okuda (1998: 258) reports a contrast between [suwat] /su-at/ 'pothook' (su 'pot', at 'to be hooked') and [su?at] /su-at/ 'pot bail' (su 'pot', at 'string'), which he and his fieldwork colleague observed in the speech of a speaker of the Shizunai dialect. According to Okuda, this speaker clearly rejected glide insertion in /u-e-newsar/ 'to talk together' *[?uwenewsar] and pronounced it as [?u?enewsar], while for /u-e-peker/ 'folktale, a specific type of oral literature, literally, to enlighten each other' she accepted only [uwepeker] and rejected *[?u?epeker]. From this obser-

⁸ There are also cases of *h*-insertion but they are restricted to specific morphological contexts such as possessive formation: onaa > onaha 'one's father', sikii > sikihi 'one's eyes' (Kindaichi and Chiri 1974 [1936]: 14).

vation, Okuda (1998, p.c.) concludes that glide insertion takes place in fossilized forms in which the semantic transparency of the constituents has been lost. Indeed, uwepeker is not the enlightening of each other, but a name of a specific type of oral literature.

When glide insertion is not an available option, glottal stop insertion is a viable alternative. This is the case when V1 is non-high (e, a, o), or when glide insertion is not possible for the morpho-syntactic reasons mentioned above. A glottal stop (or tension) is clearly audible when V2 bears accent (Kindaichi 1931: 5; Kindaichi and Chiri 1974 [1936]: 7; Tamura 1970: 586, 1996: xv), and/or when V2 finds itself in a closed syllable, i.e., followed by a consonant (Tamura 1970: 586). 9,10

(6) a. a'?ep 'food' b. a'?ovpep 'tableware' c. o'?atteke 'a hand' d. e'?unpipka 'to doubt' e. e'?ikka 'to steal' f. te'?eta 'ancient times'

When the above conditions are not fully met, a clear glottal is not audible (Tamura 1970: 586, 1996: 2). In the words of Tamura (1970: 586–587), "It corresponds merely to the syllable division point; the transition between two vowels is gradual."

The distribution of glottal stops and glides described above led some authors to insist that these segments are underlyingly present as phonemes, since their surface distribution is not predictable from phonology alone (recall the case of suwat vs. su?at). Another argument for the glottal stop-as-a-phoneme view is that it leads to a simplification of the syllable inventory of the language: the presence of an initial [?] at every vowel-beginning syllable reduces the number of possible syllable types in Ainu to only two: CV and CVC.

A proponent of this glottal stop-as-a-phoneme view was Shirō Hattori (1980 [1961]), who raised a similar argument for Japanese. 11 Currently, it has been proposed to relax this standpoint for (intervocalic) glides, as including them at the underlying level inevitably leads to a complication of the morphophonology of the language (see Satō 2003; Forthcoming, for discussion). 12 As for glottal stop, there is yet no consen-

⁹ Since these authors did not always exemplify their descriptions on glottal stop insertion, the examples in (6) are mostly from Shiraishi (1999), which are based on my own impressionistic observation obtained from the recordings of the Saru dialect made by Tamura (1984).

¹⁰ Tamura (1996: 2) reports that whether a clear glottal stop is audible is subject to idiolectal variation.

¹¹ See Poser (1984) for criticism of such a view.

¹² Satō (forthcoming) proposes to call such inserted glides and glottal stops "epenthetic phonemes", together with the post-r release vowel.

sus and a number of researchers list glottal stop in their phonemic inventory. Before Hattori, the phonological (phonemic) status of glottal stop was questioned by Chiri (1973 [1942]: 461), "The glottal stop of Ainu is not a phonological entity, unlike that in Danish". In any case, it should be pointed out that in Ainu, a glottal stop is in no way loaded with a contrastive function in monomorphemic forms, thereby contrasting with a language like Hawaiian, in which a glottal stop functions to set up contrast even in monomorphemic forms.

4.4 Resyllabification

A syllable-final consonant often undergoes resyllabification when followed by a vowel-initial morpheme (Kindaichi and Chiri 1974 [1936]: 9).

(7) a. *sik-o* (*si.ko*) 'to open the eyes so as to see' eye-open b. *mat-ak* (*ma.tak*) 'younger sister' woman-vounger brother c. *cip-o* (*ci.po*) 'to get on a boat' boat-board d. hum-as (hu.mas) 'to hear a sound' sound-stand.SG

e. tan_ukuran (ta.nu.ku.ran) 'tonight' this_evening

Resyllabification is blocked occasionally when a following vowel bears (secondary) accent as in (8a) and/or across certain morphological boundaries such as reduplicant-base as in (8b) (Tamura 1998: 41-42, 1996: xv). In such cases, glottal stop insertion takes place instead.

(8) a. pa'raparak-[?]an 'to cry' b. 'ay-[?]ay 'baby'

In resyllabification, /t i/undergoes palatalization and becomes ci [tci] (Kindaichi and Chiri 1974 [1936]: 1; Tamura 1988b: 14).13

¹³ A specific type of resyllabification occurs with the prefixes i- (indefinite object) and u- (reciprocal). When such a prefix occurs intervocalically in an accent bearing position (see Section 5 for accent), it turns into a glide and forms a syllable with the following vowel: [koyomare] /ko-i-omare/ 'to serve sake', [kuwepeker] /ku-u-e-peker/ 'I tell a folktale' (Satō 1996, 1997; Tamura 1996). See Shiraishi (1998) and Satō (2003) for discussion on this phenomenon and its interaction with glide insertion.

(9) a. mat-ikor > macikor 'female treasure'b. rekut-i > rekuci 'throat'

4.5 Co-occurrence restrictions of vowels in derivation

While it is true that Ainu does not have a full-fledged type of vowel harmony comparable to its geographic neighbors like Tungusic, ¹⁴ it shows some V1-V2 co-occurrence restrictions in some nominal and verbal derivations. This was first pointed out by Chiri (1952), who called it vowel harmony. Subsequently, this restriction was discussed by Ito (1984) and went on to become one of the most discussed issues in Ainu phonology by generative phonologists to date (e.g., Mester 1986; Ewen and van der Hulst 1988; Krämer 1998; Shiraishi 2017; Shiraishi and Botma forthcoming). In Ainu literature proper, there are discussions by Shibatani (1990), Vovin (1993), and Satō (2010). Here, I will give an overview of the phenomenon and review the discussions provided by these authors.

The V1-V2 co-occurrence restrictions apply in two derivational contexts: transitive verb formation and possessive noun formation. In transitive verb formation, the base to which a V-suffix affixes is either a free morpheme (intransitive verb) or a bound morpheme (\vee : root).

		Intransitive verb or root		Transitive verb	
(10)	a.	kay	'to be broken'	kay-e	'to break'
	b.	mos	'be awake'	mos-o	'to wake up'
	c.	yak	'to be crushed'	yak-u	'to crush'
	d.	ran	'to go down'	ran-i	'to lower'
	e.	√mak	ʻopen'	mak-a	'to open'
	f.	√kom	'bent'	kom-o	'to bend'
	g.	√kar	'spinning'	kar-i	'to rotate'
	h.	√mes	'to come off'	mes-u	'to tear off'

In possessive noun formation, the V-suffix attaches to a base which is often referred to as the *conceptual form* in Ainu literature (Kindaichi and Chiri 1974 [1936]; Tamura 1988b). By V-suffix affixation, the conceptual form changes to a possessive form in which the possessor can be overtly expressed.

¹⁴ See the following works for an overview of vowel harmony in Tungusic: Li (1996), Zhang (1996), Comrie (1997), Ko (2012), Ko, Joseph, and Whitman (2014).

		Conceptual form		Possessive form		
(11)	a.	nan	'face'	nan-u	'his/her/their face'	
	b.	tek	'hand'	tek-e	'his/her/their hand'	
	c.	haw	'voice'	haw-e	'his/her/their voice'	
	d.	rek	'beard'	rek-i	'his/her/their beard'	
	e.	hon	'belly'	hon-i	'his/her/their belly'	
	f.	уир	'brother'	уир-і	'his/her/their brother'	

The distribution of V1 and V2 is illustrated in Tables 3–6. The observed frequency (the actual number) is from Chiri (1952), the expected frequency and the ratio are added by the current author.

Table 3: Observed frequencies (expected frequencies) of transitive formation.

V1 V2	i	u	е	a	0	
i	9 (4.0)	3 (4.7)	3 (4.0)	0 (1.4)	0 (1.7)	16
u	5 (4.8)	7 (5.6)	6 (4.8)	1 (1.7)	0 (2.0)	19
e	0 (4.5)	9 (5.3)	9 (4.5)	0 (1.6)	0 (1.9)	18
a	9 (10.0)	14 (11.8)	8 (10.0)	9 (3.6)	0 (4.3)	40
0	4 (4.8)	0 (5.6)	3 (4.8)	0 (1.7)	12 (2.0)	19
	28	33	29	10	12	112

Table 4: Observed frequencies (expected frequencies) of possessive noun formation.

V1 V2	i	u	е	a	0	
i	22 (14.1)	1 (4.1)	1 (3.4)	0 (1.2)	0 (1.2)	24
u	28 (22.3)	3 (6.6)	7 (5.4)	0 (1.9)	0 (1.9)	38
e	14 (17.0)	7 (5.0)	8 (4.1)	0 (1.4)	0 (1.4)	29
a	12 (24.0)	17 (7.1)	3 (5.8)	8 (2.0)	1 (2.0)	41
0	19 (17.6)	0 (5.2)	4 (4.3)	0 (1.5)	7 (1.5)	30
	95	28	23	8	8	162

By comparing Tables 3 and 4 Chiri (1952: 220) noticed that the V1-V2 patterns of verbal and nominal derivations are "surprisingly similar". In particular, Chiri reported the following observations to be common to both nominal and verbal derivations: i) in V2, /i u e/ outnumber /a o/ to a considerable degree, ii) there is a preference for lining up identical vowels, iii) /i/ and /e/ may co-occur with all vowels whereas /a u/ and /o/ may not co-occur, and iv) when V2 is /e/, V1 is also /e/ or it is preceded by one of the glides, /y/ or /w/.

V1 V2	i	u	е	a	0
i	2.25	0.64	0.75	0.00	0.00
u	1.04	1.25	1.25	0.59	0.00
e	0.00	1.70	2.00	0.00	0.00
a	0.90	1.19	0.80	2.50	0.00
0	0.83	0.00	0.63	0.00	6.00

Table 6: Observed/Expected ratios: nouns.

V1 V2	i	u	е	a	o
i	1.56	0.24	0.29	0.00	0.00
u	1.26	0.45	1.30	0.00	0.00
e	0.82	1.40	1.95	0.00	0.00
a	0.50	2.39	0.52	4.00	0.50
0	1.08	0.00	0.93	0.00	4.67

These observations led Chiri (1952: 118) to propose the following hypothesis. Historically, the suffix vowel was -i, a third person singular suffix meaning 'he/she/ it'. This also explains why V2 /e/ co-occurs with a preceding y or w. This is because *yi and *wi are disfavored CV sequences, though not impossible across morpheme boundaries (Section 4.2). Therefore, the lowering of /i/ to [e] to create ye and we is phonologically motivated. Second, this -i underwent total assimilation imposed by the preceding vowel.¹⁵ This explains the preference for lining up identical vowels. Chiri also adduces as additional support cases of progressive vowel assimilation: e.g., erum > erem 'mouse' (Iburi Dialect).

While Chiri's analysis successfully accounts for the co-occurrence restrictions illustrated in the tables above, it is not yet sufficient to call the phenomenon vowel harmony, as Shibatani (1990), Vovin (1993), and Satō (2010) point out. For instance, the co-occurrence pattern cannot be characterized by features which are known to characterize reported cases of vowel harmony cross-linguistically, such as palatality (backness) or tongue-root position (Shibatani 1990: 15; Vovin 1993: 43; Satō 2010: 164-165). In addition, this co-occurrence restriction is restricted to two morphological contexts

¹⁵ Satō (2010: 167) postulates an intermediate historical stage in which V2 undergoes reduction to a vowel like [ϑ], and then assimilates to the preceding vowel: $kom-\vartheta > kom-\vartheta$ 'to bend'.

only and does not expand to other morphological contexts, such as plural suffix -pa (e.g., kom-pa 'to bend many things', *kom-po) or personal prefixes (e.g., ku-kor 'I have', *ko-kor), nor to underived forms (e.g., poru 'cave') (Shibatani 1990: 15–16; Satō 2010: 163-166).

Although not readily classifiable into known patterns of vowel harmony, this restriction has been discussed repeatedly in phonological literature since Ito (1984). For Ito, the focus of interest was a pattern of disharmony, which she called *melodic* dissimilation. Ito subcategorized V1-V2 patterns into three groups; i) the total assimilation group (e.g. kom-o, mak-a), ii) the a-roots, which have a as V1 and one of the high vowels as V2 (e.g. kar-i, ram-u), and iii) the disharmonic group, which has a non-low vowel as V1, and a high vowel with the opposite backness value as V2, that is, if V1 is [+back], V2 is [-back] and vice versa (e.g. hum-i 'to chop up', pok-i 'to lower', pir-u 'to wipe', ket-u 'to rub'). Of these three groups, i) can be accounted for by a total copying of V1 to V2 and ii) by encoding backness value of the high vowel in the lexicon. The interesting case is iii), for which Ito proposes a dissimilation rule.

Melodic dissimilation rule (12) $[+high] \rightarrow [-\alpha back]/[\alpha back]$

By this rule, sequences such as *e-i or *o-u are avoided since they share a backness value.

This dissimilation rule attracted the interest of a number of authors in subsequent works. Nevertheless, the melodic dissimilation rule cannot be readily accepted as viable in Ainu for the following reasons. First, the vowel co-occurrence restriction itself applies to a restricted set of derivations, as pointed out earlier. It should therefore be questioned whether we are right in discussing it along with harmony/disharmony patterns observed in languages that have a full-fledged type of vowel harmony. Second, application of (12) should be further narrowed down to a subset of the data, since in nominal derivation we find *e-i* sequences, which (12) predicts not to occur. Table 4 counts 14 such cases, which is perhaps too large to be eliminated as exceptions. Finally, it is not clear in Ito's analysis how the three subcategorized groups interact with each other. Since she provides three different mechanisms to account for each group, her analysis gives the impression that there are three independent mechanisms involved, although they apply to the same morphological context. Chiri's insight that both verbal and nominal derivations provide common grounds for V1-V2 patterning is thereby lost.

We close this section by referring to a research topic on vowel harmony in the region. A number of linguists have worked on the languages in northeast Asia concerning the type of yowel harmony prevalent in this geographic area (Janhunen 1981; Comrie 1997; Matsumoto 2006; Ko 2012; Ko, Joseph, and Whitman 2014, etc.), where tongue root harmony (RTR or ATR) is one such type, as exemplified by language groups such as Tungusic (Ard 1980, etc.) and Mongolic (Svantesson et al. 2005, etc.). In addition, the following languages have been hypothesized as having or having once had tongue root harmony at some time in their history: Chukchee (Kenstowicz 1979), Korean (Kim 1988, Matsumoto 2006), and Nivkh (Shiraishi and Botma 2017). As these languages belong to different language families or groups, tongue root harmony is thought to have spread through language contact.

The question is whether vowel co-occurrence restrictions in Ainu could be regarded as tongue root harmony. While it is true that the case of Ainu cannot readily be accepted as yowel harmony as discussed above, there are historical reconstruction attempts that may provide new insights into the issue, e.g., Satō (2010) and Janhunen (2020). Further information in support of the discussion could be obtained by measuring phonetic characteristics of the vowels or by looking at dialectological variation.

5 Word accent

Accent in Ainu is realized as high pitch (Kindaichi and Chiri 1974 [1936]: 10). Accented vowels in a (C)V syllable are reported as being slightly lengthened, especially in the northeastern dialects (Asai 1972, 1976). Generally speaking, the Ainu pitch accent sounds similar to the pitch accent of (Standard) Japanese (Tamura 1988b: 13). ¹⁶ There are no cases of (lexical) tone or vowel reduction comparable to how unaccented vowels are realized in English or Russian.

5.1 An overview of the accentual system

The accentual (rhythmic) pattern is iambic – realized as a low-high pitch contour on consecutive pairs of syllables at the left edge, and, although there are a number of words which do not conform to the iambic pattern, it is the prevailing accentual pattern. This is obvious from a preference for an iambic rhythm output in word formation processes, as we see below.

For the purpose of describing the accentual system, we divide Ainu syllables into two types, light and heavy. A light syllable is (C)V, a heavy syllable is (C)VC. The iambic pattern is created by locating accent (high pitch) on the second syllable from the left when the first syllable is light.

¹⁶ In describing Ainu accent, the term rising kernel is often used (Hattori 1980 [1961]; Tamura 1970). This term is borrowed from Japanese accentology 昇り核 and contrasts with the falling kernel 降り 核 in Standard Japanese. As the terms 'rising' and 'falling' denote, this terminology reflects the way in which the accent is phonetically realized. Since our primary concern is the underlying accentual system and its interaction with other phonological phenomena in the language, we do not make use of this terminology and use accent as an abstract phonological entity, much in the same way as stress is used in phonological literature.

(13) a. sa'pa 'head'
b. ka'muy 'deific spirit'
c. i'naw 'ritual wands'
d. nu'kar 'to see'
e. me'noko 'woman'

When the first syllable is heavy, accent falls on the first syllable.

(14) a. 'sinrit 'ancestors' b. 'teyne 'wet' c. 'tapsut 'shoulder'

There are a number of words which do not conform to the iambic pattern. They have accent on the first syllable even though it is light.

(15) a. *'huci* 'grandmother' b. *'mina* 'to smile'

Accordingly, there are a handful of minimal pairs contrasting in the locus of accent alone (Kindaichi and Chiri 1974 [1936]: 11).

(16) a. 'nisap 'suddenly' b. ni'sap 'shin'

(17) a. 'utur 'the western side of a house' h. u'tur 'between'

The domain of application of the accent rule above includes personal affixes. Most prefixes induce a relocation of the accent.

(18) a. *yu'pihi* 'his/her/their brother' b. *ku-'yupihi* 'my brother'

A few prefixes do not induce the relocation of the accent. This is the case with the fourth person prefix a- and second person plural prefix eci- (Tamura 1970: 586, 592).

(19) a. o'naha 'one's father'
b. a-o'naha 'my father (in folktales)'
c. eci-o'naha 'your father'

Personal suffixes receive an accent alongside the accent on the stem (Tamura 1970: 585, 587, 1996: xvii). Kindaichi (1931: 20) called this a secondary accent.

```
(20) a. i'ruska-as 'We (exclusive) are angry.'
b. i'ruska-an 'We (inclusive) are angry.'
c. ip'e-as 'We (exclusive) eat.'
d. ip'e-an 'We (inclusive) eat.'
```

This (secondary) accent on a personal suffix is lost when the stem consists of (C)VC (Tamura 1970: 585; 1996: xix).

```
(21) a. 'cis-an 'We (inclusive) cry.'
b. 'sap-an 'We (inclusive) go downstream.'
```

5.2 Accent in morpho-syntactically complex forms

In morpho-syntactically complex forms, the general rule is to locate primary accent on the first element, and to reduce accent in subsequent elements. In case of derivation, this means giving priority to stem over suffix in accent placement, often resulting in the violation of the iambic pattern (Kindaichi 1931: 18; Kindaichi and Chiri 1974 [1936]: 10).

```
(22) a. 'nu-re 'to let someone listen'
b. 'ya-un 'on a land'
```

This *First-element priority rule* (Satō forthcoming) is observed in larger morpho-syntactic concatenations as well (Kindaichi 1931: 20; Kindaichi and Chiri 1974 [1936]: 10). Tamura (1970: 585) reports:

As a general rule, when two forms, each of which has a prosodeme [accent, HS], are closely combined into one form – such as compound words, modifier + noun, or verb + auxiliary – the accent kernel of the first form becomes primary and that of the second form, secondary. A secondary accent kernel is weaker, and often disappears so that the resulting compound form has one prosodeme with an accent kernel on a syllable of the first form.

This observation is exemplified in the morpho-syntactic concatenations below.

```
(23) a. 'aynu mosir 'land of Ainu'
b. 'san-tek 'end of the arm, descendant'
c. 'ri-nupuri 'high mountain'
d. 'ku-sapa 'upper edge of a bow'
```

Nevertheless, there are cases where accent is located in accordance with the iambic rule even in morpho-syntactically complex forms (Kindaichi 1931: 20; Kindaichi and Chiri 1974 [1936]: 10–11). This is typically the case when the first (leftmost) element is CVC and the second element is vowel-initial (Satō 2015: 2; Forthcoming). Satō (forth-

coming) investigated the accentual pattern of $CVC-V(\ldots)$ compounds (noun-noun, noun-verb) in Tamura (1996) and found that 109 compounds were iambic, whereas 29 had initial accent.

According to Kindaichi and Chiri, such a shift of accent occurs when the compound is lexicalized and is felt to be non-complex (monomorphemic) by the speakers (Kindaichi 1931: 20; Kindaichi and Chiri 1974 [1936]: 10-11).

Derivation

```
(24) a. ko'r-e
                        'to give' lit. 'to make /let sb have sth'
                        'to break'
      b. ka′v-e
      c. tu'y-e
                        'to cut'
```

Compound

```
(25) a. ha's-inaw
                       'a type of ritual wand'
     b. ce'p-etu
                       'edge (nose) of fish'
     c. na'y-etok
                       'source of a stream'
```

From these observations, Kindaichi and Chiri (1974 [1936]: 11) conclude that the iambic rule is dominant in the accentual system of Ainu.

6 Phonological processes

6.1 Sandhi

Syllable final /n/ and /r/ are often affected by a following consonant. These sandhi phenomena are called phonemic alternation, phonological alternation, or phonological assimilation/dissimilation in the literature. We lay out these in turn, and then focus on the interesting discrepancy /n/ and /r/ exhibit in their domains of application.

A syllable final /n/ undergoes sandhi when it is followed by /s/, /y/, or /w/ (Kindaichi 1931: 24–25; Kindaichi and Chiri 1974 [1936]: 17; Tamura 1988b: 14). This is called *n-sandhi*.

```
(26)
      a. po[y] seta
                           (< pon)
                                      'little dog'
      b. simo[y] sam
                                      'the right side'
                           (< simon)
      c. we[v] vuk
                           (< wen)
                                      'harmful bear'
      d. iwa[y]yukar kur (< iwan)
                                      'six performers of an oral epic'
                                      normal water (in contrast with water from a
          yaya[w]wakka
                           (< yayan)
                                      hot spring)'
      f.
          a[y]_yakka
                           (< an)
                                      'though'
```

A syllable final r undergoes sandhi when it is followed by r, r, r, or r (Kindaichi 1931: 23-24; Kindaichi and Chiri 1974 [1936]: 15-17; Tamura 1988b: 14). This is called r-sandhi.

```
(27) a. ku-ko[n]nispa (< kor)
                                     'my husband' lit. 'the husband (that) I have'
     b. peke[n]nisat
                                     'bright morning, dawn'
                          (< peker)
     c. ko[t]cise
                          (< kor)
                                     'his house' lit. 'the house (that) he has'
     d. reta[t]ciri
                          (< retar)
                                     'white bird, swan'
         a-ko[t]totto
                          (< kor)
                                     'my mother'
         kapa[t]tuki
     f.
                          (< kapar)
                                     'thin cup'
     g. ko[n]rametok
                         (< kor)
                                     'his bravery'
     h. a[n]rur
                          (< ar)
                                     'the other sea'
```

Many previous studies describe n-sandhi and r-sandhi as involving both assimilation and dissimilation respectively (e.g., Kindaichi 1931; Kindaichi and Chiri 1974 [1936], Shibatani 1990, etc.) and do not provide a unified account. For instance, a final /r/ is described as undergoing assimilation to a following /n/, /t/, or /c/, but dissimilation when followed by /r/. In contrast, Shiraishi (2001) proposes a unified account, which he bases on an observation that the triggering consonants form a natural class in both n-sandhi and r-sandhi. In n-sandhi, the trigger consists of consonants without occlusion in the oral cavity, i.e., the [+continuant] consonants of the language. 17 It is therefore assimilatory in nature, which could be characterized as the spreading of [+continuant] in a feature-based framework.

As for r-sandhi, the triggering consonants are the coronal consonants of the language. Cases involving /s/ and /y/ are not exemplified above, but they occur in the northern dialects, e.g., tu[s]se (< tur) 'to fall' (Chiri 1956: 343) or in specific morpho-syntactic contexts, e.g., kor ar (< kor yar), 'to give', (Kindaichi and Chiri 1974 [1936]: 13). From this observation, Shiraishi (2001) hypothesizes that r-sandhi is triggered to avoid an /r/+[coronal] sequence and is therefore dissimilatory in nature.

6.2 Domain of application

Both n-sandhi and r-sandhi apply word internally as well as word externally. In the latter case, it is reported that they have fairly large domains of application, which span large morpho-syntactic constituents (Shiraishi 2001). It is therefore expected that the two processes exhibit characteristics typical of Postlexical phonology in Lexical Phonology (Kiparsky 1982, etc.). This prediction is borne out. Shiraishi (2001) reports the following characteristics: i) sensitivity to pause-insertion, that is, sandhi is blocked

¹⁷ We exclude /h/ since it is articulated without a stricture in the oral cavity.

when a pause intervenes between the two constituents, ii) extension to L2, that is, we find mispronunciation in the speech of Ainu speaking Japanese of the type seise from Japanese seNsei, 'teacher' (Kindaichi 1931: 25) or a case of r-sandhi triggered by a Japanese word uepeke[n] ni yoku juu (< uepeker) ウエペケンによく言う 'something appears frequently in the Ainu oral literature uepeker' (Shiraishi 2001: 144), and iii) creation of otherwise illicit sequences such as [uw] as in a-esikaru[w] wenkasuno 'to long very much for' (Tamura 1986: 12) in violation of Structure Preservation.

Despite these similarities, n-sandhi and r-sandhi differ in their domain of application. Shiraishi (2001) investigated recordings of the Saru dialect (Kayano 1974; 1998a; 1998b; 1998c and Tamura 1984; 1985; 1986; 1987; 1988a; 1989; 1997) and found that n-sandhi never applied across a sentence boundary, whereas there were no such restrictions for r-sandhi (// denotes blocking of sandhi).¹⁸

(28) Blocking of n-sandhi

- a. inan-i un hoski arpa-an kor pirka kus which-place ALL before go.SG-4.S if/when be.good because haw-as sekor yaynu-an.// sino wen voice-stand.SG QUOT think-4.S true be.bad i-ruska poka nesi a-ki ANTIP-be.angry.with.sth only very 4.A-do 'I could not decide where to go first. I was completely frustrated.' (Kayano 1998a: 110)
- b. e-moto-ho a-nukar wa an-an.// ya-un 2SG.A-origin-POSS 4.A-see and exist.SG-4.S land/shore-live.at/belong.to mosir un iwor kor kamuv a-ne wa . . . live.at/belong.to field have god 4.A-COP and 'I am looking at your origin. I am the spirit governing this field in this country...' (Kayano 1998c: 58)
- c. kanna ruy-no yan.// sekor ve ve yan be.violent-ADV say/tell IMP.POL say/tell IMP.POL QUOT 'Say it again. Say it again' (Kayano 1998a: 74)

¹⁸ The end of a sentence is denoted by a period in the examples below. These periods are added by the current author. They do not appear in the original text.

- (29) a. Application of r-sandhi
 - ne sinrit-i ka e-ko-pus-pa-ka[n]. nokan uype-he that root-POSS even 2SG.A-APPL?-draw.out-TR.PL-? be.fine chips-PL ka opitta usa mun-i tura-no e-uhuy-ka. even all various garbage-POSS COM-ADV 2SG.A-burn-CAUS 'You dig that root. Together with the fine chips you burn all of them'. (< kopuspakar) (Kayano 1974: 145)
 - b. kotan-kon-nispa sine mat-ne-po ko[n]. nea village-have-rich.man one woman-COP-DIM have that mat-ne-po ram-atu uk tek hine... woman-COP-DIM heart-string take.SG momentary and 'the village head had one daughter. [My brother] pulled out the life of that daughter...'

 (< kor) (Tamura 1985: 60)
 - c. nea niatus he-ya-(a)s-i a-nin-pa ko[n].

 that pail head.PF-shore-stand-TR.SG 4.A-pull.along-TR.PL if/when rapok-ke sinki-an hine...

 during-place be.tired-4.S and
 'I dragged that pail to the bank and then became tired...'

 (< kor) (Kayano 1974: 99)

In the examples above, we are dealing with phonological contexts that would normally trigger the sandhi processes and yet only r-sandhi applies. Shiraishi reports that in the recordings investigated, there was not a single instance of n-sandhi applying across a sentence boundary, regardless of sentence length. For instance, in (28c), the sentence is short and pronounced without an intervening pause, but nevertheless n-sandhi fails to apply. This observation is in concordance with a cross-linguistic observation that there are two types of Postlexical rules (Selkirk 1986); *P-structure rules*, which are sensitive to syntactic boundaries and *Pure phonological rules*, which are not. The present study shows that n-sandhi is a P-structure rule whereas r-sandhi is a Pure phonological rule.

7 Intonation

Intonation has been described only sporadically in individual sketches of dialects until recently (e.g., Simeon 1968; Murasaki 1979; Refsing 1986; Tamura 1996). In the last two decades, there have appeared a few articles focusing on intonation, which involve F0 measurements. Here we review two of them.

Tamura described the intonation of the Saru dialect as follows:

Sentence intonation differs per illocutionary act. When one speaks, there is a natural declining of pitch and there is no rise or fall at the end of the sentence. A rising intonation appears when A expects reaction from B on A's report, question, answer, request, or invitation. In expressing exclamation or wish, the pitch of the whole utterance is raised and a lengthened rising-falling contour appears at the end of the sentence. (Tamura 1996: 4)

This description is confirmed by the FO measurements conducted in Tamura and Motohashi (2002b) and Makarova (2002). Makarova (2002) investigated the pitch contour of 35 interrogative sentences from sound materials of the Saru dialect (Tamura 1984) and found "a strong pitch movement and an intensity peak . . . mostly in the last word of the question, which is most commonly an interrogative particle (hawe, ya, a, he)." (Makarova 2002: 76).

In the same study, Makarova reports three cases of interrogative sentences without a final rise. This was also noticed by Tamura and Motohashi (2002b), who attested the following example.

Tamura and Motohashi (2002b) admit that they do not have a clear explanation as to why (30) is uttered without a rising contour. They point at two possibilities. One is the influence of Japanese, which has a falling contour even in interrogatives. This is especially the case in the Hokkaidō dialect of Japanese, e.g., Kore de ii kai 'Is this OK?' (Tamura and Motohashi 2002b: 61, 70). Next, the final word in (30) contains an interrogative particle ya (amkir+ya > amkir a), which is optionally used in polar questions. Likewise, a sentence ending in nankora 'perhaps (interrogative)', which also contains ya (nankor+ya > nankora) is uttered with a falling contour in the same data set. Thus, one may hypothesize that a falling contour is associated with ya, although we need more data to confirm it, as Tamura and Motohashi (2002b: 70) point out.

Although few in number, these cases should not be neglected since the absence of a final rise in interrogatives is reported in other dialects as well (Murasaki 1979; Takahashi 2015).

Takahashi (2015) reports a similar case of a non-rising contour in interrogatives in the Tokachi dialect. According to Takahashi, this contour is associated with the following characteristics: A sentence ends either in i) a noun or nominalizer, or ii) a conjunctive particle followed by an interrogative particle. A common denominator is the lack of a predicate verb, which is expected to end the sentence, as Ainu has an SOV word order. From this observation, Takahashi (2015: 24) hypothesizes association of the non-rising intonation contour with incompleteness, of which the illocutionary act is "a request of confirmation". Interestingly, this view is similar to an observation made by Simeon (1968), who notes that a level (falling) contour implies an upcoming next utterance, whereas a rising contour implies the definite end of an utterance.¹⁹

8 Concluding remarks

This chapter aimed at providing an overview of the phonetic and phonological characteristics of Ainu. In describing these topics, I have tried to illustrate not only facts but also controversial issues to invite the interested readers to take part in the ongoing discussions. These issues can be taken up from a number of linguistic viewpoints: typological, areal, dialectological, historical, etc.

In light of the current sociolinguistic situation of Ainu, (see Chapter 12 by Ōno, this volume), linguists face severe restrictions in their research program – obtaining new data from speakers is extremely difficult. Still there is much to be done. In particular, the vast amount of available data and recordings compensates for the short-comings caused by the abovementioned restrictions, as some of the works cited in this chapter have shown.

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¹⁹ Simeon conducted fieldwork in Horobetsu, Biratori, and Higashi Shizunai, of which a male from Biratori was his main informant.

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Hiroshi Nakagawa

14 Parts of speech – with a focus on the classification of nouns

1 Introduction

Based on a set of syntactic characteristics, Ainu parts of speech can be divided into the following seven types: nouns, verbs, adverbs, prenominals, interjections, auxiliary verbs, and particles, as shown in Table 1.

Table 1: Parts of speech in Ainu.

	In a syntactic relation with other elements in the clause	Can function as independent word	Functions as head of the predicate	Can be head of a predicate argument	Can modify a predicate argument
Noun	0	0	×	0	0
Verb	0	0	0	×	0
Adverb	0	0	×	×	×
Prenominal	0	Δ	×	×	0
Interjection	×	0	×	×	×
Auxiliary verb	0	×	0	×	×
Particle	0	×	×	×	×

These can be further subcategorized as shown below:

- Nouns ordinary nouns, locative nouns, pronouns, formal noun
- Verbs 0-valence verbs, 1-valence verbs, 2-valence verbs, 3-valence verbs (=0/1/2/3-argument verbs, cf. Chapter 15, this volume), locative object verbs, phrasal verbs
- Adverbs adverbs, postpositional adverbs
- Prenominals demonstrative prenominals, interrogative prenominals, numeric prenominals
- Interjections
- Auxiliary Verbs
- Particles case particles, conjunctive particles, adverbial particles, final particles

As characteristics of the composition of Ainu parts of speech, this chapter first examines the category termed "adjective" in Section 2. Sections 3 through 6 focus on nouns in particular and describe the subcategories of nouns. Section 3 explains the criteria for subcategorization. Section 4 describes ordinary nouns and Section 5 locative nouns. Finally, Section 6 discusses the feature <location> carried by locative nouns and the syntactic function of the feature.

2 The category "adjective"

In the parts of speech given in Table 1, there is no category "adjective". Through recent developments in theories of language typology, it has become apparent that the category adjective varies greatly cross-linguistically in comparison to the categories noun or verb. It has been reported that, in the Yimas language of New Guinea, the category adjective comprises just three elements (Dixon 2010: 63). Even in languages for which the category adjective is recognized, there are both languages like English in which adjectives have characteristics that are syntactically and morphologically similar to nouns and languages like Japanese in which they have characteristics similar to verbs.

In studies of Ainu, ever since Chiri (1942), adjective has not been set up as a separate category and elements with adjective-like meanings have all been treated as 1-valence (intransitive) verbs. The reasons for this treatment can be summed up in the following:

- Syntactic identity
- 2) Morphological identity
- 3) Semantic identity

2.1 Syntactic identity

The element that occupies the predicate position in Ainu is invariably a verb phrase and the head of the verb phrase is a verb or an auxiliary verb. Sentences like the Japanese Watasi wa kamome [I TOP seagull] 'I am a seagull' that end in a noun are basically avoided in Ainu, and when expressing the meaning A=B, the copular verb ne must be placed after the noun as in wen menoko ku-ne 'I am a poor woman'. On the other hand, an element having an adjective-like meaning, like pon 'small' is placed in the predicate position *cape pon* 'the cat is small' just as in *cape hoyupu* 'the cat ran'.

From this, it is clear that, syntactically speaking, adjectives in Ainu are not of the noun type like those of English or French but are of the verb type like Japanese or Korean.

In addition, when modifying a noun, they show properties identical to verbs in that they are placed before the noun with no morphological change.

(1) **apkas** utar arki ruwe ne nankor kusu sinki nankor. people come.PL INFR.EVID COP probably because tire probably 'Since the **walking** people probably came on foot, they are probably tired.' (CHITOSE)1

¹ Ainu example sentences are annotated (dialect: source: page number). Examples annotated with just (dialect) are examples recorded by the author. Also, for convenience, regardless of the source of the examples, the Ainu orthography in all examples has been changed to that used in this volume.

(2) **onne** utar pirka-no yay-e-punki-ne.
be.old people be.good-ADV REFL-about.APPL-guard-COP
'The **aged** people, please pay close attention to yourselves.' (CHITOSE)

In short, "adjectives" never occupy a position syntactically different from verbs.

2.2 Morphological identity

In the case of Japanese, adjectives and verbs have identical properties in that they can both be used as predicates. Where they differ is in their conjugations; that is, they differ in their morphological paradigms. Not only are *aru* 'exist' and *nai* 'not exist' syntactically identical in that they can both be predicates, they also have the common semantic feature that they express static states. What insures that *aru* is a verb and *nai* is an adjective is just the morphological difference that the conclusive form of the former ends in -*u* and that of the latter ends in -*i*.

In contrast, "adjectives" in Ainu are morphologically the same as 1-valence verbs. 1-valence verbs take the set of affixes showing the person of the subject, as in Table 2. Verbs with an adjective-like meaning also take exactly the same set of affixes.

Table 2: 1-valence subject person-marking affixes.

	Singular	Plural
1	ku-	-as
2	e-	es- (Ishikari dialect) eci- (other than the above)
3		
4	-	an

- (3) yuk kam anakne **ku-pon** hi ta anakne k-e deer meat TOP 1SG.S-small time LOC TOP 1SG.A-eat ka eramiskari. even not.know 'When **I was small**, I hadn't ever eaten venison.' (SARU)
- (4) *iisonekay etap* **e-pirka** wa e-hosipi ru an.

 EXCL EXCL 2SG.S-be.good and 2SG.S-return.SG INFR.EVID exist.SG 'That's good. **You** came back **healthy**.' (TOKACHI: Kirikae 1996: 127)

(5) anokay wen-an a kusu, kakkok tono 4PL be.bad-4.S PRF.SG because cuckoo master i-ruska hine ANTIP-be.angry.with.sth and 'Since I was bad, the head man of cuckoo got angry.' (ISHIKARI: Otsuka 1990: 183)

Furthermore, affixes that attach to verbs, like the causative suffix and the applicative prefix, can all attach to words with adjective-like meanings, provided they are semantically compatible.

- (6) nusa cinki kes ta a-anu wa alter hem end LOC 4.A-put/place.SG and a-e-yay-pirka-re p ne.
 4.A- with.APPL-REFL-be.good-CAUS NMLZ COP 'If you place it under the alter, with that you can become rich.' (SARU)
- (7) a-e-yay-sukup-ka oruspe a-ye hawe
 4.A-with.APPL-REFL-grow-CAUS story 4.A-say/tell REP.EVID
 tapan na.
 this SFP
 'I have talked about what I thought painful in my life.'
 (SARU: S. Tamura 1985: 14)

Viewed semantically, *pirka* 'good' would be an adjective and *sukup* 'grow' would be a verb, but both of them can form derived verbs in exactly the same way with the applicative prefix *e*-, the reflexive prefix *yay*-, and the causative suffixes *-re* or *-ka*. Considering this, morphologically as well, no necessity for division into separate categories of adjectives and verbs is apparent, and they can be treated as being the same.

2.3 Semantic identity

What differentiates adjectives and verbs cross-linguistically is probably the semantic features that, while adjectives primarily describe the properties of something or a static state, verbs show a movement or a change. However, it also difficult to apply this distinction to Ainu.

For example, a word like *poro* 'be large/old' showing a property, also shows, in the same form, without undergoing any morphological process such as the addition of affixes, the meaning 'become large/old'. Rather, it is difficult to distinguish between the meaning 'be large/old' and the meaning 'become large/old'. Learners of Ainu who are native Japanese speakers, out of a desire to make this distinction, often combine

poro 'be large/old' and *ne* 'become' getting **poro ne* when trying to translate 'become large/old' into Ainu, but this collocation is ungrammatical.

- (8) **ku-poro** hi orano ku-matak-utar-ihi mi pa 1SG.S-be.large/old time then 1SG.A-younger.sister-PL-AFF wear PL p ka ku-kar.

 NMLZ even 1SG.A-make 'Since **I've become older**, I also make the clothes my sisters wear.' (SARU)
- (9) pirka ipe patek ku-ki wa ku-poro, ku-sukup be.good eat only 1SG.A-do and 1SG.S-be.large/old 1SG.S-grow pe ne kusu, NMLZ COP because 'Since I am eating only good things, I've become older and grown up.' (ISHIKARI: Sunazawa 1983: 45)

As used here, *poro* cannot be interpreted as showing a static state like 'be large/old'. In addition, *pirka* is usually glossed as 'be good' or 'be beautiful', but it is also used in the same form to mean 'recover from an illness'.

(10) paykar wa-no **ku-pirka**, ku-monrayke. spring from-ADV 1SG.S-be.good 1SG.S-work 'When spring came, **I got well** and began working.' (ISHIKARI: Sunazawa 1983: 158)

Since it can be said that words like this that express static states and properties can all also express the meaning of change, it is also impossible to separate adjectives and verbs semantically.

Even the existential verb *an* 'exist' and the copula *ne* have this kind of dual meaning and can express both a static state and a change of state.

- (11) **paykar an** yakun, kina-kar-an kusu paye-an ro. spring exist.SG if grass-gather-4.S for go.PL-4.S COHORT 'When **it turns spring**, let's go and gather edible wild plants.' (CHITOSE)
- (12) cikap kasu-no **poro** cikap ne hine, arkuwanno bird more.than-ADV be.large/old bird COP and straight kanto kotor o-rik-i-n.
 heaven surface at.APPL-upper.place-EP-INTR.SG
 'It turned into a bigger bird than (normal birds) and went straight up into the heaven.'
 (SARU: Kayano 1974: 230)

Considering the points raised above, the category "adjective" is not established in modern Ainu studies and elements that correspond semantically to adjectives are treated as intransitive verbs.

2.4 Can adjectives be recognized as an independent part of speech?

In Dixon (1982), the claim was made that there exist languages for which the category adjective may not be recognized: "However, not all languages have the major word class Adjective. Either they have no Adjective class at all, or else there is a small non-productive minor class that can be called Adjective." (Dixon 1982: 2–3). However, in Dixon (2010) he reverses himself.

Detailed examination (over the past thirty years) of languages for which this claim [that it is impossible or inappropriate to identify an adjective class] had been made suggests that, once again, when all relevant facts are taken into account an adjective class can be (and should be) recognized for every language, distinct from noun and verb classes. (Dixon 2010: 62)

To be sure, it is not the case that there is absolutely no syntactic difference between "adjectives" and verbs in Ainu. When two verbs are linked together, a conjunctive particle must be used. When the two represent actions, then the conjunctive particle wa can be used, as in ipe wa mokor 'ate and slept'. However, when the first member is a verb expressing a property or state, like pirka 'be good', no is used, as in pirka no mokor 'slept well'. This no could be taken as an adverb-forming suffix, but in that case, the stems to which it attaches would be limited to "adjectives".

```
poro 'big' > poro(n)-no 'plentifully'
hawke 'fragile' > hawke-no 'gently'
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In contrast, when *no* is attached to a verb that basically expressed an action or change, it does not become an adverb but only intensifies the meaning of the verb.

```
ipe 'to eat' > ipe-no 'to eat well'
mokor 'to sleep' > mokon-no 'to sleep soundly'
```

(13) **mokon-no** okav rekuc-i wa ре a-tuv-pa sleep-much and exist.PL person throat/neck-AFF 4.A-cut-TR.PL ki kor do and 'I cut the throats of those who were **sleeping soundly**' (CHITOSE)

However, this is primarily due to the difference in meaning between pirka and mokor rather than to a difference in syntactic qualities. Even with an action verb like ipe 'eat', if it is used in the negative form, no is used, as in somo ipe no mokor 'went to sleep without eating', and use of wa is blocked *somo ipe wa mokor. Since the negation of an action is the static state of the action not taking place, the particle used is no not wa. In short, the difference is not in the part of speech of the first member; rather, the meaning of the verb phrase as a whole is involved.

Verbs may be subcategorized by their valency into 0-valence verbs, 1-valence verbs, 2-valence verbs, and 3-valence verbs, and there are large differences among 0-valence, 1-valence, and 2-valence verbs at least in terms of the types of their person affixes and the way they are affixed. In addition, the subcategories of phrasal verbs and locative object verbs, with their special limitations on their direct objects, can be identified, but all these show clear morphological and syntactic differences. Compared to these, the differences between "adjectives" and 1-valance verbs is miniscule. Accordingly, in opposition to the claims of Dixon (2010), while it may not be impossible to recognize the category adjective in Ainu, it can certainly be said to be inappropriate.

3 Subcategories of nouns

Nouns can be defined as elements that can be the heads of noun phrases and noun phrases as elements that can be arguments to a predicate. Table 3 summarizes four subcategories of nouns that can be identified through five morphological and syntactic features: 1) inflection, 2) possessive case person affixes, 3) independence, 4) possible modifiers, and 5) locativity.

	_			
lable	3:	Noun	subca	tegories.

	Inflection	Prefixes showing person and number of the possessor	Independence	Possible modifiers	Locativity
Ordinary noun	Conceptual form Affiliative form	Same forms as transitive verb subjective person forms	Conceptual form O Affiliative form △	Noun Phrase Verb Phrase Prenominal	Conceptual form × Affiliative form O
Locative noun	Basic form Long form	Same forms as transitive verb objective person forms	Basic form× Long form△	Noun Phrase Verb Phrase	0
Pronoun	Basic form	×	0	×	Depends on word
Formal noun	Basic form	×	×	Depends on word	Depends on word

3.1 Inflection

Both ordinary nouns and locative nouns change their forms through the attachment of suffixes to their basic forms. Until now, the changes in both types were regarded as being the same and they have both often been referred to conceptual forms and affiliative forms. However, since the changes in ordinary nouns and locative nouns are morphologically different and their syntactic functions also differ, the terms conceptual form and affiliative form are restricted here to ordinary nouns and the locative noun forms are referred to as the basic form and the long form. Pronouns and formal nouns do not show this kind of change in form. A detailed look at the concrete changes in form will be presented in Sections 4 and 5.

3.2 Prefixes showing person and number of the possessor

When the possessor is first-, second-, or fourth-person, person affixes are attached to both ordinary and locative nouns. The affixes attached to ordinary nouns are the same as the subjective person affixes of transitive verbs, and those of locative nouns are the same as the objective person affixes of transitive verbs. Pronouns and formal nouns do not attach person affixes. In addition, in the case of ordinary nouns, person affixes attach only to the affiliative form, never to the conceptual form. In contrast, in the case of locative nouns, person affixes attach to both the basic form and the long form. This is another point of difference between the two. Detailed discussion will be presented in Sections 4 and 5.

3.3 Independence

The standard for measuring independence of nominals is whether or not a word can form a noun phrase alone. The conceptual form of an ordinary noun is the highest in independence, being able to form a noun phrase alone. The category 2 locative nouns described in Section 5.4 and pronouns are the same. The affiliative form of an ordinary noun can form a noun phrase alone, but the existence of a possessor is always presumed, so, in this sense, its independence is somewhat lower. Since category 1 locative nouns in their basic forms without an antecedent or person affixes cannot form a noun phrase, their independence is greatly lower. In contrast, their long forms can form a noun phrase, but, like the case of the affiliative form of ordinary nouns, the existence of a noun phrase expressing a locational reference point is always presumed, so their independence is lower than that of the conceptual form of an ordinary noun.

Since formal nouns cannot form a noun phrase without being modified by a verb phrase or a prenominal, they are lowest in independence. Therefore, they are also termed noun particles or nominalizing affixes. In particular, the formal nouns *p~pe*

'concrete thing' and hi 'fact, thing, time, place' are always pronounced as phonetically forming a single unit with the element preceding them and thus, in a sense can be considered suffixes, but syntactically, they are not attached just to the immediately preceding element such as a verb but have the function of nominalizing the entire verb phrase.

- (14) kamuv a-ona ne vak ve 4.A-father.AFF COP COMP sav/tell NMLZ god **'one** who says he is my divine father' (SARU)
- (15) ene i-ki-an hi horka а neno i-res-pa like.this ANTIP-do-4.S PRF.SG thing same.as in.reverse 4.O-raise-PL 'In the same **way that** I did (for them), in reverse, they supported me.' (SARU)

The p in (14) does not nominalize just the verb ve 'say' but should rather be seen as nominalizing the whole verb phrase kamuy a-ona ne yak ye and in that sense, is not a suffix of the verb ye. The hi in (15) nominalizes the entire verb phrase ene i-ki-an a and is not a suffix of the auxiliary verb a. Considering these facts, these elements should not be called affixes but should be considered clitics.

Among the formal nouns, there are some that derive from ordinary nouns through grammaticalization with some degree of bleaching of the original meaning. For example, as an ordinary noun *utar* means 'companion, relative' but is thought to have acquired the meaning "pluralizer" through grammaticalization. Expressions like the following in which both appear together are often used.

(16) *a-utar-i* wa a-hunara **utar** i-tura 4.A-kin/people-AFF PL4.O-accompany and 4.A-search yakka a-turaynu. although 4.A-lose 'I searched together with **my companions** but didn't find it.' (SARU)

The preceding discussion on the degree of independence can be summarized as follows:

Ordinary noun Ordinary noun Category 1 locative conceptual form affiliative form > Formal noun noun basic form Category 2 Category 1 locative locative noun noun long form Pronoun

3.4 Possible modifiers

The degree to which a noun can be restricted by a modifying element also differs among the subcategories of nouns. Both the conceptual form and the affiliative forms of ordinary nouns can be modified by verb phrases, noun phrases, and prenominals. Locative nouns can be modified by an antecedent noun phrase or a verb phrase but cannot be modified by a prenominal. For example, with an ordinary noun, one can use the prenominal tan 'this' to form a phrase like tan okkaypo 'this youth', but one cannot form a phrase like tan kasi 'this above' using a locative noun. Pronouns are not modified by other elements. That is, one cannot say the equivalent of the Japanese phrase soko ni iru anata [there LOC be-NPST you] 'you who are over there', and in this sense Ainu pronouns are more like those of English than Japanese. Formal nouns vary according to the individual noun: hi 'fact, thing, time, place' can only be modified by a verb phrase; p 'concrete thing' can be modified by a verb phrase or by a prenominal but not by a noun phrase. On the other hand, utar 'pluralizer, people' can be modified by verb phrases, noun phrases, or prenominals.

3.5 Locativity

Ainu distinguishes grammatically between locations and non-locations (location in the grammatical sense will be expressed as <location> below). Constructions that require a noun phrase to be <location> are called "locative expressions" and include the following:

- When the locative particle ta, the allative particle un, en, ne (depending on the dialect), the ablative particle *wa*, or the perlative particle *peka* follows the noun: example (17)
- 2) When used as the object of a verb with the applicative prefixes *e*-, *o* which can alternate with the particles in 1): example (18)
- 3) When used as the object of a locative object verb like *oma* 'exist, be', *osma* 'jump into', o 'insert something into', or kus 'pass through/along': example (19).
- (17) situ ka a-uni sike ta un rura kor ridge top LOC 4.A-home.AFF ALL baggage carry PL and 'When they carry baggage **to** my house **on** the ridge' (SARU)
- (18) *iwor* kurka opitta SO **e**-rok kamuy hunting.ground sitting.place above at.APPL-sit.PL god all a-nu-re wa 4.A-hear-CAUS and 'I spoke to all the gods who **are above** the hunting grounds' (SARU)

(19) *kakenca corpok osma sir-i a-nukar.* clothes.hanger under get.into/enter appearance-AFF 4.A-see
'I saw (my brother) **dive** under the clothes hanging rack.' (SARU)

The noun phrases *situ ka* 'on the ridge', *a-uni* 'my house', the *iwor so kurka* 'above the hunting grounds' before *erok* 'sit' (*<e-rok*), and *kakenca corpok*, the direct object of *osma*, are all *<*location>. They cannot be restated as below.

- (17') *situ ta *a-kor cise un sike rura pa kor ridge LOC 4.A-have house ALL baggage carry PL and
- (18') *iwor so e-rok kamuy opitta hunting.ground sitting.place at.APPL-sit.PL god all a-nu-re wa 4.A-hear-CAUS and
- (19') *kakenca **osma** sir-i a-nukar. clothes.hanger get.into/enter appearance-AFF 4.A-see

situ 'ridge', *a-kor cise* 'my house', *iwor so* 'hunting grounds', and *kakenca* 'clothes hanging rack' are not grammatically <location>, at least in the Saru dialect. This feature is one of the major differences between ordinary nouns and locative nouns. An ordinary noun in its conceptual form cannot, as a general rule, be <location>. In contrast, locative nouns are always <location> in either of their basic or long forms. In the examples given here, *situ*, *cise*, *iwor so*, and *kakenca* are all ordinary nouns in their conceptual forms, while *uni* is an ordinary noun in its affiliative form and *ka*, *kurka*, and *corpok* are all locative nouns.

The following sections examine in greater detail the differences between the two noun subcategories of ordinary nouns and locative nouns.

4 Ordinary nouns

4.1 Ordinary nouns and proper nouns

The great majority of nouns in Ainu are ordinary nouns and this is an open category. There are no particular syntactic or morphological differences between ordinary nouns and proper nouns. If pressed, one could note that in Hokkaido dialects proper nouns do not have affiliative forms as a point of difference from ordinary nouns, but since in Sakhalin dialects peoples' names have affiliative forms and, in even in Hokkaido dialects, there are many ordinary nouns that are normally not used in their

affiliative forms, this does not mark definitive difference. On the contrary, in the case of place names, many are created using the same morphological means as ordinary, everyday nouns and name geographic features as in *Poropet* 'Horobetsu' < *poro* 'be large' *pet* 'river' or *Nisekoannupuri* < *nisey* 'cliff' *koan* 'facing toward' *nupuri* 'mountain', and, in fact, are sometimes indistinguishable from mere descriptions of geographic features.

Of course, even in place names, there are many like *Kusur* 'Kushiro' and *Tokapci* 'Tokachi' whose origins are unclear, and among peoples' names there are those like *Samkusain* or *Kosamain* (both names of leaders once active in fighting against the Japanese) for which, even though one can surmise that the *ain* part is probably derived from *aynu*, which shows males, the overall meaning or etymology is unclear. However, even these cannot be considered grammatically to form a names subcategory.

4.2 Conceptual form and affiliative forms

Ordinary nouns generally take three morphological forms, as in the word for 'hand': tek, tek-e, and tek-ehe. Of these, tek is the conceptual form and tek-e and tek-ehe are called the affiliative forms. Of the affiliative forms, tek-e is called the short form and tek-ehe, which is formed by adding a suffix of the form $-hV_I$ (here -he) to the short form ending in the vowel V_I (here e) is called the long form. Other than a prosodic difference, there is thought to be no semantic or functional difference between the short and long forms.

The semantic difference between the conceptual form and the affiliative form is that the conceptual form is used when expressing the concept of the thing itself and the affiliative form is used when showing an indivisible relation with some specified reference. As examples of indivisible relations, the following can be adduced.

- a. names of body parts and similar items: example (22)
- b. whole part relation: example (23)
- c. family relation: example (24)
- d. material and product relation: example (25)
- e. cause and effect relation: example (26)

These are generally aggregated as "inalienability". Even in cases that would be expressed using the same possessive relations, in Ainu, alienable possession is expressed in the pattern [possessor + kor 'have something' + conceptual form] whereas inalienable possession is expressed in the pattern [possessor + affiliative form].

Examples with [*kor* + conceptual form]:

(20) **a-kor seta** a-tura hine arpa-an. 4.A-have dog 4.A-accompany and go.SG-4.S 'I took **my dog** with me.' (CHITOSE) (21)cise kor kur a-kor makiri inkar or un knife/short.sword place ALL look house have person 4.A-have kane an. and exist.SG 'The master of the house was looking at my short sword.' (HOROBETSU: Kitamichi 2004: 36)

Examples with the affiliative form:

- (22) *kani* anakne **ku-kema-ha** ka arka. **ku-tek-ehe** ka arka 1SG TOP 1SG.A-leg-AFF even hurt 1SG.A-hand-AFF even hurt ne р kusu. NMLZ COP because *kema – kema-ha* 'foot', *tek – tek-ehe* 'hand' are body part names 'As for me, since **my foot** hurts and **my hand** also hurts' (CHITOSE)
- (23) *a-e kimi nic-ihi cikuni a-kote wa*4.A-eat corn handle-AFF tree 4.A-tie.sth.to.sth and *nit nic-ihi* 'handle, core' are a whole-part relation

 'I tied the **core** of the (ear of) corn I had eaten to a stick.' (CHITOSE)
- (24) **eci-ona ak-ihi** te ta kotan kar
 2PL.A-father.AFF younger.brother-AFF here LOC village make
 wa an.
 and exist.SG
 ona ona 'father', ak ak-ihi 'younger brother' are a family relation
 'Your (plural) father's younger brother built this village.' (SARU)
- (25) usa imo ku-ko-poy-pa wa ohaw-e
 various potato 1SG.A-with.APPL-mix-PL and hot.pot.dish-AFF
 ku-kar wa
 1SG.A-make and
 ohaw ohaw-e 'food cooked in a pot' are a material and product relation
 I mixed together the potatoes and things and made a hot pot dish from them.'
 (CHITOSE)
- (26)kamuy tono ki kusu, konto asur-uhu tuyma р ne god lord do NMLZ COP because then rumor-AFF far hi un asur-u as hine place ALL rumor-AFF stand.SG and asur – asur-uhu 'rumor' are a cause and effect relation 'Since the lord did that (boasted about his retainer), the **rumor** spread far.' (SARU)

However, in the Saru dialect, even though they are family relations, address terms for older relatives like *huci* 'grandmother', *hapo* 'mother', and *acapo* 'uncle' take the form [kor 'have' + conceptual form] like kor huci, kor hapo, and so on, and are distinguished from the affiliative forms like sut-ihi 'grandmother', unu-hu 'mother', and aca-ha 'uncle', which are only used as reference terms. The differences among dialects in the use of family relations are great, and there is variation even with a single dialect, presenting a complex situation.

As a general rule, while all ordinary nouns have conceptual forms, it is said only some nouns have affiliative forms. However, this is primarily due to semantic restrictions, and, for example, even a noun like *cise* 'house' which, as a normal possession expression does not take an affiliative form in the Saru and Chitose dialects, instead appearing as ku-kor cise 'my house', can be expressed in an affiliative form when in a material-product relation, as in the following example.

```
(27) top
               u-hekota
                              a-e-rew-pa
                                                   wa
     bamboo RECP-towards 4.A-head.PF-bend-PL and
     a-u-ko-sina
                             wa
                                  cise-he
                                              a-kar.
     4.A-RECP-with.APPL-tie and house-AFF 4.A-make
     'I bent the tips of the bamboo over from both sides and tied them together
     and with that built a house.' (CHITOSE)
```

From this, it should be concluded that all ordinary nouns have the quality of having underlying affiliative forms which can appear if semantic conditions are fulfilled.

Suzuko Tamura presents another condition for taking the affiliative form: that the antecedent noun phrase refer to a specific item.

The affiliative form is used to express a specific someone, or something closely affiliated with another. For example,

```
(4.109)
          kamuy
                    rus-ihi
          bear
                    pelt-AFF
          'the bear's pelt' (rus-ihi is the affiliative form of rus 'pelt')
```

indicates a specific bear's pelt, such as that of "the bear we killed yesterday" or "the bear caught in the trap this morning". To indicate no specific bear's pelt, but the thing called "bear pelt", the conceptual form is used.

```
(4.110)
         kamuy
                  rus
         bear
                  pelt
         'bear pelt' (S. Tamura 2000: 83)
```

Concerning this conceptual form kamuy rus, Tamura adds, "This structure can almost be treated as a compound word (kamuy-rus)." Leaving for future consideration the question of whether or not *kamuy rus* is a compound word, more important is the fact that this kind of expression has the same structure as *kane cise* 'metal house [=excellent house]' and okkayo po 'male child [=boy]'. In kane cise and okkayo po, the first member describes a quality or attribute of the second member rather than showing a possessor. In the same way, kamuy rus can be thought of as expressing 'a pelt that has the attribute "bear", which also explains why this kamuy is restricted to meaning the general concept of "bear". In this sense, this [conceptual form-conceptual form] combination is not a possessive relation.

On the other hand, the condition that the antecedent to the affiliative form must refer to a specific someone or something is largely a syntactic condition rather than semantic. Firstly, even when the antecedent is a non-specific person as in a-tek-ehe 'a person's (someone's) hand', *tek* appears in the affiliative form. That is, regardless of the meaning, the possessive person affixes only attach to the affiliative form and a pattern like *a-tek is disallowed. In short, in this case, the reason the affiliative form appears is not a semantic condition but is a syntactic requirement.

In order to express the meaning 'a fox with a long tail', one does not say *sar tanne cironnup but must say sar-aha tanne cironnup with sar 'tail' in the affiliative form. The possessor of this sar is a cironnup 'fox', but it is not the case that it refers to a specific actual fox. That is, the appearance of this affiliative form should be thought of as being due to a syntactic requirement.

Satō (1997) criticized S. Tamura's (1988) semantic explanation arguing that a structure in which the latter member is an affiliative form is a head-marking² type of construction in which the possessed noun is marked and proposes a theory that in such cases the possessor and the possessed are in separate clauses.

The above examples suggest that a head marking type of a possessive construction is used when the possessor and the possessed are not in the same clause. That is, the dependent cep 'fish' in (9) is not a part of the main clause but is extraposed out of that clause by topicalization as in the following scheme.

(9) tan cep || mim-ihi keraan this fish meat-AFF delicious 'As for this fish, the meat is delicious,' (Satō 1997: 153)

If this line of thought is adopted, then in the case of the example sar-aha tanne ciron*nup* as well, it may be possible to explain why the affiliative form must be used saying that sar-aha tanne is in a modifying clause and that the main clause cironnup is in a separate clause.3

² For the details of the head-marking type see Bugaeva (Chapter 1, this volume).

³ However, Satō (1997) regards the affiliative forms of ordinary nouns and the long forms of locative nouns to be the same and tries to explain the phenomena associated with both together. On this point, the present author's thought differs.

4.3 Forming the affiliative form

The affiliative form of ordinary nouns is formed by adding a suffix to the conceptual form. The suffix is either -V (short form) or -VhV (long form) and the value of V changes to match the last vowel in the conceptual form.

Treating the last vowel of the conceptual form as V_1 , in cases 1 and 2 below, the form of the suffix is determined by rule.

```
1. -V_1 \rightarrow -V_1 - \emptyset, -hV_1
```

When the conceptual form ends in a vowel, the suffix is either zero or $-hV_1$.

```
kema 'foot' \rightarrow kema, kema-ha etu 'nose' \rightarrow etu, etu-hu
```

```
2. -VC \rightarrow -VC-e, -e-he (C=y or w)
```

When the conceptual form ends in a consonant and the consonant is either *y* or *w*, the suffix is either *-e* or *-e-he*.

```
patoy 'lips' \rightarrow patoy-e, patoy-e-he ikkew 'hip' \rightarrow ikkew-e, ikkew-e-he
```

```
3a. -V_1C \rightarrow -V_1C-i-hi (V_1=a, e, i, o, u; C≠y or w)
3b. -V_1C \rightarrow -V_1C-V_1-hV_1 (V_1=a, e, i, o, u; C≠y or w)
3c. -V_1C \rightarrow -V_1C-u-hu (V_1=a; C≠y or w)
```

If the conceptual form ends in a consonant other than *y* or *w*, there are three types. Which type a word belongs to depends on the word and also varies somewhat by dialect.

In the type to which rule 3a applies, the suffix is -i-hi regardless of the value of V₁.

```
am 'nail' \rightarrow am-i-hi
askepet 'finger' \rightarrow askepec-i-hi
sik 'eye' \rightarrow sik-i-hi
hon 'stomach' \rightarrow hon-i-hi
kesup 'heel' \rightarrow kesup-i-hi
```

In the type to which rule 3b applies, V_1 matches the last vowel in the conceptual form. If that vowel happens to be i, then the result is the same as the output of rule 3a.

```
tumam 'body' → tumam-a-ha
setur 'back' → setur-u-hu
tek 'hand' → tek-e-he
osor 'buttocks' → osor-o-ho
```

In the type to which rule 3c applies, the last vowel is *a* and the suffix is -*u*-*hu*.

```
nan 'face' \rightarrow nan-u-hu
rar 'eyebrow' \rightarrow rar-u-hu
```

There are only a few exceptions like the following.

```
pi 'seed' \rightarrow piy-e-he
ci 'penis' \rightarrow ciy-e-he
pu 'warehuse' \rightarrow puw-e-he
ru 'trace' \rightarrow ruw-e-he
```

Even though these end in vowels, they take the suffixes for words ending in v or w. The corresponding words in the Sakhalin dialects, which do not allow monomoraic independent words, take a form in CVV, such as cii and ruu. If we set up underlying forms for the Hokkaido dialects like *ciy, and *ruw, then rule 2 would apply giving -e-he as the suffix. It can be thought that, since the Hokkaido dialects do not allow syllables ending in -iv or -uw, the conceptual forms surface as *ci* and *ru*.

The following two examples can also be considered to be exceptional.

```
par 'mouth' \rightarrow par-o-ho
mor 'earlock' \rightarrow mor-u-hu
```

Even though there exist such variations, ultimately, cases of -i as the affiliative suffix are the most common and this can be considered the most fundamental form. The fact that -i is the default value can be observed in the following.

```
tar 'packing tool', at 'rope' \rightarrow at-u-hu
tar-at 'rope parts of tar' \rightarrow tarac-i-hi
```

At is of the type to which rule 3c applies but the compound tarat is of the type to which 3a applies. Foreign words and words for which their relation to the original source word has become weak can be thought to take the default value of -i. Etymologically, this -i can be considered to be related to the formal noun hi 'fact, thing, time, place' touched upon in relation to example (15). Section 4.5 goes into more detail.

4.4 Ordinary noun prefixes showing person and number of the possessor

As noted in Section 3.2, the prefixes showing person and number of the possessor for ordinary nouns are the same as transitive verb subjective affixes A (see Table 4). Like the verb person markers, they are obligatory and cannot be omitted.

Table 4: Ordinary noun prefixes showing person and number of the possessor.

	Singular	Plural	
1	ku-	ci-	
2	е-	es- (Ishikari dialect) eci- (other than the above)	
3			
4	a- (western Hokkaido dialects)an- (other than the above)		

- (28) iyotta kiyanne ku-po-ho extremely elder 1SG.A-child-AFF 'my oldest brother' (SAMANI)
- (29) ci-kotan-u menoko utar uekarpa hine un pon 1PL.EXCL.A-village-AFF belong.to be.young woman and 'the young maidens of **our village** assembled' (SARU: S. Tamura 1987: 92)

Since person affixes have the role of antecedent noun phrases, explicit antecedents (in this case, it would be a pronoun) normally do not appear with nouns with person affixes.

4.5 The locativity of ordinary nouns

A noun phrase without the grammatical feature <location> cannot be immediately followed by a locative case particle, nor can such a noun phrase appear as the object of a locative object verb. Since this distinction is a syntactic one, it is difficult to determine whether or not a noun has the feature from the meaning. For example, although it means 'mountain', the ordinary noun nupuri does not have the feature <location> and cannot be immediately followed by the locative particle ta as in *nupuri ta to mean 'in the mountain'. In order to follow *nupuri* with *ta*, it is necessary to supplement *nupuri* with a locative noun like or 'place of' giving nupuri or ta 'in the place of the mountain'.

In contrast, the category 2 locative noun kim, also meaning 'mountain', can be followed by ta yielding kim ta 'in the mountain' and in fact *kim or ta is disallowed.

Normally an ordinary noun cannot be <location> in its conceptual form. However, a very few ordinary nouns exceptionally can be <location> even in their conceptual forms. A representative example is *kotan* 'village', which can appear either as *kotan* or ta 'in the place of the village' or as kotan ta 'in the village', and this is true for this word across all dialects.

- repunkur (30)kotan ta ka arpa-an ka somo ki Repunkur village LOC even go.SG-4.S even NEG do 'I also didn't go to the village of Repunkur.' (SARU)
- (31)ne okkaypo utar a-tura hine. **kotan** or ta this/that young.man PL 4.A-accompany and village place LOC pave-an ruwe ne akusu go.PL-4.S INFR.EVID COP then 'when we went **to the village** together with the young people' (SARU)

Other words that show the same quality are mosir 'land, country' and kanto 'heavens', but at this time examples treating *kanto* as <location> are found only from the Saru dialect. Also, although the Saru and Chitose dialects do not treat cise 'house' as <location>, many other dialects do.

Toponyms are generally treated as <location>, but, if either the speaker or the hearer is not familiar with the location, it is often followed by a locative noun such as or, see also Tangiku (Chapter 9, this volume) for the Sakhalin dialect of Ainu.

- (32)Tokapci wa ka, topattumi arki kusu inne utar Tokachi from even night.attack for be.numerous people come.PL ruwe ne korka INFR.EVID COP but 'From Tokachi as well many people came in a night attack.' (SARU: S. Tamura 1985: 70)
- (33)kani anak teeta i wa-no Tokyo or un k-arpa 1SG TOP long.ago time from-ADV Tokyo place ALL 1SG.S-go.SG rusuv kor k-an. DESI and 1SG.S-exist.SG 'I had thought all along I wanted to go **to Tokyo.**' (SARU: Honda 2001: 21)

In contrast, the affiliative form of an ordinary noun is generally treated as <location> (see Nakagawa 1984).

- (34) *e-mina* ko wakka **par-oho** wa soyne at.APPL-laugh when/if water mouth-AFF from go.out 'When I laughed, water came out from **my mouth**.' paroho < par 'mouth' (HOROBETSU: Chiri 1981 [1937]: 94)
- (35) haykannup a-kuwe osma hine middle.size.bear 4.A-bow.AFF go.into then 'A middle-sized bear was trapped in my trap bow.' (SARU: Chiba University 2015: 192)
- (35') *ku or osma ruwe oka ya?*bow place go.into INFR.EVID COP Q
 '(was it) trapped in a trap bow?' (Saru: Kubodera 1977: 147)

Although there are few exceptions, it is normal to treat *kotanu*, the affiliative form of *kotan* 'village', as <location>.

(36) **eci-kotan-u ta** maratto ne pa kor orano 2PL.A-village-AFF LOC celebration COP PL when/if then 'if you hold a celebratory banquet **at your (plural) village,**' (SARU)

However, family relations, even in their affiliative form, seem not to be treated as <location>.

(37) a-po-utar-i a-yup-i or-o ta paye wa
4.A-child-PL-AFF 4.A-elder.brother-AFF place-LF LOC go.PL and
u-tura sinot pa wa
RECP-accompany play PL and
'My children went to my older brother's place and played together.' (SARU)

As to why an ordinary noun comes to be treated as <location> in the affliative form, M. Tamura (2003), writing from a cognitive linguistics point of view, adduces the cognitive condition of "territoriality' and the syntactic condition of [NP + NP]. In M. Tamura's explanation, the construction [ordinary noun + locative noun] is taken as the prototype for <location>, and, when the latter member, which is the head, is an ordinary noun, it is assigned "territoriality" by the antecedent noun phrase in the subordinate position and turns into the affiliative form as a result, coming to have the same structure as [ordinary noun + locative noun] and is thus treated as <location>. This ties in with the function of the -*ke* found in the locative noun long form discussed in Section 5.4.1 and can be considered an effective explanation.

In contrast to this synchronic analysis, in a problem that may be considered to be related, the concept of territoriality may offer a historical explanation for the origin of

the affiliative form suffix. As stated in Section 4.3, the basic form of the affiliative form forming suffix is -i and this form may be related to the formal noun hi.

As described in Section 3.5, hi is a formal noun with a variety of uses in nominalizing a verb phrase and can be translationally equivalent to, among other possibilities, 'act', 'fact', 'thing', 'time', or 'place'. When it is interpreted as 'time' or 'place', it is always treated as <location>.

- (38)hi kor neno ku-pon ta ku-nu same.as 1SG.S-be.small time LOC 1SG.A-hear while k-an ne 1SG.S-exist.SG NMLZ 'When I was small, I heard it that way.' (CHITOSE)
- (39) nina menoko a-nukar hi wa pon-no gather.firewood woman 4.A-see PRF.SG place and be.little-ADV sa-n-an kor front.place-INTR.SG-4.S and 'when I descended a little from **the place** I met the woman gathering firewood' (SARU: S. Tamura 1989: 32)

This hi is thought to have the function of making the event described by the verb phrase more concrete and specific spatially or temporally, and if it is viewed as being placed not only after verb phrases but also after nouns and to have the function of making the abstract concept expressed by the conceptual form more concrete and specific (Tamura's "territorialization"), both the morphology of the affiliative form and its semantic function of concreteness and specificity can be explained simultaneously.

5 Locative nouns

5.1 Basic and long forms of locative nouns

Locative nouns are words that express relative locations like 'above', 'below', 'before', or 'after' and, as will be shown below, differ from ordinary nouns in various ways. Also, as will be explained in Section 5.2, locative nouns can further be divided into category 1 locative nouns and category 2 locative nouns.

Locative nouns have two forms: the basic form and the long form. The long form has several patterns, but, unlike ordinary nouns, the patterns vary for each word and the number of patterns also varies by the word. For example, corresponding to the basic form ka 'above' are the six long forms ka-s, ka-si, ka-s-ke, ka-si-ke, kas-ke-he, and *ka-si-ke-he*. Even if *kas* is considered to derive from *ka-si* through phonetic loss of *i*, there still remain the three forms *ka-si*, *ka-si-ke*, and *ka-si-ke-he*.

The suffix -ke of ka-si-ke is not unique to locative nouns, being also found in ar-ke 'half' (< ar- 'half of'), hi-ke 'the alternative of' (< hi 'act, thing'), and aktono-ke 'honorific for younger brother' (< ak 'younger brother' + tono 'lord') and can be thought to have originally had the meaning of 'the alternative of, one part of from among several choices'. It attaches as a suffix to the long form of many locative nouns making an expanded long form. Syntactically and semantically, there is no difference from the long form; one can see it being used to adjust the number of syllables in verse. Here, it is considered just one of the various long forms and it will be termed the ke-joined form.

Ke-joined forms are not found for all locative nouns. For example, *etok* 'before (something moving)' has the two long forms *etok-o* and *etok-o-ho* and forms like **etok-o-ke* and **etok-o-ke-he* are not found. On the other hand, with *kotca* 'before (something stationary)' *kotca-ke* with *-ke* added directly to the basic form functions as its long form.

The biggest syntactic difference between the basic form and the long forms, particularly for the category 1 locative nouns to be discussed later, is that the basic form requires an immediately preceding noun phrase or person affix as antecedent while the long form has no such requirement. That is, the long form can stand at the beginning of a sentence while the basic form cannot unless it has a person affix attached. A long form without an antecedent is interpreted as *kasi* 'on top of that' or *corpokke* 'beneath that'.

- (40) *ne nupuri ka ta hemes-pa-an ruwe ene* this/that mountain top LOC climb-PL-4.S INFR.EVID like.this *an hi* exist.SG thing 'When I climbed to the **top** of that mountain, this is how it turned out.' *ka* is the basic form and *ne nupuri* 'that mountain' is the antecedent noun phrase. (SARU)
- (41)teeta kamuy tono tusir-ihi ka-si ta cise hine as long.ago god grave-AFF top-LF LOC house stand.SG and lord 'A house has been built on **top** of the long-ago lord's grave.' kasi 'top' is the long form and tusirihi '(lord's) grave' in the antecedent noun phrase. (SARU)
- (42) nusa-ha kes ta san e-kar wa, ka-si alter-AFF end LOC shelf 2SG.A-make and top-LF ta e-ari.
 LOC 2SG.A-put/place.PL 'Build a shelf beside the altar and put it on top of that.' (SARU) kas-i 'top' is the long form and there is no antecedent noun phrase

The basic form requires an immediately preceding antecedent, as in (40), but the long form may have an immediately preceding antecedent, as in (41), or there may be a conjunctive particle before it, as in (42), or the preceding sentence may have been concluded.

However, there appear to be differences between dialects and depending on the word; in the Saru and Chitose dialects, the basic form *or* cannot appear at the beginning of a sentence, and the long form oro must be used, as in (43). In the Tokachi and Ishikari dialects, however, forms with the [basic form + case particle] pattern, like otta (< or ta) and or en, can stand at the beginning of a sentence, as in (44).

- (43) poro cise a-yup-utar-i kar hine. or-o be.big/old house 4.A-elder.brother-PL-AFF make and place-LF a-i-hop-pa ruwe ene an hi LOC 4.A-4.O-leave-TR.PL INFR.EVID like.this exist.SG thing COP 'My older brothers built a big house and left me **there**.' (CHITOSE)
- (44) sonno wen-kur kotan hoski-no ta okav ne. or truly poor-person village COP before-ADV place LOC exist.PL utar-i opitta wen siyeye ne isam kusu kin/people-AFF all be.bad sickness for not.exist because 'It was truly a poor village. Because the Ainu who lived there long ago all died of a serious illness.' (ISHIKARI: Sunazawa 1983: 94)

5.2 Prefixes showing person and number of the possessor of locative nouns

The prefixes showing person and number of the possessor that attach to locative nouns are the same as the transitive verb objective person affixes, as shown in Table 5.

Table 5: Possessive case person affixes of locative nouns.

	Singula	r Plural
1	en-	un-
2	e-	es- (Ishikari dialect) eci- (other than the above
3		
4		i-

As with ordinary nouns, these person affixes are obligatory, but unlike ordinary nouns, in the case of locative nouns, the person affixes attach to both the basic form and the long form. Below are examples of first-person affixes.

- (45) poro cikap/ un-4 enka peka kari/ haw-e ene
 be.big bird/ 1PL.EXCL.O-above across pass/ voice-AFF like.this
 an ihi
 exist.SG thing
 'a big bird / passed over my head / said as follows' (ISHIKARI: Otsuka 1990: 192)
 enka 'distantly above' is the basic form.
- (46) poro-n-no icen en-kotca-ke ta an.
 be.big-EP-ADV money 1SG.O-front-LF LOC exist.SG
 'A lot of money was in front of me.' (ISHIKARI: Sunazawa 1983: 121)
 kotcake 'before something stationary' is the long form.

Since these person affixes serve the role of antecedent noun phrases, even for the basic form, there is no overt antecedent noun phrase when person affixes are attached.

5.3 Category 1 locative nouns

5.3.1 Basic form and long forms

Locative nouns can be further subcategorized by whether they require an antecedent or not. As stated in Section 5.1, the majority of locative nouns require an antecedent noun phrase for their basic form and on that point the basic form and the long forms function differently. However, among the locative nouns, there are some that do not require an antecedent noun phrase even for their basic forms and, in fact, not having an antecedent is more common. These are called category 2 locative nouns, and the majority requiring an antecedent are called category 1 locative noun phrases.

As noted in Section 3.1, the way of forming the long form of locative nouns is different from the way of forming the affiliative form of ordinary nouns and is quite irregular. Here we will call the long form formed by the addition of a suffix other than -ke the "basic long form" and the long form with the -ke suffix the "ke-joined form". A long form formed by the addition of -hV to either of these is called the "hV form". Table 6 shows category 1 locative nouns in the Saru dialect for which there are verified examples. Examples not verified in the Saru dialect but verified in another dialect appear in parentheses.

⁴ *un*- is the first person plural exclusive objective case person affix, but this example has the folk narrative form *oyna*, and in this case, *un*- is often used in the meaning of first-person singular objective marker.

Table 6: Saru dialect category 1 locative nouns.

Basic form	Basic long form	ke-joined form	hV form	Meaning
ka	ka-si	ka-si-ke	ka-si-ke-he	'contiguous above'
enka	enka-si	enka-si-ke	enka-si-ke-he	'distantly above'
kurka	kurka-si	kurka-si-ke	kurka-si-ke-he	'spreading above'
corpok	corpok-i	corpok-ke corpok-i-ke	corpok-ke-he corpok-i-ke-he	'below'
etok	etok-o		etok-o-ho	'before something moving, linearly or temporarily before'
oka		oka-ke	oka-ke-he	'behind something moving, linearly or temporarily behind'
kotca		kotca-ke	kotca-ke-he	'before something stationary'
osmak	osmak-e		osmak-e-he	'behind something stationary'
sam	sam-a	sam-a-ke	sam-a-ke-he	'near'
teksam	teksam-a	teksam-a-ke	teksam-a-ha	'next to'
utur	utur-u	utur-ke	utur-u-hu utur-ke-he	'between'
or	or-o	or-ke	or-o-ho or-ke-he	'inside, the place of ~'
tum	tum-u	tum-u-ke	tum-u-hu tum-u-ke-he	'inside something homogeneous (earth, water, wind, etc.)
onnay		onnay-ke	onnay-ke-he	'inside something hollow'
piskan	piskan-i	piskan-i-ke	piskan-i-ke-he	'around'
asam	asam-a	(Tokachi dialect example asam-a-ke)	asam-a-ha	'bottom'
ра		pa-ke	pa-ke-he	'upper edge'
kes	kes-e	kes-e-ke	kes-e-ke-he	'lower edge'
kotor	kotor-o	kotor-ke	kotor-o-ho kotor-ke-he	'surface'
tom	tom-o	(Ishikari dialect example tom-o-ke)		'side surface'
hontom	hontom-o	(Tokachi dialect example <i>hontom-</i> <i>o-ke</i>)	hontom-o-ho (Tokachi dialect example hontom-o-ke-he)	'in the midst of ~'

Looking at the table, it can be seen that, aside from special cases like *ka-si*, unlike ordinary nouns, the most common way of forming of the basic long form from the basic form is the 3b pattern of forming the affiliative form of ordinary nouns in which the vowel affixed is the same as the last vowel in the basic form, although there are also examples of the ordinary nouns pattern 3a in which *-i* is added without regard to the nature of the last vowel in the basic form (see Section 4.3). It is clear that, not only do the affiliative form of ordinary nouns and the long form of locative nouns differ in their syntactic functions, but they also differ morphologically.

Furthermore, many of the ordinary nouns that take pattern 3b can be considered to etymologically consist of a compound with a locative noun as the head, as shown below.

```
osor 'buttocks' < os 'backward' + or 'place'

setur 'back' < se 'carry on the back' + utur 'between'

tapsut 'shoulder' < tap 'round thing' + sut 'base'

ureasam 'sole' < ure 'foot' + asam 'bottom'
```

In short, ordinary nouns ending in consonants other than *y* or *w* basically follow pattern 3a, but there is a strong possibility that, since compound nouns with locative nouns as their head were changed to ordinary nouns, pattern 3b became one way of forming the affiliative form of ordinary nouns.

5.3.2 Representative uses of category 1 locative nouns

At the level of word stems, category 1 locative nouns can be said to form a closed category, but they are extremely numerous compared to particles or prenominals. Since they also undergo further derivation with affixes like *si-* 'self', *u-* 'mutual', *uko-*'mutually opposed', see Bugaeva and Kobayashi (Chapter 15, this volume), and form compounds with ordinary nouns, it is difficult to get a grasp of the overall picture.

Presented here are concrete examples of some of the characteristic nouns of this category.

Locative nouns showing 'above' and 'below'

Locative nouns expressing the meaning 'above' are formed on the stem ka and there are a great number of different kinds, including ka, enka, kurka, tuyka, mawka, tapka, rewka, parka, and mekka, etc. Of these, ka, enka, and kurka are most frequently used.

ka means 'contiguously above', *enka* 'noncontiguous/distantly above', and *kurka* 'spreading above'.

- (47)upas ka kusu ta nep ne seta ru snow top LOC what COP track because dog sit-ci-nina-nina hine ground-RES-crush-crush and 'For some reason there are a lot of dog footprints **on top of** the snow.' (SARU)
- (48) kane itoat kane okot i-enkasi suwop wa metal string metal attach and 4.0-above box o-ciw o-ciw bottom.PF.POSS-stick bottom.PF.POSS-stick 'A metal box is attached to a metal wire and is swinging up and down **over** me.' (SARU)
- (49) nep kurka pone ya, sorekus mintar ne ruwe ne what bone COP INFR.EVID COP Q exactly field above a-e-car-i-kar hine sir-an. 4.A-to.APPL-sprinkle-TR.SG-TR and appearance-exist.SG '(I don't know) what kind of bone, but they appear to be scattered **across** the field.' (SARU)

In (47) *seta ru* 'dog footprints' are directly on the snow so in a case like this 'above (on)' is expressed by *ka*. In contrast, (48) is an utterance in a dream and tells of a box swinging up and down over where one is sleeping. Since the box does not touch the speaker, in this case *enka* is used. (49) is a story about the slaughter of a village, and by using *kurka* the scene of the villagers' bones scattered across the whole expanse is evoked.

The meaning 'under' is expressed by words like *pok*, *corpok*, *kurpok*, *tuypok*, *monpok*, and *rewpok*, all formed on the stem *pok*. *Pok* is not much used and the general word for 'under' is *corpok*. There is no 'contiguous under' versus 'non-contiguous under' distinction like that between *ka* and *enka*, and the form *enpok* is used only in the fixed expression *aman enpok* 'under the beam'. *Kurpok* does not affirmatively express the notion of 'spreading', and in general the clear differences in meaning found with the words for 'above' are not found with those for 'under'.

(50) tanepo a-yup-ihi situ **pok**now-DIM 4.A-elder.brother-AFF ridge under
sir-epa hine
appearance-arrive.at and
'My older brother finally reached the **bottom** of the ridge.' (SARU)

- (51)samam ni corpok ta a-unu-hu retar pone fall.sideways tree under LOC 4.A-mother-AFF be.white bone takupi si-tur-i wa an. REFL-stretch/extend-TR.SG and exist.SG only '**Under** the fallen tree, only my mother's white bones stretched out.' (SARU)
- Locative nouns showing 'before' and 'behind'
 There are basically two sets of locative nouns expressing the concepts of 'before' and 'behind', etok~oka and kotca~osmak. The first set, etok~oka, expresses 'before/ behind something moving, before/behind linearly or temporally' and the second set shows 'before/behind something stationary'.
- (52) iwak-an akusu **i-etok** un aynu eramiskari haw return-4.S then 4.O-before ALL human not.know voice 'When I was returning the voice of someone I didn't know was **before** me (came out of my house).' (SARU)
- (53) *pet* **etok** *ta to an wa* river before LOC lake exist.SG and 'At the river's **source** there is a lake.' (SARU)

In (52) a voice comes out of the house to the space before me as I am walking toward it. (53) is an example of something linear, a river. The earlier portions of rivers or roads are examples of locations expressed by *etok*.

The next example is a temporal expression using *etok* and *oka* in a stock expression.

(54) itak tunas kur itak etok-o ko-tuv-e. itak speech before-LF to.APPL-cut-TR.SG speak speak early person moyre kur itak okake ko-tuy-e be.late person speech end/behind.place to.APPL-cut-TR.SG rametok a-ne pa ruwe ne bravery 4.A-COP PL INFR.EVID COP 'We are brave men who cut fast speakers **before** their words (before they begin to speak) and cut slow speakers behind their words (after they've finished speaking)'

In contrast, *kotca~osmak* show 'before/behind something stationary' and cannot be

(='We are brave men who can topple any foe.') (SARU)

used in a temporal expression.

- (55) sintoko kotca ta a-hotke-re tan wa an pe, in.front.of LOC 4.A-sleep-CAUS container exist.SG this and person pon a-po-ho ne ruwe ne hi kusu be.voung 4.A-child-AFF COP INFR.EVID COP thing because 'The one who was put to bed in **front** of the ceremonial container was the vounger son over here.' (SARU)
- (56) masar osmak ta sorekusu inne kotan grassy.field behind LOC exactly be.numerous village an hine exist.SG and 'At the back of the grassy field at the shore is a village that was really lively.'
- Locative nouns showing the concept 'inside'

There are many locative nouns expressing the concept of 'inside', but broadly speaking, they can be divided into ones that show the inside of something homogeneous, such as earth, water, the wind, or a forest and those that show the inside of something hollow like a box, a house, a boat, or a mouth. The former sense is shown by *tum* and the latter by *onnay*.

- (57) upas **tum** oma hine a-pa hine snow inside enter and 4.A-find and 'I found (the girl) buried in the snow.' (SARU)
- (58) tane cise **onnay** sake hura
 now house inside liquor smell
 e-tusnatki kane ki akusu
 with.APPL-fill and do then
 'when the smell of liquor had already filled the inside of the house' (SARU)
- The general purpose <location> marker or

As explained in Section 3.5, since the conceptual form of an ordinary noun cannot be used as <location>, when <location> is required, a locative noun is often inserted after the ordinary noun. When doing so, if there is no need to show a specific relative location, *or* is often used. *Or* is thought to have originally meant 'inside', but as can be seen in the next example, it is often used for making the noun phrase <location> that have no relation to the concept 'inside'.

(59)ne sokoni nitek a-tuv-e wa ek-an wa, elder.tree branch 4.A-cut-TR.SG and come.SG-4.S this/that and puyar or ta. ana or ta a-racitke-re. window place LOC door place LOC 4.A-hang-CAUS 'I cut branches of the red-berried elder and hung them by the window and by the doorway,' (SARU)

In this example, the branches are stuck into a location above or around the *puyar* 'window' and *apa* 'door', and *or* does not show the 'inside' of anything. Used this way, *or* functions like a 'locationizer' just for making ordinary nouns into locations and is the locative noun most frequently used for this purpose.

Furthermore, concerning or in the Chitose dialect, Satō (2008) says the following.

As a general rule, the affiliative form *oro* (strictly speaking, the third-person affix \emptyset -*oro*) is used only when its antecedent is separated from *or*. However, as a special use, when the antecedent is not separated but is a noun phrase meaning a person and appears immediately preceding, *oro* is used. In that case, the abstract meaning of 'location' seems to become somewhat more concrete and has a meaning like 'where someone lives, a house'. (Satō 2008: 163)

This applies to the Saru dialect as well, but there appear to be other dialects that do not follow this usage.

- (60) an-sa-ha tura a-yup-i **or** ta
 4.A-elder.sister-AFF COM 4.A-elder.brother-AFF place LOC
 arki-an ine
 come.PL-4.S and
 'I came to my older brother's **place** together with my older sister.'
 (ISHIKARI: Otsuka 1990: 337)
- (61) *a-kor konnarpe* **or** *en sonko kor haw-as akus*4.A-have aunt place ALL message have voice-stand.SG then
 'When he said he'd brought a message to **my aunt**.' (TOKACHI: Kirikae 1996: 131)

5.4 Category 2 locative nouns

5.4.1 Basic form and long forms

Table 7 lists the basic and long forms of the primary category 2 locative nouns in the Saru dialect for which there are verified examples.

Among the category 2 locative nouns, there are many that are almost always used in their basic form and forms built on the category 1 locative basic long form in patterns 3a or 3b, such as *kim-i 'mountain' or *ror-o 'head seat' are lacking. Many of the

Table 7: Saru dialect category 2 locative nouns.

Basic form	Basic long form	<i>Ke</i> -joined form	<i>hV</i> form	Meaning
kim		kim-ke	kim-ke-he	'the direction of a mountain'
pis		pis-ke		'the direction of a shore'
rep		rep-ke	rep-ke-he	'the direction of the ocean'
ya		ya-ke	(Chitose dialect example <i>ya-ke-he</i>)	'the direction of the coast, the direction of land'
sa				'forward'
mak				'backward'
rik				'high place'
ra		ra-ke	ra-ke-he	'low place'
cupka	cupka-si	cupka-si- ke		'east'
cuppok	cuppok-i			'west'
pena		pena-ke		'upstream'
pana		pana-ke	pana-ke-he	'downstream'
simoysam	simoysam-a			'the right direction'
harkisam	harkisam-a			'the left direction'
ror		ror-ke	ror-ke-he	'the direction of the head seat'
utur		utur-ke	utur-ke-he	'the direction of the lower seats'
siso		siso-ke		'the direction of the seat on the right
harkiso		harkiso- ke	harkiso-ke- he	'the direction of the seat on the left

forms corresponding to long forms are ke-joined forms. On this point, category 2 locative nouns differ morphologically from both category 1 locative nouns and ordinary nouns.

However, forms corresponding to the basic long form do appear, depending on the circumstances.

kotan-u/ (62)a-kor kotan cuppok-i/ ewak kamuy 4.A-have village-AFF/ village west-LF/ god 'my village / west of the village / live the gods' ('the gods who live in west of my village') (SARU: Monbetsu-chō Kyōdoshi Kenkyūkai 1969: 207–208)

This *cuppoki* corresponds to the basic long form of *coppok* 'west'. However, this an example found in verse and, as with the preceding 'my village', which is not a-kor kotan but is in the form [kor + affiliative form], a-kor kotanu, it could be seen as the addition of -i to meet the demand in the verse to keep to five syllables, see Okuda (Chapter 11, this volume), and could be regarded as an underlying form that only rarely emerges.

Also apparent from Table 7 is that category 2 locative words basically come in sets of pairs indicating opposite directions along the same axis, kim-pis, rep-ya, rik-ra, sa—mak, cupka—cuppok, pena—pana. The reference point is usually the speaker or the person whose point of view is being taken or a locative relationship determined by custom.

rik (63) humne ta hemesu-an wa occasionally upper.place LOC climb/go.upstream.SG-4.S and siraun inkar-an. humne ra ta ra-n-an below look-4.S occasionally low.place LOC low.place-INTR.SG-4.S wa he-rik-as-i inkar-an hikeka and head.PF-top-stand-TR.SG look-4.S though 'Once I climbed to a high place and looked down below. And, once I went down to a low place and looked up.' (SARU)

Since the reference point is thus determined by default, it may be thought that even used in their basic form, these words do not need an antecedent noun phrase; however, when necessary, they can appear with an antecedent.

(64) tapan kotan kim-kehe pon-cise-kar-an ta village mountain-LF LOC be.small-house-make-4.S this ра wa PLand 'I built my small hut on the mountain side of this village.' (SARU: S. Tamura 1985: 72)

When it is necessary to clearly indicate the reference point of a relative direction this way, an antecedent noun phrase appears. In such a case there appears to be a tendency for the word to be used in its long form (*ke*-joined form). This appears to be the opposite of rule for category 1 locative nouns for which, when there is no antecedent noun phrase, the long form is used. It is also possible that the reason many category 2 locative nouns do not have basic long forms and do not appear in a form corresponding to a long form is that, since the basic form normally does not need an antecedent noun phrase, the function held by the long form has become different from that of category 1 locative nouns.

5.4.2 Special adverbs derived from category 2 locative nouns

One more phenomenon in which category 2 locative nouns exhibit a behavior different from category 1 locative nouns and ordinary nouns is that special adverbs indicating directions can be formed from them. As shown below, these adverbs are formed by placing the prefixes he-'head', ho-'buttocks', e-'head of ~', o-'buttocks of ~' before and verbs like asi 'stand something up', un 'fit something into', or ne 'become' after, sandwiching the category 2 location nouns between. These are normally used as adverbs, but since their heads are originally verbs, occasionally they are also used as verbs.

he-LN2-asi ho-LN2-asi e-LN2-un o-LN2-un e-LN2-ne o-LN2-ne

Table 8 shows the special adverbs formed primary category 2 locative nouns verified in the Saru dialect.5

The blank entries in the table mean that there are no verified examples of that form; it cannot be said that such forms do not exist, but it is apparent there is a bias in the forms normally used depending on the locative noun appearing in the root position.

- (65) *a-cinkew-e* ka etav-e wa, he-rik-as-i 4.A-hip-AFF even pull.out-TR.SG and head.PF-top-stand-TR.SG inkar inkar hi kusu look look thing because 'since (a dog) pulled on my hip (with its mouth) and looked repeatedly **upward**' (SARU)
- (66) pon ku a-ona-ha kar wa i-kor-e kor. be.small bow 4.A-father-AFF make and 4.O-have-CAUS and e-utun-ne e-ron-ne, head.PF.POSS-the.lower.seat-COP head.PF.POSS-place.of.honour-COP a-e-ak-sinot kor 4.A-with.APPL-shooting-play and 'My father made me a small bow and, to the head seat and to the lower seats, I had fun shooting it.' (SARU)

⁵ Judging from the behavior of the other words, one would think osisoun and oharkisoun should mean 'from the seat to the right' and 'from the seat to the left', respectively, but in reality, it is normal for them to be used to mean 'at or in the seat to the right' and 'at or in the seat to the left'.

Table 8: Adverbs in the Saru dialect derived from category 2 locative nouns.

	he-V-asi	ho-V-asi	e-v-un	o-V-un	e-v-ne	o-V-ne
<i>kim</i> 'mountain direction'			<i>e-kim-un</i> 'toward the direction of a mountain'	o-kim-un '(come) from the direction of a mountain'	e-kim-ne '(go) in the direction of a mountain'	o-kim-ne '(come) from the direction of a mountain'
<i>pis</i> 'shore direction'			<i>e-pis-un</i> toward the direction of a shore'	<i>o-pis-un</i> 'from the direction of a shore'	<i>e-pis-ne</i> 'toward the direction of a shore'	o-pis-ne from the direction of a shore'
rep 'ocean direction'	<i>he-rep-asi</i> 'toward the direction of the ocean'	<i>ho-rep-asi</i> 'from the direction of the ocean'	<i>e-rep-un</i> 'toward the direction of the ocean'	o <i>-rep-un</i> '(come) from the direction of the ocean'		
sa 'forward'	<i>he-sa-si</i> 'in the forward direction'	(ho-sa-si Horobetsu) 'from the forward direction'				
mak'backward' he-mak-asi 'toward the	<i>he-mak-asi</i> 'toward the back'	(<i>ho-mak-asi</i> Chitose, Horobetsu) 'from the back'				
rik'high pllace' he-rik-asi 'from lowe	<i>he-rik-asi</i> 'from lower to higher'	<i>ho-rik-asi</i> 'from higher to lower'	(e-rik-un Nayoro) 'from lower to higher'			
ra'low place'	<i>he-ra-si</i> 'from higher to lower'	(ho-ra-si Shizunai) 'from lower to higher'				
cupka 'east'			e-cupka-un 'toward the east'	(o-cupka-un Nayoro) 'from the east'		

cuppok 'west'	e-cuppok-			
	un 'toward the west'			
ror 'the direction of the head seat'	(e-ror-un Horobetsu, Tokachi, Ishikari, etc.) 'toward the head seat'	(o-ror-un Shizunai) 'from the head seat'	e-ron-ne 'toward the head seat'	o-ron-ne 'from the head seat'
utur 'the direction of the lower seats'	(e-utur-un Horobetsu) 'toward the lower seats'	(o-utur-un Horobetsu) 'from the lower seats'	e-utun-ne 'toward the lower seats'	
siso 'the direction of the seat on the right'	e-siso-un 'toward or at the seat on the right'	<i>o-siso-un</i> 'at or in the seat on the right' ⁵		
harkiso 'the direction of the seat on the left'	e-harkiso- un 'toward or at the seat on the left'	o-harkiso-un 'at or in the seat on the left'		

Since, as mentioned earlier, these words are verbs in terms of their formation, the same word can be used as an adverb or a verb.

- (67) nea nispa i-siren hine **ekimne** arpa that gentleman 4.O-accompany and toward.mountain go.SG ruwe ne akus
 INFR.EVID COP then
 'The gentleman went for the mountain accompanying me.' (SARU)
- (68) a-yup-ihi tura-no tu-n a-ne
 4.A-elder.brother-AFF COM-ADV two-person.CLF 4.A-COP
 ekimne-an yakka
 go.to.the.mountain-4.S though
 'Two people, my elder brother and me, went to the mountain.' (SARU)

The following examples do not appear with person affixes as expected for the verb use. They show, however, characteristics of verbs as well since they are followed by the conjunctive particle *wa* 'and' and the whole phrases including *wa* function as adverbs.

- (69) e-si-so-un wa/
 head.POSS.PF-right-seat-fit.in and/ head.POSS.PF-left-seat-fit.in and/
 a-e-yay-oterke/ e-ciw kane/ an-an rok wa
 4.A-to.APPL-REFL-stamp/ with.APPL-stick and/ exist.SG-4.S PRF.PL and
 'toward the seat to the right / toward the seat to the left / I bouncing / jumping /
 I was doing, then' (SARU: Kubodera 1977: 128)
- (70) **e-cupka-un wa** arpa pet a-turasi hine head.POSS.PF-east-fit.in and go.SG river 4.A-go.upstream and 'I went up the river flowing **to the east**.' (SARU: S. Tamura 1989: 70)

6 The syntactic function of <location>

6.1 <location> as a nominal argument

Ainu shows the subject and object arguments to the predicate by not attaching case markers to the noun phrases.

(71) $[a\text{-}mac\text{-}ihi]_{NP}$ $[menoko\text{-}po]_{NP}$ $[menoko\text{-}monrayke]_{NP}$ $[e\text{-}pakasnu]_V$ 4.A-wife-AFF woman-DIM woman work about.APPL-teach.to

- $hike]_{NP}$ [a-mac-ihi]_{NP} [menoko (72)[menoko ne COP one.of 4.A-wife-AFF woman woman $monraykel_{NP}$ $[e-pakasnu]_V$ work about.APPL-teach.to
- (73) [menoko ne $hike|_{NP}$ [menoko monrayke]_{NP} COP one.of woman woman work $[a\text{-mac-ihi}]_{NP}$ $[e\text{-pakasnu}]_{V}$ 4.A-wife-AFF about.APPL-teach.to (All three examples are CHITOSE.)

All of these three sentences express the same meaning: 'My wife taught our daughter women's work.' The verb *e-pakasnu* 'teach someone something' is a verb that takes three noun phrase arguments, and the noun phrases corresponding to these arguments are placed before the verb, but their order is free. Accordingly, it is also possible to interpret the sentences as 'Our daughter taught my wife women's work', but normally common sense would rule this interpretation out.

Languages that have the so-called SOV word order with the predicate coming last, but which do not show their subject and objects either by case marking or by fixed word order are probably relatively rare. The Nivkh language spoken just to the north of the Ainu also does not case mark its subjects and objects, but there is a constraint that the object must come immediately before the verb, and, moreover, there is the unique characteristic that the initial consonant of the verb changes depending on the final segment of the object, thus clearly differentiating between subject and object (Gruzdeva 1998: 41-42).

Since in Ainu, first and second person, as well as indefinite person are obligatorily marked on the verb by person affixes, if any of these are subject or object, whether a third person noun phrase is subject or object is readily ascertainable, but if both the subject and the object(s) are third person, cases in which they are difficult to identify do arise.

One of the reasons whether a noun phrase is <location> or not is clearly distinguished may be linked to determining the noun phrase's syntactic role. There are verbs in Ainu called locative object verbs that specify a <location> as their object. For example, the verb *oma-re* in the following example is a 3-valence locative object verb taking two objects, but one of them must be <location>.

(74)[ci a-e-pl [saranip or] oma-re [get.burnt/dry/boiled 4.A-eat-thing] [basket place enter-CAUS '(My older sister) put food that had been cooked into the basket.' (SARU)

In this case, since both *ci aep* 'food that has been cooked' and *saranip or* 'basket <location>' are objects, they both have zero case marking, but since saranip is followed by the locative noun or, it is clearly marked as <location>, and thus the sentence is uniquely understood with 'food that has been cooked' as the object of the action and 'basket' as the location into which it is put. If the sentence had been (74'), then, since Saru dialect doesn't have a particle conjoining two noun phrases, it would probably be interpreted as '(Someone) put the cooked food and the basket (into something else).'

(74') [ci *[saranip]* oma-re a-e-pl [get.burnt/dry/boiled 4.A-eat-thing] [basket] enter-CAUS '(Someone) put the cooked food and the basket (into something else).' (Example made up by author)

Furthermore, since it is not necessary in Ainu for a noun phrase that is clear from the context to appear in a sentence and such a noun phrase is not even represented by a pronoun, even if a verb takes two objects, it is normal for only one of them to be present.

(75)sum a-oma-re kor kina kotom wa kera-an oil 4.A-enter-CAUS then grass match and taste-exist.SG pe NMLZ COP 'If one puts oil in, it becomes delicious matching with edible wild greens.' (CHITOSE)

If there were no clear <location> distinction, the example above would be ambiguous between 'put something in the oil' and 'put the oil in something', both of which are reasonable interpretations. However, since sum 'oil' is an ordinary noun in its conceptual form and not <location>, only the latter interpretation is possible.

There are only a limited number of fundamentally locative object verbs like *omare*, but the applicative prefixes introduced in Section 3.5, e- and o-, can be added to any verb, provided the meaning is compatible, and is a highly productive word formation process, particularly in verse.

(76)kamuy sikuma/ an ruwe ne/ sine kuma tapka/ god ridge/ exist.SG INFR.EVID COP/ one ridge above/ poro to e-an be.large lake to.APPL-exist.SG 'the ridge of the gods / existed / above one ridge / **there was** a great marsh' (SARU)

e-an 'there is' follows both sine kuma 'one ridge' and poro to 'great marsh', and either one of them could be a candidate for the <location> called for by e-, but in fact, it is the locative noun tapka 'above (a mountain)' that marks the <location>, and, since to is an ordinary noun in its conceptual form, the only interpretation possible is that in which *poro to* is the subject and *sine kuma tapka* is the locative object.

In Ainu, which does not show the syntactic relations subject and object either by case marking or by word order, the marking of <location> can be considered an effective means for grasping the structure of the sentence.

7 Summary

In this chapter, after presenting an overview of parts of speech in Ainu, the reasons for not recognizing a category "adjective" independent of the category "verb" were explained. Next, subcategories of the category "noun" were examined, first broadly dividing nouns into ordinary nouns and locative nouns, demonstrating that ordinary nouns have the two forms conceptual form and affiliative form, and then explaining the differences in the ways those two forms are used in possession expressions. Following this, it was explained that locative nouns have a basic form and long forms, and it was demonstrated that these forms are morphologically and syntactically different from the conceptual and affiliative forms of ordinary nouns. In particular, it was shown that, whereas the conceptual form of ordinary nouns generally does not have the syntactic function of <location>, locative nouns are always treated as <location>. In addition, it was shown that locative nouns are further divided into category 1 locative nouns and category 2 locative nouns depending on whether or not their basic forms require an antecedent noun phrase, and it was shown that the category 2 locative nouns form a set of adverb patterns indicating directionality. Finally, it was hypothesized that marking for <location> has the function of clarifying syntactic roles in Ainu, which has no marking of noun phrases for the syntactic roles of subject and object.

Additional abbreviations

LF

AFF affiliative form (same as possessive form in other chapters)

long form of locative nouns (same as possessive form in other chapters)

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15 Verbal valency

1 Introduction

This chapter focuses on verbal valency and valency changing alternations in Ainu, which adjust the relationship between semantic roles and grammatical relations. Such alternations are sometimes referred to as voice in a broad sense. It would not be an exaggeration to say that the trademark of Ainu in linguistics is its wealth of voices (Shibatani 1990), their impressive combinability (Bugaeva 2015a, 2017), and multifaceted noun-incorporation (Satō 1992, 2012, 2016, and Chapter 16, this volume). Not surprisingly, voice phenomena are at least to some extent dealt with in every grammar of Ainu (e.g., Tamura (2000 [1988]) and there are separate articles on each particular voice type including valency-increasing alternations such as applicatives (Bugaeva 2010) and causatives (Bugaeva 2015b), and valency-decreasing alternations such as reciprocals (Alpatov, Bugaeva, and Nedjalkov 2007), reflexives (Kirikae 1987; Satō 2007; Kobayashi 2008; Satō 2018), and antipassive (Bugaeva 2021), and the valency-neutral impersonal passive (Satō 1995; Bugaeva 2011).

The aim of this chapter is not to provide a detailed description of voice phenomena in Ainu (for this purpose the reader is directed to the above-mentioned publications), but rather to highlight their most interesting features and familiarize the reader with the genius of Ainu.

The chapter is structured as follows: Section 2 and Section 3 explain the basics of syntactic valency in Ainu. Two major parts of the chapter are Section 4, focusing on verb-coded valency alternations, and Section 5 (based on Kobayashi (2016)), attempting to investigate uncoded argument alternations by using predicate calculus-based approach to semantics. Section 6 provides concluding remarks.

2 The basic structure of Ainu verbs

See Fukuda (Tamura) (2001 [1955]) for a detailed description of the structure of Ainu verbs. This chapter presents a brief overview of Ainu verb structure.

Ainu verbs basically have the structure shown in Figure 1¹ below.² In this chapter, verbs taking a single noun phrase will be termed 1-argument verbs, those taking two will be termed 2-argument verbs, and those taking three will be termed 3-argument

¹ Cf. Schema 1 in Bugaeva (Chapter 1, this volume), which is a more detailed revised model of Fukuda (Tamura) (2001 [1955]).

² In the figure, $\sqrt{\ }$ shows the verb stem.

verbs. Those taking no noun phrases will be termed 0-argument verbs. Furthermore, forms functioning as 1-argument, 2-argument, or 3-argument verbs without the affixation of prefixes or suffixes are each termed "base forms". For example, the form apkas 'walk' is the base form of a 1-argument verb. The form apkas-te 'cause to walk' is a 2-argument verb, but, since it is formed by the suffixation of a causative suffix to the base form, it would be termed a derived verb. There are cases in which the base form is a bare verb root and cases in which the base form consists of a verb-forming suffix added to a root form, and these base forms may further go on to form various verbs. In such a case, the base form may be formed of multiple elements. The base forms of Ainu verbs may have various prefixes and suffixes affixed to them and may then have person affixes affixed before such prefixes or after such suffixes.

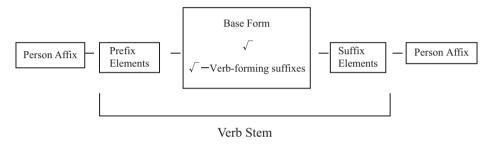


Figure 1: Basic structure of Ainu verbs.

Ainu marks person and number with verbal affixes, which are obligatory. There are also personal pronouns, and personal pronouns and adverbial particles may be placed before the verb; see examples (3) and (4) in Bugaeva (Chapter 1, this volume), but even in such cases, person affixes are attached to the verb. The use of a personal pronoun may deliberately stress the subject, but normally a subject is expressed by the person affixes alone. Since third person is expressed by a zero affix, if an overt affix does not appear, it is interpreted as third person. Also, no prefix can appear before a person-affix prefix and no suffix can appear after a person-affix suffix. Thus, when such prefixes or suffixes are affixed, the presence of a word boundary can be determined. Also, some person affixes are used to show different persons with 1-argument vs. 2-argument and 3-argument verbs. Thus, one can clearly distinguish in Ainu whether a verb is 1-argument or 2/3-argument by means of what person affixes are attached. For example, if the subject is first-person plural exclusive, the 1-argument verb inkar 'see/look' will have the suffix -as attached as in inkar-as 'we (EXCL) see', and the 2-argument verb *nukar* 'see sth' will have the prefix *ci-* attached as in *ci-nukar* 'we (EXCL) see it'. See Table 1.

Table 1: Saru dialect person affixes.3

		Subject Person Affixes		Object Person Affixes
		1-Argument Verb	2-Argument Verb 3-Argument Verb	
First-Person	Singular	ku-		en-
	Plural	-as	ci-	un-
Second-Person	Singular		e-	
	Plural		eci-	
Third-Person				
Fourth-Person		-an	a-	i-

3 Categorization of verbs by valency

Ainu has been said to be a language in which the syntactic valency of a verb is easily determined. For example, Nakagawa states:

Ainu has the characteristic of being extremely transparent with regard to so-called valency. Namely, the valency of each verb can be clearly specified, not semantically, but syntactically and the valency is clearly shown in surface structure by the person affixes. Moreover, the relation between the valency and the arguments that fill it is not merely a relation between the predicate and the noun phrases but can be applied to the internal structure of a compound verb. In other words, sentence structure and the internal structure of verbs can be described with the exact same system. (Nakagawa 1993: 163)

The relation in Ainu between nominal elements and verbal elements can usually be captured clearly, and the number of noun phrases each verb takes is also usually clear.

To avoid confusion, this chapter will not use the terms "intransitive", "transitive", and "ditransitive" as in Tamura (1996) but will use the terms 0-argument verb, 1-argument verb, 2-argument verb, and 3-argument verb, reflecting the valency of the verb. These are the terms used in such works as Nakagawa (1995).

³ The fourth person is used to show: 1) indefinite person, 2) second-person honorific, 3) first-person plural inclusive, and 4) first-person in a quoted sentence or logophoric in folktales.

4 Coded valency alternations

Considering affixes in relation to verb valency, there are three types: those that increase the valency by one, those that decrease the valency by one, and those that, though targeting valency, neither increase nor decrease the valency.

4.1 Valency-increasing alternations

There are only two possible ways to increase valency: either add a new Agent argument (the causer) or add/promote a non-Agent argument. The former alternation results in causation (S=O type), and the latter in applicative alternation (S=A type).

4.1.1 Applicatives

As mentioned in Bugaeva (Chapter 1, this volume), there are three applicative markers. All of them are prefixes promoting peripheral participants (like Instrument, Recipient, or Location) to the direct object or just adding a new non-Agentive participant (like Theme or Content) as a new direct object:

- (1) 'regarding' / 'by' / 'at (a location)' *ko-* 'with respect to' / 'together with' 'in (a location)' / 'toward (a location)'
- Adding these prefixes increases the valency of the verb by one. For example, in (2b), adding the valency-increasing prefix o- 'toward (a location)' to the 1-argument verb ran 'descend' produces the 2-argument verb **o**-ran 'descend to (a location)', which is clear from the deletion of the locative postposition ta, cf. (2a), and the change of the intransitive subject marker -an to the transitive subject marker a-. Similarly, in (2c), adding this prefix to the 2-argument verb ran-ke 'lower sth' yields the 3-argument verb *o-ran-ke* 'lower sth to (a location)', but there is no change in the personal affix.
- (2)a. pet or ta suy ra-n-an hine river place LOC again low.place-INTR.SG-4.S e-wor-ne-an hine pet inkar-an turasi head.POSS.PF-water-COP-4.S and river upstream look-4.S 'One day when I went to the river to wash my face, I looked upstream' (Nakagawa et al. 2016–2021: K8010291UP.380)

- b. *Iskar iwor-i* a-o-ra-n h_i ora, iskar ridge-POSS 4.A-at.APPL-low.place-INTR.SG NMLZ then '(I went down the mountain following the Iskar ridge, and) reached the Iskar hunting grounds.' (Nakagawa et al. 2016–2021: K8109171UP.015)
- c. rik-un kanto wa aynu mosir
 upper.place-belong.to sky ABL human land
 a-i-o-ra-n-ke
 4.A-4.O-at.APPL-low.place-INTR.SG-CAUS
 'I was sent down (lit. 'lowered') from the upper sky to the land humans.'
 (Kubodera 1977: 300)

Applicatives in Ainu are productive, ubiquitous, and versatile. As mentioned, they are allowed with almost all verb classes except meteorological, bodily processes, change of state verbs at one edge of the transitivity hierarchy and effective action verbs at the other (Bugaeva 2015a: 838). It seems that they are often a preferable, and in some cases, the only way, to express the Recipient as in (3). And furthermore, the range of their functions listed in (1) is far from being exhaustive, see more details in Bugaeva (2010) and Bugaeva (Chapter 1, this volume).

(3) a-kor ekas-i hoski-no nea okkay-po utar
4.A-have grandfather/elder-POSS before-ADV that man-DIM PL

ko-i-pun-i
to.APPL-ANTIP-raise-TR.SG
'The young men served grandfather first.'
(Nakagawa et al. 2016–2021: K7803231UP.071)

Ainu has double applicatives but they are limited to *ko-e-* or *e-ko-* with *ko-* encoding Addressee/Recipient and *e-* Content without any visible difference between the two combinations.

- (4) a. hemanta ne ene **sunke**-an hi an haw an why COP like.this lie-4.S NMLZ exist.SG REP.EVID exist.SG 'Why do you say I should lie?' (Nakagawa et al. 2016–2021: K8007292UP.069)
 - b. aynu ne yay-kar wa kamuy ko-sunke wa an human as REFL-make and god to.APPL-lie and exist.SG ruwe ne
 INFR.EVID COP
 '(Then) it transformed into a human and deceived (the other) Kamui.'

(Nakagawa et al. 2016–2021: K8010311UP.072)

ka a-kar ka e-avkap c. nep wa, what even 4.A-make even about.APPL-be.unable and a-i-ipe-re ka. e-ko-sunke4 kor. an-an 4.A-4.O-eat-CAUS even about.APPL-to.APPL-lie and exist.SG-4.S humi an? NONVIS.EV exist.SG 'Why cannot I do anything and they cheat **me** even over **food** (lit. 'being fed')?' (Tamura 1985: 2)

Interestingly, a 3-argument verb with two applicative markers as in (4c) can easily be turned into a 1-argument verb again by the noun incorporation of an applicative object⁵ introduced by the *e*- prefix (*ipe* 'food) and reflexivization of an applicative object introduced by the **ko-** prefix (yay- REFL) as in (5) below. This illustrates quite eloquently the polysynthetic character of Ainu (Bugaeva 2017).

(5) iteki yay-ipe-e-ko-sunke pa no pirka-no PROH REFL-food-about.APPL-to.APPL-lie PL and be.good-ADV suke wa ipe pa kor oka vak pirka cook and eat PL and exist.PL if 'You must not eat meager meals, fix proper food and eat it.' (lit. 'lie to **oneself** about **food**') (Nakagawa et al. 2016–2021: K8010291UP.183)

4.1.2 Causatives

There are productive $-re/-e/-te^6$ and non-productive $-V^7$, -ke, and -ka causatives in Ainu, Non-productive causatives have traditionally been viewed as "transitives", but Bugaeva (2015b) argues that they can be treated as direct causatives with regard to their syntax and function, though causatives in -V do not have the same derivational status and should rather be regarded as lexical causatives, see (6b), (6c), and (44). Also, a cross-dialectal comparison shows that the causative function of -ka is gradually being replaced by the productive causative -re/-e/-te which came to be used as a default causative marker of both indirect (or distant) and direct (or contact) causation.

⁴ It is unclear why the personal object marker i- (4.0) 'me' is omitted here. There is a possibility that the verb e-ko-sunke 'cheat sb over sth' functions here as an auxiliary verb; cf. (48b) and (49b) in Bugaeva (Chapter 1, this volume).

⁵ See more on the incorporation of applicative and inherent objects in Bugaeva (Chapter 1, this vol-

⁶ The form -re suffixes to a root ending in a vowel or /y/. The allomorph -te is suffixed to roots ending in consonants other than /y/ or /r/. The form -e is suffixed to roots ending in /r/.

⁷ The choice of the vowel is not fully predictable, for details see Shiraishi (Chapter 13, this volume).

Though Fukuda (Tamura) (2001 [1955]: 478) states regarding *-re/-te/-e*, "as long as there is no semantic impediment, it can attach to any verb to make its causative form", in reality, 0-argument meteorological verbs do not allow this type of causativization and are generally resistant to any valency alternations (Bugaeva 2015a: 837).

Non-productive causatives are limited in number and derived only from verbs of certain semantic groups, i.e., -V attaches to base verbs denoting processes/states, -ka to spontaneous verbs denoting processes/states/actions and internal states/processes, and -ke to process/state and motion verbs; except causatives in -ke, which are only derived from 1-argument verbs, all other causative markers may derive causatives from both 1-argument and 2-argument verbs.

Causatives from 1-argument verbs naturally result in 2-argument verbs and in the respective causative constructions the erstwhile subject turns into an object (S=O), while a newly added Agent (the causer) becomes a new transitive subject (A) as in (6b). Causatives from transitives (here direct causatives) result in a double-object construction (6c), but the overt expression of both causee objects as in (6c) is infrequent because at least one of them tends to be coreferentially omitted.

- (6) a. *ku-tek-kotor-o kap-u tuy*1SG.A-hand-surface-POSS skin-POSS cut
 'The skin on my palm is ripped off.'
 (Nakagawa 1995: 279)
 - b. arpa-an wa hat punkar a-tuy-e wa
 go.SG-4.S and grape vine 4.A-cut-TR.SG and
 ek-an yak pirka
 come.SG-4.S if be.good
 'Go out and cut grapevine.' (Nakagawa et al. 2016–2021: K7803233UP.055)
 - c. ki kusu hat punkar a-e-tuy-e-re wa
 do because grape vine 4.A-2SG.O-cut-TR.SG-CAUS and 'That's why I told you to cut the grapevines.' (lit. 'made cut indirectly, i.e. by telling')
 (Nakagawa et al. 2016–2021: K7803233UP.144)

A number of languages put restrictions on causative derivations from transitives (Nedjalkov and Silnitsky 1969, 1973) and even more languages disallow double causatives (Kulikov 1993), which is, however, not the case in Ainu (6c).

It is noteworthy that direct causee objects can be incorporated as *puma* 'wage/ charge' in (7c) and even antipassivized as in (8), but indirect causee objects cannot, which is probably a universal ban imposed by their high degree of individualization and specificity.

- (7) a. siro-kane seta a-**kor** pon rusuv white-metal be.small dog 4.A-have DESI 'I want a silver dog.' (Nakagawa 1995: 227)
 - b. nep ka a-kor- e^8 ka puma pa ka what even wage/charge even 4.A-have-CAUS PL even somo ki no NEG do and 'They didn't get their pay money at all.' (Nakagawa et al. 2016–2021: K8108011UP.005)
 - c. konto i-tura pa utar then 4.0-go.together.with PL kin/people a-**puma**-kor**-e** 4.A-wage/charge-have-CAUS PL 'Then I paid **money** to **the people** who carried things.' (Nakagawa et al. 2016–2021: K7803233UP.144)
- (8)i-newsar-ka (ANTIP-be.amused-CAUS) 'amuse people' i-oripak-ka (ANTIP-feel.humble-CAUS) 'make people feel humble' i-rayap-ka (ANTIP-be.surprised-CAUS) 'surprise people' (Bugaeva 2015b: 451)

4.2 Valency-decreasing alternations

Valency-decreasing in Ainu includes reciprocal, reflexive, and antipassive alternations. Reciprocals and reflexives are similar in that a participant(s) fulfills both the two semantic roles of Agent and Patient, which reduces the object argument. Antipassivization decreases verbal valency in that the original object is either demoted or deleted (depending on a language); it is an S=A type of alternation because the original transitive subject becomes intransitive.

4.2.1 Reciprocals

In case of canonical reciprocals, the roles are doubled: each of two participants is involved in two symmetrical inverse actions serving simultaneously in the semantic roles of Agent and Patient so the reciprocalized argument is always plural. The result-

⁸ Note that the Ainu verb kor-e 'give' (lit. 'make have sth/sb') is derived from the verb kor 'have sth/ sb' with the productive causative suffix -re/-e/-te.

ant reciprocal situation (9c) consists of the following base situations as in (9a) and (9b). Each original object in (9a) ('you') and (9b) ('me') is deleted and becomes part of the plural subject of the newly derived reciprocal construction in (9c) ('we (INCL)', i.e., 'I and you'). This is a canonical subject-oriented reciprocal construction and it is always intransitivizing. This type of reciprocal is highly productive: they can be formed from both inherent (9c) and derived 2-argument applicative (41), (13) or causative verbs; restrictions on 2-argument verbs are likely to be of trivial nature, like the inanimate subject of the base verb.

- (9) a. tan ukuran mosma a-e-tumam this last.evening another 4.A-2SG.O-sleep.embracing 'I will hold you tonight (as you sleep) one more time.'

 (Nakagawa et al. 2016–2021: K7807151UP.185)
 - tan ukuran mosma e-i-tumam
 this last.evening another 2SG.A-4.O-sleep.embracing
 'You will hold me tonight (as I sleep) one more time.' (constructed example)
 - c. **u-**tumam-an hine hotke-an
 RECP-sleep.embracing-4.S and sleep-4.S
 'We held **each other** and slept.' (Nakagawa et al. 2016–2021:
 K8109171UP.069)

"Indirect" reciprocals, which are also subject-oriented, are a common label for reciprocals derived from base 3-argument verbs. The Recipient/Addressee object is reciprocalized, while the Theme object stays intact. Almost all 3-argument verbs in Ainu are derived (for a single exception see footnote 20) either from applicatives (10b) or causatives (7b).

- (10) a. sekor patek a-ona-ha i-pakasnu kor oka-an QUOT only 4.A-father-POSS 4.O-teach.to and exist.PL-4.S 'Saying so constantly, my father taught me.' (Nakagawa 1995: 318)
 - b. kas-i e-hanke usi-ke sorekus ka top-POSS to.APPL-be.close place/time-place even exactly a-ona-ha a-yup-utar-i **e-**pakasnu 4.A-father-POSS 4.A-older.brother-PL-POSS about.APPL-teach.to kusu pa p ne PL NMLZ COP because 'Which area was closest to the village, all these things father had taught **older brothers**.' (Nakagawa et al. 2016–2021: K8007292UP.166)

c. **u-**w-e-pakasnu RECP-EP-about.APPL-teach.to 'They teach it to **each other**.' (Tamura 1996: 808)

Reciprocals in Ainu can be object-oriented too, for instance, when the canonical subject-oriented reciprocal construction (11a) is causativized (11b).

utar **u-**kovki (11)a. nea nispa kor oka that rich.man PL RECP-attack and exist.PL siri a-nukar seemingly.COMP 4.A-see 'I could see the elders fighting each other.' (Nakagawa et al. 2016–2021: K8010281UP.168)

b. *a-ak-ihi* a-utar-i utar u-koyki**-re** 4.A-younger.brother-POSS 4.A-kin/people-POSS PL **RECP-attack-CAUS** 'My younger brother made the villagers fight against each other.' (Nakagawa et al. 2016–2021: K8010281UP.071)

There is also a typologically interesting type of object-oriented reciprocal with the meaning of joining sth/sb together. The reciprocals belonging here denote joining, mixing, comparing two or more entities together, and the like. The object is always semantically plural or it is expressed by two coordinated nouns or it denotes an entity or substance parts of which change position relative to each other. There are about 20 object-oriented reciprocals at our disposal and all of them (with three exceptions) are derived either from causatives or applicatives. The registered examples of object-oriented reciprocals are typical cross-linguistically with respect to their lexical meaning, their base verbs being 3-argument lexical reciprocals with the meaning of joining in the broad sense (for instance, in Japanese there are more than 80 of them) (Alpatov, Bugaeva, and Nedjalkov 2007: 1776).

- (12)a. ivotta i-v-os cip **sina** hani extremely ANTIP-EP-after boat tie **EXCL** 'Tie down the boat after (everyone)!' (Nakagawa et al. 2016–2021: OI990310UP.028)
 - b. pas pirakka a-kema-ha a-ko-sina wa run wooden.clog 4.A-leg-POSS 4.A-to.APPL-tie and 'I put the magic **clogs** on **my feet**.' (Nakagawa et al. 2016–2021: OI9810132KY.017)

c. *ku ay a-u-ko-sina wa a-nu p ne* bow arrow 4.A-RECP-with.APPL-tie and 4.A-hear NMLZ COP 'I tried to bundle the bow and an arrow **with each other**.' (Nakagawa et al. 2016–2021: OI990302UP.029)

And finally, Ainu seems to lack possessive reflexives proper like 'test each other's strength' or 'listen to each other's stories', but it has a special type of "quasi-possessive" reciprocal, which involve the incorporation of the **u**- prefixed noun such as **u**-oruspe 'each'other's stories' (*u*- is the possessor of *oruspe*) in **u**-oruspe-nu 'listen to each other's stories' below. These forms seem to lack synonymous correlates with a non-incorporated object. See more examples in Alpatov, Bugaeva, and Nedjalkov (2007: 1773).

(13) a-po-utar-i a-mippo-utar-i u-ko-payeoka
4.A-child-PL-POSS 4.A-grandchild-PL-POSS RECP-to.APPL-come.and.go.PL
u-oruspe-nu-an kor oka-an ayne
RECP-story-hear-4.S and exist.PL-4.S finally
'The sons and grandchildren went back and forth. As we led our lives discussing things with each other.' 'lit. 'hearing each other's stories')
(Nakagawa et al. 2016–2021: K8010291UP.517)

The reciprocal prefix **u**- can attach to locative nouns, postpositions, adverbs (cf. *sam* 'near' > **u**-sam' near each other', *tura* 'with sb/sth' > **u**-tura' with each other, together', *neno* 'like this' > **u**-neno 'like each other, similar to each other') and body part nouns, but the latter need to be incorporated as in **u**-tek-kisma 'shake hands, seize each other's hands' (OI), which is the "quasi-possessive" reciprocal type as in (13). There is also an adverb **u**-taspa with the meaning 'mutually, each other, by turns' used with both prefixed and lexical reciprocal verbs.

4.2.2 Reflexives

In a canonical reflexive construction, subject and object are the same entity as in *yay-ipe-re* (REFL-eat-CAUS) 'feed oneself' or *yay-kar* (REFL-make) 'transform oneself' in (4b); the reflexive prefix is *yay-*. However, there is also another reflexive prefix, namely *si-*, as in *si-turi-ri* 'stretch oneself' or *si-tuy-tuy-e* 'brush off dust/dirt of oneself'.

In fact, the difference between the two reflexive prefixes has been one of the most hotly debated topics since the early days of Ainu studies. At first glance, it looks rather simple:

(14) hekaci pet or un rawkuske ayne **yay-**pusu boy river place ALL dive finally REFL-draw.out 'A boy dives into the river and finally pops up.' (Kindaichi 1931: 149) (15)rav **si-**pusu ranke **si-**pusu ranke avnu dead human REFL-draw.out ITERA REFL-draw.out ITERA mom sir i-ki appearance ANTIP-do float 'It looks like a body is floating up and down.' (Kindaichi 1931: 149)

Kindaichi (1931; 149), Kindaichi and Chiri (1974 [1936]: 97), Tamura (2000 [1988]: 66-67), and Tamura (1996: 622) analyze **yay-** as an intentional reflexive and **si-** as an unintentional reflexive; in other words, yay- as reflexive proper and si- as anticausative. Kirikae (1994: 316) suggests that *yay*- is 'the agentive self' and *si*- is 'the patientive self', which is close to Kindaichi's original interpretation. Claiming that Kirikae's (1987) observation should be regarded as a major principle in Ainu, Kobayashi (2008: 140) points out that **si-** can function as a Theme/Patient only and cannot function as a causee, which is basically in line with previous studies.

The same principle seems to be at work in the following possessive reflexives, or to be precise, "quasi-possessive" reflexives in which the reflexive prefix is the possessor of an incorporated noun (recall "quasi-possessive" reciprocals in Section 4.2.1). The action described in (16) is intentional, while that in (17) is unintentional or spontaneous.

(16) **yay-**par-oyki REFL-mouth-do.about 'to feed oneself' (lit. 'do about self's mouth') (Satō 2018)

(17)**si-**etu-uyna

REFL-nose-take.PL

'to hold **one's** nose unintentionally (= to be astonished)' (In older times, people believed that they should hold their nose when astonished not to let their spirit go out.) (Satō 2018)

When applied to Ainu, Geniušienè (1987), which is the most comprehensive typology of reflexives to date, fails to capture the functional difference between the two prefixes, e.g., both (16) and (17) are "quasi-possessive" reflexives; see more intersecting autocausative, anticausative, and reflexive-causative examples in Bugaeva (2012: 488–489). However, if we look closely, there are also many si-cases which cannot be explained by the principle of unintentionality. Consider the following examples from Satō (2007):

(18) **si-**nuv-e REFL-carve/write/tatoo-TR.SG 'tattoo oneself'

- (19) inan kun_ ne yakka pirka na. ku-si-kasuy-re whoever man COP though be.good SFP 1SG.A-REFL-help-CAUS rusuy na. DESI SFP 'Everyone is OK. I want to make him help me (lit. 'self')'
- (20) **si-**ranpewtek**-ka**REFL-know.nothing-CAUS
 'to **pretend** to know nothing' (lit. 'make oneself know nothing')

Satō suggests that in all these examples *si*- is used because the subject is only indirectly (through other people) involved in an action directed to himself. In (18), *si*- is used because the action *si*-nuye 'tattoo oneself' can never be done without the participation of others: the subject can never tattoo oneself because the pain is unbearable. In *si*-kasuy-re 'have others help oneself' (19), *si*- is used because the subject is only indirectly (through others) involved in an action directed to himself, in this case, in 'helping'; see also (32).

In si-ranpewtek-ka 'pretend to know nothing' (20), indirect si- is used because the action 'pretend to know nothing' can never occur without others' participation: the subject can pretend to know nothing only when others think so. In the latter case, the interpretation of pretending is favored because the verb contains an overt causative suffix -ka, which is usually closely related to the subject's intention; si-...-CAUS is regularly used to encode a pretended action in Ainu (Satō 2018). A similar combination of the reflexive and causative markers $\tilde{n}e$ -mbo- is frequently attested in Paraguayan Guaraní texts (Gerasimov 2019: 89). According to Velázquez-Castillo (2008: 391–392), in many such cases, the derivatives in question acquire a meaning of simulative (=an action of pretending).

To sum up, Satō (2007) proposes to regard *yay*- as 'direct reflexive' and *si*- as 'indirect reflexive'. In direct reflexive *yay*-, the subject participates in an action directly, while in indirect reflexive *si*-, the subject participates in an action only indirectly, i.e., through the involvement of other people. While Geniušienè's (1987) framework seems to show that reflexives in most languages are mainly used to encode 'the absence of other people's participation in an action' (e.g., Agent-Patient coreference in proper reflexives), Ainu seems to overtly encode 'dependence on others' in *si*- reflexive expressions and 'the absence of dependence on others' in *yay*- reflexive expressions. To our knowledge, so far no other language has been reported as having this typologically unusual semantic distinction in reflexives.

To conclude this section, we would like to present a few newly attested minimal pairs in *yay-* and *si-*, which substantiate Satō (2007).

- (21) *vay-tuy-tuy-e* 'brush off dust/dirt of **one's** body' (Kayano 1996: 443) si-tuy-tuy-e 'brush off dust/dirt of one's body' (Appears only in contexts when a wife is watching the very moment of her husband turning into a bird. The husband acts as if brushing dirt off his body, but in reality he is getting rid of his human clothes.) (Bugaeva 2004: 312), (Kubodera 1977: 407)
- (22) **yay-**etaye 'To draw **one's self** out as out of a hole.' (Batchelor 1938: 561) si-etaye 'To withdraw. To draw in (as a snail its horns). To abate (as water in a river). To contract.' (Batchelor 1938: 448); 'pull **oneself** in, return into the house' (Appears in contexts when strangers come to someone's house and a wife goes outside to look at them and then goes back to the house (lit. 'pulls herself in') to report to her husband who decides whether to let them in.) (Bugaeva 2004: 258)

As in the case of reciprocals, both reflexive *yay*- and *si*- can attach as possessors to category 1 locative nouns (23), see Nakagawa (Chapter 14, this volume), and body part nouns, to the latter only when they are incorporated.

hekaci **si-**ka-osoma-re⁹ (23) hunna aynu **si-**ka-okuvma-re who human bov REFL-top-defecate-CAUS REFL-top-urinate-CAUS rusuy pe DESI thing/person exist.SG 'Who wants to let a human child pee on and poop on **oneself**?' (Nakagawa et al. 2016–2021: K7807151UP.138)

4.2.3 Antipassives

The prefix i- '(indefinite) person/thing' (Tamura 1988: 67) is traditionally regarded as a generalized object marker, but Bugaeva (2021) argues that it can be regarded as an antipassive marker per se based on its syntactic (eliminating a Patient/Theme/Recipient argument), semantic (denoting an unspecified generic participant or lexicalizing it to a single or subset of objects), and discourse (Patient-defocusing) properties.

Thus, antipassives from 2-argument verbs result in 1-argument verbs and the original object is obligatorily omitted. It is an S=A type alternation, which is evidenced

⁹ A grammatically correct form would be *si-ka-o-osoma-re* 'make/let sb poop **on** himself' and *si-ka-ookuyma-re* 'make/let sb pee **on** himself' but the applicative **o-** was dropped probably because this is an unaccented position where such phenomena can easily occur (Nakagawa p.c.).

by the change of the transitive subject indexing (A) to the intransitive subject indexing (S). Pragmatically, the antipassive construction is preferred when the focus is on Agent and the action itself rather than on the Patient.

- (24) a. *nea* kamuy **a**-ri kor that bear 4.A-skin when 'When I skinned that bear . . .' (Tamura 1996: 579)
 - b. *i-ri-an* wa or-o wa sini-an na.

 ANTIP-skin-4.S and place-POSS and rest-4.S SPF

 '(Please stay!) I will skin (the **catch**, lit. 'thing') and then have a rest.'

 (Shizunai Board of Education 1991–1995: O 0130054_6)

Antipassives from 3-argument verbs resulting in 2-argument verbs are rather rare, e.g., poyke 'mix' (vi) > ko-poyke 'mix with sth/sb' (vt) > i-ko-poyke 'mix with people' (vi). It is much more common to applicativize antipassives than to antipassivize applicatives in order to turn them into 2-argument verbs again as in (25c); cf. the applicative form in (25d).

Also note that it is the Recipient argument that is antipassivized in (25b) and (25c), which is, according to Malchukov, Haspelmath, and Bernard Comrie (2010: 31), extremely rare cross-linguistically. Of course, Ainu perfectly allows antipassivization of the Theme/Patient argument too as in (3).

- (25) a. *a-kasuy* wa a-se wa sem or un a-rura
 4.A-help and 4.A-shoulder and porch place ALL 4.A-carry
 'I helped by carrying it on my back to the shed.'
 (Nakagawa et al. 2016–2021: K8010291UP.179)
 - b. *ukuran* wa-no arpa wa **i**-kasuy kor an. last.evening ABL-ADV go.SG and ANTIP-help and exist.SG '(Our grandmother) from evening went (to the place where a wife had died) and is helping **people**.' (Tamura 1996: 221)
 - c. tokaci wa ek pewre kur monrayke e-i-kasuy.
 Tokachi ABL come.SG young man work with.APPL-ANTIP-help
 'A young man who came from Tokachi helped people with work.'
 (Sunazawa 1983: 160)
 - d. *a-sa-utar-ihi* nep ka a-e-kasuy ka somo ki 4.A-elder.sister-PL-POSS what even 4.A-with.APPL-help even NEG do 'I did not help **my sisters** with **anything**.' (Nakagawa et al. 2016–2021: K7908032UP)

According to Bugaeva (2013, 2015a, 2021), antipassives in Ainu (totaling 48 verbal lexemes in our corpus) are much less frequent than applicatives or causatives. They are derived from verbs of Perception/ Cognition/ Ingesting/ Interaction/ Communication and Grooming/Traditional Activities and never from highly transitive verbs of Creation/ Transformation/ Contact by Impact and Effective Action, which is hypothesized to be a particular feature of antipassives in non-ergative languages (Bugaeva 2021: 232–233).

Antipassives in Ainu are not fully productive, many of them tend to be lexicalized and conventionalized in Ainu culture (Chiri 1973b [1942]: 509).

(26) *ku* 'drink sth' > *i*-*ku* 'drink **alcohol**' (OI) oman-te 'make sb go, send off sth/sb' > i-y-oman-te (ANTIP-EP-go.SG-CAUS) 'send off the **spirit** of the bear god' (lit. 'make thing/person go') (OI) *amam pus ca* 'pinch off heads of **millet**' > *i-cha* (same meaning) po humke 'put child asleep by singing a **lullaby**' > **i-**humke (same meaning) (Kindaichi and Chiri 1974 [1936]: 67).

As we see, although a syntactic expression of the object is blocked by the antipassive marker i-, semantically the object is present often being lexicalized to a single object ('alcohol', 'spirit', 'millet', 'lullaby').

The antipassive *i*- can also be used as an unspecified possessor on obligatorily possessed nouns such as body parts, kinship terms, and locative nouns when they are incorporated as objects of transitive verbs (Bugaeva, Nichols, and Bickel 2022); see example (56) in Bugaeva (Chapter 1, this volume), cf. the use of reciprocal and reflexive prefixes as possessors in Section 4.2.1 and 4.2.2.

Moreover, the antipassive prefix *i*- is also residually retained on adverbs, demonstratives, question words with varying degrees of morphological transparency, and interjections with obscure verb-based morphology (e.g., *i-mak* 'behind that, beyond, on the opposite side', lit. 'behind something, opposite of something' (Nakagawa et al. 2016–2021: K8010281UP.207), *i-y-os-(no)* 'after that, later', lit. 'behind something' (Nakagawa et al. 2016–2021: K8010301UP.150), i-ne 'what', 'which', lit. 'being something' (Tamura 1996: 242), i-y-osserke-re 'well well' (Kindaichi and Chiri 1974 [1936]: 135–136)).

4.2.4 Miscellaneous

There are lexical prefixes **he-** 'head' and **ho-** 'bottom' originating in nouns, e.g., **he-**etaye 'pull one's head in' (vi) < etaye 'pull sth' (vt), **ho-**pun-i 'get up' (vi) < pun-i 'raise sth'; they occur immediately before the base. For example, when he- 'head' is prefixed to the 2-argument verb kiru 'turn sb/sth', the 1-argument verb **he-**kiru 'turn one's head, turn around' results. In addition, the conceptual forms of the original nouns 'head' and 'bottom' also fit with this category. This alternation is in many ways similar to O-incorporation, cf. Bugaeva (Chapter 1, this volume) and Satō (Chapter 16, this volume).

And finally, a few words about the least studied prefix *ci*-, which can be broadly characterized as 'middle' (Tamura 1996: 48). In our corpus (Nakagawa et al. 2016–2021), we have chosen to gloss it an object-resultative marker (RES); see object-oriented resultative examples below.

- (27) oha-sir ta ci-wen-te kotan or ta an empty-ground LOC RES-bad-CAUS village place LOC exist.SG pe e-ne aan hine thing/person 2SG.A-COP ADM.SG and 'You were living in this unpopular barren village!'

 (Nakagawa et al. 2016–2021: K7708242UP.213)
- (28) kem-ihi ci-car-i uske-he blood-POSS RES-scatter-TR.SG place-POSS 'a place where blood clots are scattered' (Tamura 1996: 48)
- (29) **ci-**rus-ko-cup-u hine iwak ruwe ne RES-fur-with.APPL-cover-TR.SG and return INFR.EVID COP 'She came back so hairy.' (lit. 'covered with fur') (Nakagawa et. al 2016–2021: K8010291UP.021)

4.3 Valency-retaining alternations

4.3.1 'Indefinite' causative

The causative suffix $-yar/-ar^{10}$ referred to as 'indefinite' does not affect valency, which is typologically unusual. There are derivations from both 1-argument as in (30b) and 2-argument verbs (31b): the original S/A is eliminated and replaced by a new S/A (the causer), while the original O, in the case of base 2-argument verbs, is retained. There is no increase in valency because the causee is only implied and cannot be encoded with an NP or cross-referenced on the verb. Note that examples below feature two verbs with the meaning 'eat': one is a 1-argument verb ipe 'eat/dine' and the other is a 2-argument verb e 'eat sth'.

(30) a. nen ka suy **ipe**-an what even again eat/dine-4.S 'We ate dinner together again.' (Nakagawa et al. 2016–2021: K7708242UP.112)

¹⁰ This suffix is realized as *-yar* after stems that end in vowels and as *-ar* after stems that end in consonants.

- b. ipe**-var**-an ro eat/dine-INDEF.CAUS-4.S COHORT 'Let's have some food eaten.' (lit. 'let's **make somebody** eat') (This phrase might be used in the presence of a guest when the speaker suggests to the listener that they offer food to the guest. It is polite in that the guest is not directly mentioned.) (Tamura 2000 [1988]: 214)
- (31) a. *kera-an* hike a-**e** kor an-an taste-exist.SG one.of 4.A-eat and exist.SG-4.S 'I ate many delicious things (everyday).' (Nakagawa et al. 2016–2021: K7708242UP.014)
 - b. e-kor topenpe sa-n-ke wa e-yar 2SG.A-have sweets front.place-INTR.SG-CAUS and eat-INDEF.CAUS 'Put forth some of your sweets and **let people** eat (them).' (Fukuda (Tamura) 2001 [1955]: 54)

The suffix -yar/-ar can encode only indirect causation. It is characterized as productive (Fukuda (Tamura) (2001 [1955]: 50-52), but the number of verbs actually registered with this suffix is small (39 verbs in the sample in Bugaeva (2015b: 464)).

According to Fukuda (Tamura) (2001 [1955]) and Tamura (2000 [1988]: 214), the indefinite causative is used when it is necessary to cause an unspecified person to perform an action, or have an action performed by someone unspecified, without doing it oneself; see (32) below. Pragmatically, it can also be used instead of the causative to show respect when the person caused is known (30b).

(32) kamuy tono or-o ta god lord/master place-POSS si-apa-mak-a**-var**-an REFL-door-open-TR.SG-INDEF.CAUS-4.S 'We had the gates opened at the Japanese person's house. (lit. 'we caused (**someone**) to open self's gates') (Nakagawa et al. 2016–2021: K8108012UP.104)

4.3.2 Sociative

A prototypical sociative¹¹ situation is a symmetrical situation involving two (or more) participants with the same semantic role: both are Agents (in case of subject-oriented sociatives) or Patients (in case of object-oriented sociatives) being involved in two (or more) parallel actions in cooperation with each other. There is a semantic affinity between soci-

¹¹ Is also referred to as "associative", "cooperative", or "collective".

atives and reciprocals: both involve plural participants and plural actions so in many languages they are encoded by the same marker, for example, -*aw* in Japanese.

In Ainu, sociative markers are not completely the same as reciprocal as they consist of a combination of the reciprocal u- 'each other' plus applicative ko- 'with' and reciprocal u- plus applicative e- 'with'. Synchronically, these 'with each other' prefixes were reanalyzed as single sociative markers uko- and uwe-, 12 which do not change valency and add the meaning 'together'. The respective applicative forms in ko-/e- 'with' are often missing synchronically, or exist with other non-comitative meanings as in (33), but, of course, that does not obscure the applicative origin of sociative markers.

(33) ani 'hold/carry sth/sb in one's hands' (Tamura 1996: 12–13)
 → uko-ani 'hold/carry sth (and sth) together in one's hands' (Tamura 1996: 755)
 cf. ko-ani 'hold/carry sth to sb/some place' (Tamura 1996: 314)
 *'hold/carry sth with sth'

The difference between **uko-** and **uwe-** is not clear and with some verbs they are even interchangeable as in (34) and (35). However, there are much more sociative derivations with *uko-* than with *uwe-*; that is probably because the comitative function 'with' is relatively rare in *e-* applicatives (and common in *ko-*); see Section 4.1.1.

- (34) *kamuy-utar opitta* **uko-**yay-kopuntek god-PL all SOC-REFL-be.pleased.with 'Then all the (fish) Gods rejoiced **together**.' (Nakagawa et al. 2016–2021: OI990423KY.066)
- (35) **uwe-**yay-kopuntek-an wa
 SOC-REFL-be.pleased.with-4.S and
 'We had a good time **together**.' (Nakagawa et al. 2016–2021: OI000118UP.157)

There are sociative derivations from 1-argument verbs and 2-argument verbs. The former can only be subject-oriented (36), i.e., the subject is plural, while the latter can be either subject (37) and object-oriented (38), which is determined by the context.

(36) **uko-**mismu wa nepki patek ki pe a-ne
SOC-feel.sad and work only do person/thing 4.A-COP
ruwe ne
INFR.EVID COP
'We were the people who felt sad **together** and only worked.'
(Nakagawa et al. 2016–2021: OI9810132KY.068)

¹² -w- is an epenthetic consonant.

- (37)sine set a-**uko-**kor hine oka-an ruwe ne one bed 4.A-SOC-have and exist.PL-4.S INFR.EVID COP 'We slept **together** in the same bed.' (Nakagawa et al. 2016–2021: K7908032UP.035)
- V(38) ku **uko-**an-i ek av wa sov-ne wa arrow SOC-hold-TR.SG and RFN outside-COP and come.SG bow Vna SPF RFN '(The Japanese lord) will go outside holding in his hands a bow and an arrow **together**.' (Nakagawa et al. 2016–2021: OI990508KY.030)

However, if both subject and object referents are plural, it can be unclear whether we are dealing with a subject- or object-oriented sociative interpretation, cf. (i) and (ii) interpretations below.

- hekattar uimak (39) a-kor uwe-pakasnu ta wa, 4.A-have children one.behind.another LOC SOC-teach.to and ene avnu-moto-kor hi ve wa like.this Ainu/human-origin-have NMLZ say/tell SFP 'My children, teach them (=next generations) one after another, tell like this about origins of the Ainu.' (Tamura 1996: 880)
 - 'you together (all of you) teach them' subject-oriented sociative (i)
 - (ii) 'you teach them **together (all of them**) – object-oriented sociative

Moreover, there can also be a referential conflict between a subject- and/or object-oriented sociative (39) and a homonymous "indirect" reciprocal; recall u-w-e-pakasnu 'teach it to each other' in (10c), but the context serves to resolve it.

And finally, in addition to the combination of reciprocal and applicative markers uko- and uwe-, the sociative meaning can also be expressed by a combination of the reciprocal prefix **u**- and causative suffixes -**re/-e/-te** or -**ka**, literally 'make each other do sth', which quite unexpectedly results in 'together'. This is not a typologically common combination for a sociative marker, yet it is attested in Kabardian (Alpatov, Bugaeva, and Nedialkov 2007: 1799).

Almost all of these sociatives are derived from intransitive bases and it seems that they have a kind of emotive coloring. Such derivations are few in our corpus (Nakagawa et al. 2016-2021).

- (40) kotan-kor-nispa utar-ehoski wa **u**-horip-pa-**re**¹³ pa village-have-rich.man kin/people-precede and SOC-dance-PL-SOC PL sorekusu ki rok ayne exactly do PRF.PL finally 'The village chief stood at the forefront and everyone **altogether** carried out an exorcism.' (Nakagawa et al. 2016–2021: K7803232UP.059)
- (41) *utar nen ka ta u-e-katayrotke*kin/people who even LOC RECP-with.APPL-be.friend.with *kur u-kira-re p ne na*person SOC-escape-SOC NMLZ COP SFP

 'The villages, people whoever are friends with each other must escape
 altogether.' (Nakagawa et al. 2016–2021: K7908032UP.336)

4.3.3 Miscellaneous

There are lexical prefixes e^- 'head of (something, someone)' and o^- 'bottom of (something, someone)' originating in the affiliative (=possessive) forms of the respective nouns. When these are prefixed to a verb, they fill one noun element required by the verb, but at the same time, they require their own possessors. As a result, the overall valency of the verb does not change. For example, the verb ca 'cut off sth' is a 2-argument verb, but when the prefix e^- meaning 'the head of' is prefixed, it results in the form e^-ca meaning 'cut off the end of sb/sth'. One of the two noun phrases required by the base form ca is satisfied by the prefix e^- , but since e^- requires its own possessor, even with e^- prefixed, the verb is a 2-argument verb; see also (2a). Thus, when this type of prefix is added, it neither increases nor decreases the valency of the verb overall.

These prefixes can be understood in a way as being parallel to the incorporation of the affiliative (=possessive) form of a noun; see S-incorporation in Bugaeva (Chapter 1, this volume) and Satō (Chapter 16, this volume). Since e-/o- behave in the same way as the affiliative form of nouns, the prefixes e-/o- are termed affiliative form-like prefixes in this chapter and are glossed as "head(/bottom).POSS.PF".

There are also a few adverb-like prefixes, which are not related to valency by definition. However, we would like to include them here to facilitate the reader's understanding of Ainu texts in the Appendix: *toyko-* 'violently', *wen-* 'awfully, violently', *sirko-* 'violently', *toy-* 'violently, awfully', *ray-* 'awfully, violently', *ru-* 'somewhat', and *sir-* 'around'.

¹³ The regular meaning of this verb is 'dance together' but in this context it means 'carry out exorcism together'.

5 Uncoded alternations

Syntactic valency or the number of nominal arguments an Ainu verb can take is basically fixed. It may appear that for the base forms of most verbs, the semantic roles the arguments take are also pretty much determined, but there are verbs for which, without a change in the number of arguments, there are alternations in the semantic roles the arguments play. 14 To explain these alternations we will use a predicate calculus-based approach to semantics.

5.1 Verbs with which the semantic roles of arguments alternate

In this section, the semantic roles played by nominal arguments are broadly divided into three: Agent, Theme, and Space/Location, and verbs with which alternations arise in the roles played by nominal arguments are considered. 15

1-argument verbs may take any of Agent, Theme, or Space/Location as subjects. 1-arguments verbs that take an Agent as subject include ones like apkas 'walk' and vapkir 'throw'. Verbs that take Themes as subjects include ones like makke 'open' and tuy 'break/get cut'. Those that take Space/Location as subjects include peker 'be bright' and hutne 'be narrow/constricted'. In addition, there are verbs that can take multiple semantic roles as their subjects.

In the case of 2-argument verbs, three types can be identified: verbs that take an Agent and a Theme, verbs that take an Agent and a Space/Location, and verbs that take a Theme and a Space/Location. An example of a verb that takes an Agent as subject and a Theme as object is tuy-e 'cut sth/sb'. Verbs taking an Agent as subject and Space/Location as object include kus 'pass through (somewhere)'. Finally, oma 'be located (somewhere)' is a verb that takes a Theme and Space/Location. As with 1-argument verbs, there are also 2-argument verbs with which the semantic roles of the nominal arguments can alternate.

3-argument verbs take Agent, Theme, and Space/Location arguments.

¹⁴ This section is based on Kobayashi (2016) and Kobayashi (2017).

¹⁵ Ainu is known to have a distinction depending on whether nouns are grammatically locative nouns or not, see Nakagawa (Chapter 14, this volume). In this section, nominal elements identified by the term "Space/Location" are not limited to grammatically locative nouns but indicate semantic Space/Location. They do, however, include grammatically locative nouns. Verbs that require grammatically locative nouns as objects are called "locative object verbs"; the 2-argument verbs treated in this section taking Space/Location arguments are not limited to locative object verbs.

5.1.1 1-argument verbs

There are 1-argument verbs that can take either an Agent or a Theme as subject. An example is *as* 'stand', as shown below.

Example in which the subject can be considered Agent

(42) *or-o* ta **as**-an wa place-POSS LOC stand.SG-4.S and 'I stand there and . . .' (Chiba University 2015: 1935)

Example in which the subject can be considered Theme

(43) ruwe ranko cikuni **as** ruwe thick Japanese.Judas.tree tree stand.SG appearance 'The sight of a thick Japanese Judas tree standing.' (Chiba University 2015: 108)

One point to consider as a standard for deciding whether the subject is Agent or Theme is whether the subject's will is involved in the event expressed by the verb. In the case of a verb that can take either an Agent or a Theme as its subject, it is sometimes difficult to decide whether the subject is an Agent or a Theme. For example, in the case of example (42), there is essentially no trouble in deciding that 'I' am an Agent conducting an action of my own intent, but the decision is more difficult in (43) where 'tree' is the subject. This is more a problem of the interpretation of a story being told than a difficulty in grammatical interpretation. In Ainu folktales, flora and inanimate objects are often described as having will. Therefore, just because the subject is a plant or an inanimate object, one cannot always conclude that it is low in volitionality.

There are such problems, but, whereas a verb like *apkas* 'walk' can only take an Agent as subject and one like *tuy* 'break, be cut' can only take a Theme as subject, there can be said to be verbs like *as* 'stand' that are more indeterminate. In addition, 1-argument verbs like *as* 'stand' that can take either an Agent or a Theme as subject show special features both in terms of derivation and in terms of their semantics.

In terms of derivation, two types of causative forms can be identified for this type of verb. As mentioned in Section 4.1.2, among the Ainu causative suffixes, there are both those that are highly productive, i.e., -re/-e/-te, and those that only affix to a lexically limited set of words, i.e., -V, -ke and to a lesser degree -ka. Suffixes -V and -ke can be seen in verbs forming transitivity pairs and, as mentioned, taken in a broad sense, can be regarded as direct causative suffixes.

For example, the 1-argument verb *as* 'stand' is one member of a transitivity pair and the singular form of the corresponding 2-argument verb 'stand sth/sb up' is *as-i* (44) suffixed with the direct causative suffix in *-V*; recall (6b). However, there is also

another causative form, namely as-te in (45), made through the attachment of the productive causative suffix *-te* encoding here indirect causation.

- (44) nea itanki a-as-i tek h_ine that bowl 4.S.-stand-TR.SG quickly and 'I quickly **stood** that bowl up and . . . ' (Chiba University 2015: 1586)
- (45) ne suv par ta i-as**-te** wa that cave entrance LOC 4.0-stand-CAUS and '(My husband) made me stand at the entrance to that cave and . . .' (lit. 'made me **stand** by telling/ordering to do so') (Tamura 1985: 26)

Suga (2000) argued that Japanese 1-argument verbs like *tatu* 'stand', *narabu* 'line up', and muku 'face' have both a use expressing an action (Ani to imooto ga te o tunaide tatte iru 'The brother and sister are standing up holding hands.') and a use expressing a change in something that does not have autonomy (Boo ga tatte iru 'A stick is standing up.') and says that, in the case of expressing an action, the actor can be thought of as simultaneously the Agent of a causative effort and as the Theme undergoing a change, forming a reflexive-like self-move structure semantically. Similarly, Geniusiene (1987: 197–198) notes for English that a type of intransitive (e.g., balance, flatten, hide, squeeze, stretch, move etc.) with a human subject can be interpreted as self-move (=autocausative) verbs synonymous with the respective reflexive verbs marked with oneself as in move oneself.

Furthermore, in Japanese, the transitive counterpart tateru 'stand sth up' to the intransitive verb tatu 'stand up' is limited to the meaning of showing a change in a physical object without autonomy. Suga (2000: 122) gives the examples Yuusyooki o tateru 'Stand a championship pennant up' and Kootyoo-sensei o tateru 'Stand the principal up' and says that the former is a normal expression but, unless one ignores the principal's autonomy, the latter is not an acceptable expression. One can consider this observation to be parallel to the fact that two kinds of causative forms can be identified for the 1-argument Ainu verb as 'stand (SG)', which can take either an Agent or a Theme as its subject. That is, when as takes an Agent for its subject, it forms a semantically reflexive (autocausative) structure, and the corresponding 2-argument form is the indirect causative as-te. In contrast, when it takes a Theme as its subject, the corresponding 2-argument form is the direct causative as-i.

5.1.2 2-argument verbs

Before considering 2-argument verbs, let us consider an example of a 3-argument verb. The base form of a 3-argument verb takes three arguments showing Agent, Theme, and Space/Location as its arguments. The example below uses *us-i* 'attach sth to (somewhere)'.

(46) *a-sapa-ha ka wakka a-us-i <i>wa a-raray-pa*.

4.A-head-POSS also water 4.A-attach.to-TR.SG and 4.A-pat-PL

'I splashed water on my head as well and patted it down.' (Tamura 1985: 8)

This section shows the semantic roles using argument structure. Kageyama (1993) provided the following three argument structures for unergative, unaccusative, and transitive verbs.¹⁶

```
(47) a. Transitive: (Agent (Theme))
b. Unergative: (Agent ())
c. Unaccusative ((Theme))
(Kageyama 1993: 47)
```

Building on this kind of representation, in addition to Agent (x) and Theme (y), Space/Location (z) will be added as an internal argument to reflect Space/Location in the argument structure.¹⁷

(48) Argument structure for 3-argument verb: $(x \langle y [z] \rangle)$

Next, let us consider 2-argument verbs. Kirikae (1988: 16) gives the examples of *otke* 'poke, stick into' and says, "Although a fluctuation between intransitive and transitive is not observed, [. . .] there exist verb stems for which the nature of the nominal arguments they can take changes considerably." Kirikae's Iburi dialect examples are given below.

Example with Agent and Space/Location arguments

(49) oyakake nit ari **otke-otke**here.and.there pole INS prick-prick
'(Pananpe) poked and poked here and there with a pole.'
(Chiri 1973a [1937]: 46)

Pananpe in (49) is a character in a prose story and can be considered to have volition. Thus, he can be considered to have the semantic role of Agent. The Space/Location

¹⁶ Kageyama (1993: 72) states that the distinction between external and internal arguments was first proposed by Williams (1981), but that different approaches to the specific notation of argument structure can be found in studies appearing after Williams (1981).

¹⁷ The analysis with location as an internal argument is argued for in Tonosaki (2005) for Japanese.

object is *oyakake* and *nit* 'pole' is shown with the instrumental *ari*, which is syntactically an adjunct.

Example with Theme and Space/Location arguments

```
(50) otompuy-e
                 top
                           otke
     anus-POSS bamboo prick
     'The bamboo was stuck into his anus and . . .'
     (Chiri 1973a [1937]: 20)
```

There is no description in the context that would lead one to consider top 'bamboo' to particularly have volition. Thus, it can be interpreted as a Theme. Also, otompuye 'anus' functions as a Space/Location.

2-argument verbs that take space/place as an argument have an argument other than space/place that may be realized as Agent in some cases, and as Theme in others. ¹⁸ The verb *otke* presented by Kirikae is included in this type of verb.

There are also 2-argument verbs like *kuta* 'empty out', which in addition to <Agent and Space/Location> and <Theme and Space/Location> argument combinations, as in (51) and (52), show an <Agent and Theme> argument combination as in (53) below.

Example with Agent and Space/Location as arguments

(51) pop-usey-kar-an sapa-ha takup wa ne boil-hot.water-make-4.S and that head-POSS only sapa-ha sa-n-ke wa an pe, front.place-INTR.SG-CAUS and exist.SG thing/person head-POSS a-kuta 4.A-empty.out 'I boiled the water and emptied (it) out on the creature with only a head sticking

(Nakagawa et al. 2016–2021: OI990310UP 050)

¹⁸ Concerning the structure of o 'be located (somewhere), insert (something) into (somewhere)', Satō (2005) states that, while the O (Theme) and L (Location) must always be expressed, the A (Agent) is not obligatory and may not appear, and it is important that there are two possibilities for the "grammatical relations" of O and L. Those possibilities are: a structure in which O is the subject and L is the object ('O is at L') and a structure in which O is the object and L is the subject ('L has O'). Satō points out that there is a possibility that o in Ainu is a verb that allows the two patterns of possession and existence and that there is a possibility that other verbs in Ainu meaning "existence" also function similarly. Verbs with the meaning of "existence" are included in the 2-argument verbs dealt with in this chapter that include Space/Location as one of their arguments. It is possible to consider there to be two sets of grammatical relations as Satō claims, but the judgements are difficult and in this chapter which is the subject in the examples presented has not been marked.

Example with Theme and Space/Location as arguments

(52) *a-husko-pir cima kut-atpa*4.A-be.old-wound scab empty.out-rapidly
'The scab came off my old wound.'
(Chiba University 2015: 1506)

Example with Agent and Theme as arguments

- (53) sineanta a-mac-ihi nupki kuta kusu once 4.A-wife-POSS muddy.water empty.out for soye-ne akusu outside-COP then 'Once, when my wife went outside to dump out some muddy water, . . .' (Chiba University 2015: 1347)
- (54) Argument structure of (51): (x < [z]>) x: I z: that head Argument structure of (52): (< y [z]>) y: scab z: my old wound Argument structure of (53): (x < y []>) x: my wife y: muddy water

The verb *kuta* has the three argument structures shown above, but the events expressed in all of them can be captured in the following sequence.

```
I. Agent x initiates \to II. Theme y moves \to III. (Theme y) is extracted from/to Space/Location z
```

Figure 2: Sequence of events expressed by kuta 'empty out'.

In other words, the verb *kuta* can be thought of as having different argument structures depending on what portion of this sequence is reflected syntactically.¹⁹

Next are some examples using a 2-argunet verb *kus* 'pass though'. Example with Agent and Space/Location as arguments

(55) kotan soy a-**kus** h_ine paye-an. village outside 4.A-pass.through and go.PL-4.S 'I went, passing through the space outside the village.' (Chiba University 2015: 838)

¹⁹ It is difficult to hypothesize an Agent in the argument structure for (52), but it is possible to hypothesize the existence of someone or something in that position.

Example with Theme and Space/Location as arguments

(56) orano i-ka tov kus pekor vavnu-an 4.0-top dirt pass.through as.if then think-4S 'After that I felt as though there was dirt above me (I was buried in dirt).' (Chiba University 2015: 986)

The argument structures of (55) and (56) are shown below.

(57) Argument structure of (15): (x < [z] >) x: Iz: outside the village Argument structure of (16): (< y [z] >) y: dirt z: above me

In the case of kus, an example like that of (53) with kuta in which Space/Location does not become an argument had not been identified. Also, although (51) and (55) appear to have the same structure, the character of the Agent (x) is different. In the kus example (55), what moves is the Agent (x) himself, but in the kuta example (51), what moves is the hot water and, while it does not appear in the syntax, it can be surmised to be the Theme (v). The sequence of events expressed by kus is shown below.

I. Agent x initiates \rightarrow II. Theme y moves \rightarrow III. (Theme y) passes through or is located at Space/Location z

Figure 3: Sequence of events with kus 'pass through'.

In an example like (55) the Theme y, which does not appear in the syntax, is the Agent x himself, and the example can be considered to have a semantically reflexive structure. This can be taken as being parallel to the case of 1-argument verbs like the above-mentioned *as* 'stand' in having a semantically reflexive self-move structure.

In addition to the verbs otke 'prick', kuta 'empty out', and kus 'pass through' discussed above, other 2-argument verbs that take Space/Location as an argument and that can take an additional argument for which multiple semantic roles can be identified include us 'attach to (somewhere), grow (somewhere), wear (footwear, trousers)', o 'enter (some place), board on (something), bear (fruit as a tree)', oma 'enter (some place)', osma 'enter (some place)', kam-u/kam-pa 'cover (some place, something)', seske 'block, cover (some place)', kik 'bump into (something, some place), strike (something), and *pici* 'move away (from somewhere), let (something) loose'.²⁰ However, these are only some examples and it is possible that others may be identified.

²⁰ Of these, us 'attach to (somewhere), grow (somewhere), wear (footwear, trousers)' can be identified as forming a causative pair with the 3-argument verb us-i 'attach to (somewhere)', and o 'enter (some place), board on (something), bear (fruit as a tree)' can function as a 3-argument verb o 'put/ place sth on sth' with no change in form.

6 Concluding remarks

Ainu is a language in which the syntactic valency of a verb is easily determined because 1-argument and 2/3 argument verbs take different personal affixes (in 1PL.EXCL and 4th person only) but semantic valency, i.e., the actual semantic roles the arguments take, can vary in some verbs.

The first part of this chapter focuses on syntactic valency and briefly describes valency coded alternations in Ainu (or voice in a broad sense) such as valency-increasing applicatives and causatives, valency-decreasing reciprocals, reflexives, and antipassive, and valency retaining indefinite causative and sociatives. All these alternations show at least some typologically unusual features and demonstrate a striking mutual combinability.

There are three applicative prefixes, provisionally termed instrumental *e*-, dative *ko*-, and locative *o*- (Bugaeva 2010), which impress one with a wide range of other semantic roles they can promote/add and a wide range of base verbs they can attach to, including even apparent unaccusatives, for details see Bugaeva (Chapter 1, this volume). There are double applicatives in *e-ko*- and *ko-e*- and extensive applicative object incorporation.

Causatives are encoded by the productive suffix *-re/-e/-te*, which functions as a marker of both indirect and direct causation and by unproductive suffixes *-V*, *-ke*, and *-ka* marking direct causation only. Ainu allows causatives from 2-argument verbs, resulting in a double-object construction, double causatives, and antipassives from direct causatives, all being not so common cross-linguistically.

Reciprocals are marked by the prefix u-. They are productive and demonstrate all theoretically possible syntactic and semantic types such as canonical and "indirect" reciprocals, "quasi-possessive" reciprocals involving noun incorporation of body part and other nouns (u- functions as a possessor), and object-oriented reciprocals with the meaning of joining objects together.

There are two reflexive prefixes *yay-* and *si-*, but the difference between the two does not boil down to a traditional syntactic categorization, but rather works on a semantic basis. While Geniušienė's (1987) framework seems to show that reflexives in most languages are mainly used to encode 'the absence of other people's participation in an action' (e.g., Agent-Patient coreference in proper reflexives), Satō (2007) has convincingly shown that Ainu overtly encodes dependence on other people in *si-* 'indirect reflexives' and the absence of such dependence in *yay-* 'direct reflexives'. We are not aware of any other language which distinguishes between reflexives in a similar way.

Antipassives in *i*- are unproductive. Most of them tend to be derived from Perception/ Cognition/ Ingesting/ Interaction/ Communication and Grooming/ Traditional Activities and never from highly transitive verbs of Creation/ Transformation/ Contact by Impact and Effective Action, which is hypothesized to be a particular feature of antipassives in non-ergative languages (Bugaeva 2021: 232-233). Not only Theme but

also Recipient objects can be antipassivized. Interestingly, though not particularly rare typologically, the antipassive *i*- can also be used as an unspecified possessor on obligatorily possessed nouns such as body parts, kinship terms, and locative nouns when they are incorporated as objects of transitive verbs (Bugaeva, Nichols, and Bickel 2022) and on other parts of speech.

Also, Ainu presents a typologically unusual example of the indefinite causative in -yar/-ar, which does not increase valency because the causee cannot be overtly expressed by an NP or indexed on the verb. It is often used for politeness reasons when it is better not to mention the causee directly (Tamura 2000 [1988]: 214).

A word on valency-retaining sociatives with the meaning 'together' is in order. They are encoded by **uko-** and **uwe-** prefixes, which consist of a combination of the reciprocal **u**- and applicatives **ko**- and **e**-, respectively (lit. 'with each other' = together), each being reanalyzed as a single prefix. They do not show any co-occurrence restrictions but often pose interpretational difficulties in being either subject-oriented (with a plural subject) or object-oriented (with a plural object) or even in being interpreted as homonymous "indirect" reciprocals in **u**- derived from applicatives in **ko**- and **e**-.

And finally, sociatives can be formed by a cross-linguistically unusual combination of the reciprocal marker **u**- and causative markers -re/-e/-te or -ka, a combination that is, however, attested in Kabardian (Alpatov, Bugaeva, and Nedjalkov 2007: 1799), and seems to have an emotive coloring.

In the second part of this chapter, we investigate uncoded argument alternations by using a predicate calculus-based approach to semantics. The events expressed by 2-argument verbs that take Space/Location as one argument and allow words that can be identified as expressing multiple semantic roles as their other argument can all be hypothesized as expressing a sequence like those proposed in Figure 2 for kuta 'empty out' or Figure 3 for kus 'pass through'; namely, first, initiation by Agent x; second, movement by Theme y; and third, (Theme y) being located at, arising at, or touching Space/Location z. From this, it can be said that it is a semantic characteristic of 2-argument verbs that take Space/Location as one argument and allow words that can be identified as expressing multiple semantic roles as their other argument, even in cases where such verbs do not take Space/Location as an explicit argument but only take an Agent and a Theme, that they include the meaning of a change of location or movement. Furthermore, this semantic characteristic is shared by 1-argument verbs that can take either an Agent or a Theme as their subjects and express a change of Location or movement by their subjects.

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16 Noun incorporation in Ainu

1 Introduction

Like many languages in the world, Ainu has noun incorporation (hereafter NI) as a productive means for word formation: a noun stem is compounded with a verb stem into one compound verb. In the following, the historical background of the study of noun incorporation in general is first sketched. Then, main basic properties of the Ainu NI are described. Further, Ainu incorporation is classified into four major types and each type is described in more detail. Finally, the distribution of the Ainu NI is discussed, and it is shown that the distribution of NI is controlled by the interaction of a number of restrictions and principles, and that it reflects a hierarchy of accessibility to NI in Ainu.

There have been a number of historical overviews of the study of noun incorporation in general, such as Miyaoka (1978), Sadock (2006: 584-587), de Reuse (1994: 2842–2847), and so on. Miyaoka (1978: 88–90) is a highly incisive review of various traditional definitions of noun incorporation. According to Miyaoka (1978), the first researcher dealing substantially with noun incorporation is Wilhelm von Humboldt (1836: 181): Humboldt explains noun incorporation as a process of uniting an object and a verb into a compound verb, referring to examples from Nahuatl. Further, following Sapir (1911)'s classical definition of noun incorporation, Miyaoka claims that a verb with a nondependent nominal element should not be considered noun incorporation and that a denominal verb consisting of a nominal stem and a derivational verb-forming affix should also not be called noun incorporation. For this reason, he concludes that a language like Eskimo, which has often been considered as a typical example of a language with noun incorporation, is in fact not a language with noun incorporation according to the definition in Sapir (1911). In conclusion, Miyaoka (1978: 92) defines noun incorporation as "a kind of compounding by which more than two stems are compounded into one word" based on Sapir's (1911) view.

Mithun (1984) classifies noun incorporation into four types. In Type I, an incorporated noun functions only inside the word. In Type II, an incorporated noun has a grammatical relationship with an element outside the word. In Type III, an incorporated noun expresses old information and so noun incorporation indicates the relation between sentences (i.e., discourse function). In Type IV, an incorporated noun expresses a general concept, while a more semantically restricted noun phrase appears outside of the verb. Mithun claims that these types form a hierarchy: a language with Type IV would have all the other types as well and that noun incorporation develops historically from Type I to Type IV.

Using data mainly from Greenlandic Eskimo and Mohawk, respectively, Sadock (1980) and Baker (1988) claim that noun incorporation is essentially a syntactic process, in particular because in these languages noun incorporation may cause stranding

of a modifier after the head noun of an NP incorporates into a verb. However, some researchers, such as Rosen (1989) and Mithun (2009), take a more deliberate attitude to such syntactic treatment of noun incorporation, since these languages permit a kind of adpositional structure apparently very similar to modifier stranding. These days, in addition to noun incorporation proper, more and more attention has been paid to a phenomenon called pseudo-incorporation or quasi-incorporation (Borik and Gherke 2015), in which an independent noun phrase combines with a verb phrase to function exactly like noun incorporation.

In the study of Ainu, Kindaichi (1927), Kindaichi (1931), and Kindaichi and Chiri (1936) refer to noun incorporation. Their works point out the fact that noun incorporation in Ainu triggers intransitivization and contributes to rather complex word formation. Tamura (1973) does not use the term incorporation, but she treats noun incorporation as a kind of compounding and gives a highly accurate and exhaustive description of its major types.

Shibatani (1990: 60-75) discusses noun incorporation in Ainu exhaustively and makes the important point that Ainu usually needs applicative prefixes to incorporate an instrumental or locative noun as an object, instead of incorporating it as a locative or instrumental adjunct.² Also, he discusses adverbial incorporation and adnominal incorporation in Ainu.

Shibatani (1992) notes that noun incorporation in Ainu behaves as if it were a syntactic process because Ainu permits argument fulfilment in morphology as well as in syntax. This point would be worthy of note to develop the traditional notion of argument which was formed by focusing on syntax alone.³ Yet, Shibatani does not entirely deny the syntactic nature of noun incorporation in Ainu. He suggests that Ainu may have two different types of noun incorporation: one that is formed in the lexical component and one that is formed in the syntactic component.⁴

Satō (1992) classifies Ainu noun incorporation according to grammatical relations and notes that it is highly special in nature in that it has transitive subject incorporation. Kobayashi (2008) notes that Ainu verbs which appear in intransitive subject incorporation are generally unaccusative and thereby characterizes Ainu noun incorporation including object noun incorporation in terms of unaccusativity. Satō (2008: 226) points out that since Ainu has transitive subject incorporation, the general char-

¹ Based on this, Type II in Mithun (1984) involves stranding. So, it may need to be reexamined.

² Satō (1990) also points out that Ainu does not incorporate a noun having the status of an instrumental or locative adjunct. Satō (1990) was published as Satō (1992).

³ Incidentally, if Shibatani's (1992) claim is the case, it would not necessarily be required to deal with noun incorporation by syntactic transformation. If so, Ainu would be described as follows: Subject or object can not only occur in syntactic positions, but also in morphological positions.

⁴ The examples that Shibatani (1992) takes as examples of syntactic noun incorporation are not common in Ainu, and so should be reexamined.

acterization of the Ainu noun incorporation should be made not by unaccusativity, but by "the low degree of agentivity" of an incorporated noun, which is negative in nature.

The most detailed recent discussion about Ainu noun incorporation can be found in Satō (2012). There he mentions a number of faults in previous works. First, he points out in detail that unaccusativity does not necessarily play a prominent role in Ainu noun incorporation. It is true that intransitive subject incorporation works primarily in relation to unaccusative verbs, but nevertheless, there are very few examples of intransitive subject incorporation in Ainu in contrast to those of object incorporation. If unaccusativity were really a necessary and sufficient condition for noun incorporation, we could commonly find more examples of intransitive subject incorporation in Ainu. However, this is not the case. Thus, he casts doubt on the unaccusative analysis of Ainu noun incorporation which does not take this fact into consideration at all. Further, he mentions an important defect common to many previous works on Ainu noun incorporation: they tend to discuss different types of noun incorporation similarly, although their frequencies differ greatly.

He claims that it is not appropriate for a description of Ainu to treat very rare examples as common, productive ones and that it is necessary to distinguish clearly marked and unmarked types in the study of Ainu noun incorporation. He notes that the most important questions to answer in the description of Ainu noun incorporation are why great differences in frequencies arise among the types of Ainu noun incorporation and why a rare type can exist though it is rare.

Then, he claims that the major restrictions to Ainu incorporated nouns are "the restriction on subject incorporation" and "the restriction on specificity" and that the great differences of frequencies among the types of Ainu noun incorporation can be explained in terms of the interaction among these restrictions and rescue rules which alleviate them. Satō (2016) points out that in Ainu there is a construction which has the same characteristic as a verbal phrase but at the same time exhibits a very similar nature to noun incorporation in semantic terms, i.e., pseudo-incorporation or quasi-incorporation, which has been paid much attention to recently. He also claims that pseudo-incorporation in Ainu occurs as an alternative means when noun incorporation is made impossible by restrictions and proposes a kind of typological hierarchy in which pseudo-incorporation appears only when all the possibilities of noun incorporation run out.

The present paper basically follows Satō (2012, 2016) and adds more examples and new topics such as a discussion about phonology.

2 Basic properties of Ainu NI

First, we will look at some basic examples to get an outline of the Ainu NI. For this purpose, it is convenient to compare two forms among which one is a base clause and the other is NI as follows:

The base clause:

(1) a. *pírka pukúsa ku-tá*. good wild.garlic 1SG.A-dig 'I dig up good wild garlic.'

Noun incorporation:

b. ku-púkusa-ta.1SG.S-wild.garlic-dig'I dig up wild garlic.'

As seen from above, the person marker (*ku*- 'I') occurs before the incorporated noun (*pukusa* 'wild garlic'), whereas the same person marker occurs just before the verb stem (*ta* 'to dig') in the corresponding phrasal expression. When incorporation occurs, the verbal valency usually decreases and the whole verb becomes intransitive as seen from the following examples:

- (2) a. **pukúsa** a-tá. wild.garlic 4.A-dig 'We dig wild garlic.'
 - b. **pukúsa**-ta-an. wild.garlic-dig-4.S 'We dig wild garlic.'

Here, Ainu uses different person markers to denote first person plural inclusive subject according to verbal valency: if the verb is transitive, it is marked with the prefix *a*-'we', while it is marked with the suffix -*an* 'we' when the verb is intransitive. So, in (2b) with NI, the subject is expressed with the intransitive first person plural inclusive subjective -*an*, not the transitive *a*-.

Here, a question arises: what differs functionally or semantically in pairs like the above that seem to refer to essentially the same event? Further study is needed to solve this problem completely. However, we can say at least that noun incorporation in Ainu is highly lexical in its basic nature and that it usually denotes a nameworthy or 'institutionalized' event in some or other respect in the Ainu culture. Moreover, incorporated noun stems must be generic or semantically 'unbounded'. For example, in (1a) above, *pirka pukusa* 'good wild garlic' could never be incorporated because the meaning is narrowed with the modifier *pirka* 'good', besides the fact that *pirka pukusa* 'good garlic' is considered a phrase, not a stem. Consideration of the following examples would be useful to understand this point:

(3) a. ku-**pét**-tomotuye. 1SG.S-river-cross 'I cross a river.' b. *ku-**Síkotpet**-tomotuve. 1SG.S-Shikotsu.river-cross 'I cross the Shikotsu river.'

(3a) is possible because the incorporated noun stem pet 'river' is generic in its semantics, meaning a river in general, i.e., not a specific river. By contrast, in (3b), Sikotpet is also a river but is in turn the name of a specific river. So, it cannot be incorporated.

Before going on to grammatical problems, let's take a brief look at phonological aspects of NI, too, because the Ainu NI presents a very interesting problem from a phonological point of view as well (Satō 2015, 2021). Accent (i.e., the accent kernel of pitch accent, usually realized as high pitch) is assigned as follows:

- Accent regularly falls on the first syllable when the word begins with (C)VC: e.g., kátkemat 'woman, lady'.
- 2) Accent usually falls on the second syllable when the word begins with (C)V: e.g., menókopo 'young woman'.5
- 3) Even if a word begins with (C)V, accent regularly falls on the first syllable if the (C)V is a stem: e.g., só-kar 'to mat a rug', ká-eka 'to twist thread'.⁶
- 4) If a stem with the syllable (C)VC is attached to a form beginning with V, resyllabification occurs so as to form the sequence (C)VCV. In this case, accent regularly falls on the second syllable: aw-ósma 'to go inside'.

The above accent phenomena can be explained if we assume foot in the Ainu phonological structure (below, foot is represented by bracketing a syllable or a syllable sequence. (C) indicates that C is optional).

The Ainu word accent falls either on the first or second syllable alone. This is because accent falls on the head syllable of the initial foot. Accent of the stems which are not the primary accent are finally deleted.

⁵ In a few exceptions, accent falls on the first syllable, even though it begins with CV: réra 'wind', húra 'smell', húre 'red', kéra 'taste', and so on. These exceptions are considered to come from some historical reasons. For example, possibilities we can suppose are: 1) their first CV may have historically once been an independent stem; 2) initial CV's may have originally been a heavy CVC, but even after it changed to CV losing its coda consonant for some reason, its trace remains as an irregularly accented initial CV. Anyway, this problem remains to be solved at this time.

⁶ If the following stem begins with V, its onset consonant should be supplied in some way or other, if possible. However, because of the lack of the coda consonant of the preceding stem, in this case a glottal stop is inserted in the position of the onset of the second stem. When a stem beginning with V stands at the initial position, a glottal stop is inserted at the onset position, too. In the study of Ainu, a glottal stop has often been represented with the notation / ' /. In the present paper, this notation is omitted for convenience as in $k\acute{a}$ - $k\acute{a}$ discussion.

- The Ainu syllables are classified into (C)V (a light syllable) and (C)VC (a heavy svllable).
- 6) The initial (C)VC forms a foot, 7 so it has accent.
- A light syllable (C)V cannot usually form a foot as such, so it forms a foot together with the following syllable. In that case, accent falls on the head of the foot, e.g., the second syllable. That is, foot in Ainu is iambic.8
- 8) A light syllable (C)V usually does not form a foot, but, if it is an independent stem with accent, it can exceptionally form a foot even when it becomes a constituent of a compound: e.g., $(k\hat{a})$ 'thread', $(k\hat{a})$ -(eka) 'to twist thread'.
- 9) When a one-syllable stem with a heavy (C)VC syllable is compounded with a form beginning with V, resyllabification occurs so that it can avoid the occurrence of a syllable beginning with V, following the "Maximal Onset Principle". In that case, the coda consonant of the first syllable is supplied as the onset of the second syllable. As a result, the sequence $(C_1)V_1C_2V_2(C_3)$ occurs. Since a morphological boundary is between the C_2 and V_2 , not after the initial $(C_1)V_1$, the initial $(C_1)V_1$ alone cannot form a foot, but $(C_1)V_1C_2V_2(C_3)$ form a foot. Therefore, accent shifts from the first syllable to the second syllable, i.e., the head of the foot: e.g. $(\acute{a}w)$ 'inside' + (ós) ma 'to go fast' \rightarrow (a wós) ma 'to go fast inside'.

In the case of noun incorporation, 10 among the above accent rules, especially the rules 8) and 9) play an important role in deciding accent and such accent as so formed

⁷ To introduce the notion of foot into the explanation for Ainu accent, I here refer to Prince (1992), Kubozono (1995), Alber (2006), and Sugawara (2014).

⁸ Since in Ainu, accent is based not on stress but pitch, the term 'iambic' may be inappropriate. But here, following convention, we will use this term for a pattern with accent on the second syllable.

⁹ We may explain the Ainu accent pattern by thinking that in stem compounding, the initial CV stem preserves its accent, while the coda consonant carries its underlying accent, which shifts to the following nucleus on the surface level by resyllabification. However, whether this analysis is adequate or not is not necessarily obvious, because it is not easy to say why a CV stem preserves its accent in compounding, or whether the assumption of accent on C even on the abstract level is adequate. Therefore, it would be more appropriate to introduce the idea of foot as in the present paper in order to make possible a more general explanation, though it is not so common for CV to form a foot (Prince 1992: 360). However, we may provide strong evidence for our analysis by seeing a CVC stem, which is apparently similar to other CVC stems, but has in fact a morphological boundary between the initial CV and the final C: in this case accent does not shift to the following nucleus, even if a form beginning with V follows, e.g. mip 'clothes'; mip-i 'one's clothes' (not the expected *mip-i). This would be explained as follows: since mip 'clothes' can be analyzed as mi- 'to wear', -p 'thing' and thereby the foot boundary is between mi- and -pi, the initial CV stem forms a foot like (mi) pi with accent on the first syllable. In contrast, in the case of aw-osma 'to go inside fast' without a morphological boundary between the nucleus and the coda of the first stem aw 'inside', w forms a syllable with the following V to result in a foot with two syllables: $(aw \acute{o}s)ma$. In this case, as already mentioned, accent shifts to the head of an iambic foot (here wos).

¹⁰ Not only incorporation but also various word formation processes of verbs and nouns follow accent rules similar to those given here for noun incorporation: kú 'to drink', kú-re 'to make someone

gives a phonological unity to a word with a number of stems formed by noun incorporation.11

So far, we have briefly surveyed basic characteristics of Ainu NI. We will now turn to considering the major NI types in Ainu in more detail.

3 Major types of Ainu NI

The Ainu NI is classified into the following four major types: Object NI (85.9%), Intransitive (Natural Force/Phenomenon) Subject NI (6.8%), Intransitive (Possessor-Requiring) Subject NI (5.6%), and Transitive (Natural Force/Phenomenon) Subject NI (1.7%) (See Figure 1 below).12

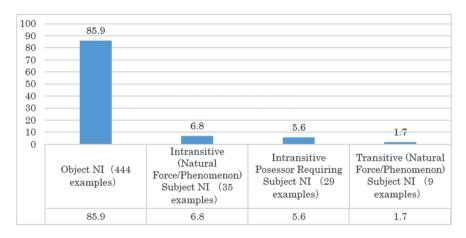


Figure 1: Types and percentage of Noun Incorporation in the Chitose dialect of Ainu.

drink' (rule 8); túy 'to break (of a thread)', tuy-é 'to cut' (rule 9); ré 'name', ré-he 'someone's name' (rule 8); sík 'eye', sik-í 'someone's eye' (rule 9).

¹¹ Even when various inflectional and derivational prefixes are attached to incorporational verbs, their accent is supposed to be basically determined according to rules of foot. Yet, the inflectional prefix *a*- does not affect accent at all, so it can be supposed to be extrametrical: *i-pároyki* '(he) supports us', *a-i-pároyki* 'people support us = we are supported'.

¹² The data are from my recordings of the Chitose dialect amounting to about 130 hours. I am grateful to my late informant, Mrs. Nabe Shirasawa.

3.1 Object NI

This type of NI is very common in Ainu as is shown in Figure 1. Examples already given above are of this type. A similar example is as follows:

The base clause:

(4) a. *turép ku-tá* wild.lily 1SG.A-dig 'I dig wild lilies.'

Noun incorporation:

b. ku-túrep-ta1SG.S-wild.lily-dig'I dig wild lilies.'

This type is characterized in terms of its lexical nature: an incorporated noun stem functions only within the word and does not have any grammatical relationship with elements outside the word. So this type can be said to belong to the type that Mithun (1984) refers to Type I NI. Incorporated noun stems in the Ainu NI very often belong to the following semantic fields: space (26%), body parts (18%), plants (11%), tools and house (7%), and fire (5%).

Examples:

- (5) soy-ósma 'plunge into' (sóy 'outside', ósma 'plunge')
- (6) *sik-érayke* 'stare at' (*sík* 'eye', *eráyke* 'kill with')
- (7) *ní-tuye* 'cut trees' (*ní* 'tree', *tuyé* 'cut')
- (8) *kem-éyki* 'sew' (*kém* 'needle', *éyki* 'do with')
- (9) *cisé-kar* 'build a house' (*cisé* 'house', *kár* 'make')
- (10) *apé-ari* 'build a fire' (*apé* 'fire', *ári* 'put')

Incidentally, stems belonging to these semantic groups that exhibit relatively high frequency in NI may be interesting from a social or cultural point of view as well. They probably reflect their high importance in Ainu society, because they are considered to be part of institutionalized activity in Ainu culture.

Furthermore, it is important to note that in Ainu, examples which have both NI and its corresponding phrase are rather limited. This suggests that NI in Ainu is essen-

tially highly lexical. To illustrate this, I will give examples from Object NI, which is the most common in the Ainu NI. Those pairs that commonly occur in real contexts are as follows:

	Phrase	Noun
(11)	apá así 'close the door' (apá 'door', así 'close')	Incorporation apá-asi
(12)	apá caká 'open the door' (apá 'door', caká 'open')	apá-caka
(13)	apé árí 'build a fire' (apé 'fire', ári 'put')	apé-ari
(14)	cép kóyki 'catch fish' (cép 'fish', kóyki 'catch')	cép-koyki
(15)	cisé kár 'build a house' (cisé 'house', kár 'make')	cisé-kar
(16)	ináw ké 'make an offering stick' (ináw 'offering', ké 'shave')	ináw-ke
(17)	ináw róski 'stand offering sticks' (ináw 'offering', róski 'stand')	ináw-roski
(18)	pukúsa tá 'dig wild garlic' (pukúsa 'wild garlic', tá 'dig')	pukúsa-ta
(19)	turép tá 'dig bulbs of lilies' (turép 'wild lily', tá 'dig')	turép-ta
(20)	wákka tá 'scoop water' (wákka 'water', tá 'scoop')	wákka-ta

As is seen from the above examples, it does not seem that such pairs are so many or productive. Although further study will be needed to make this point clearer, this fact suggests that the alternation between an NI and a phrase may not be so systematically grammaticalized in Ainu.

3.2 Intransitive (Natural Force/Phenomenon) Subject NI

This type of NI, which also belongs to Mithun 1984's Type I, is highly limited in Ainu as is shown in Figure 1. Incorporated stems used in this type are also extremely limited. In fact, only two stems (sir 'weather, atmosphere' and me 'cold') have so far been found. In addition, unlike Object NI, this type of NI entirely lacks the corresponding phrasal expression: an incorporated noun stem is always incorporated into the NI verb and can never appear as an independent noun.¹³

- (21) **sír-**pirka weather-good 'The weather is good.'
- (22) **mé-**an. cold-exist 'It is cold.'

3.3 Intransitive (Possessor-Requiring) Subject NI

The base clause:

(23) a. *ku-ték-e páse* 1SG.A-hand-POSS heavy 'My hands are heavy.'

Noun incorporation:

b. ku-ték-e-pase1SG.S-hand-POSS-heavylit. 'I am my-hands-heavy.' = I feel as if I've aged.

This type differs from the other types in an important respect. That is, it belongs to Type II in Mithun's (1984) framework, in which an incorporated noun stem manipulates the grammatical case of a noun outside the NI verb. By definition, this type is much more marked than other types because it inevitably involves stranding. This is true in Ainu as well, as is seen from Figure 1. Furthermore, the peculiarity of this type mainly lies in the fact that it does not cause the valency decrease that usually occurs in the other types of NI. The reason is that the incorporated stem in this type of NI requires its own possessor, which promotes to the subject of the whole NI verb. Most of the incorporated noun stems in this type of NI are body parts and so naturally need their possessor. Thus, the effect of NI to the valency of the resulting NI verb is ±zero and so does not cause valency change. However, there is another peculiarity in this type of NI. Unlike Object Incorporation already mentioned as well as Intransitive Natural Force/Phenomenon Subject Incorporation, the relevant incorporated stems in this type can be seen as taking its semantic possessor, which is grammatically promoted to the subject of the overall NI verb. This means that the incorporated noun stem has a stranded possessor (i.e., the subject in this case) outside the whole NI verb.

¹³ This type of NI results in a zero-valence verb that can take no argument(s).

Stranding crosslinguistically tends to be avoided, because it violates a general constraint that an element inside a word cannot relate syntactically or grammatically to an element outside it. More specifically, stranding results in a problematic situation: an incorporated noun in this type is semantically made definite by a stranded external subject (i.e., possessor). As already noted, in Ainu, NI in which definite, or semantically specified nouns are involved are usually severely prohibited. It is true that this type of NI is limited in Ainu, but we can nevertheless find a number of real examples of this type. Why this type is rare in Ainu NI but is sporadically actually possible is a mystery which we cannot ignore. We will later discuss this problem in more detail when we consider various constraints and their interaction in Ainu NI.

3.4 Transitive (Natural Force/Phenomenon) Subject NI

This type of NI is the most marked and extremely rare in Ainu and probably transitive subject NI would not be possible in many other languages in the world. The incorporated noun stems that have so far been found in this type are only kamuy 'deity' (kamuy-panakte 'deity-punishes him' = he is punished by a deity), koy 'wave' (koy-yanke 'wave-raises it' = it is raised by the waves), me 'cold' (me-rayke 'cold-kills him' = he feels cold), nis 'cloud' (nis-ruture 'cloud-carry it' = it is carried by a cloud), rera 'wind' (rera-paru 'wind-blasts it off' = it is blasted off by the wind), rir 'wave' (riryanke 'wave-raises it' = it is raised by the waves) and sukus 'light' (sukus-cire 'lightburns it' = it gets sunburned).

The base clause:

(24) a. **koy** en-yanke wave 1SG.O-raise 'The wave raises me.'

Noun incorporation:

b. ku-koy-yanke 1SG.S-wave-raise 'I am wave-raised.'

It should be noted that in this form the role of the incorporated noun is a little difficult to understand. In NI of this type, the original subject (koy 'wave') is incorporated and the whole verb becomes intransitive. So the original patient (en- 'me') can only appear as the 'subject' of the NI verb because the NI verb is intransitive and can only take a subject. Therefore, the NI verb (koy-yanke) takes the subjective (not objective) personal prefix (here, ku-'I') which denotes the subject, though semantically it is a patient. That is, the original object denoting the patient (en- 'me') promotes to the subject (ku-'I') in this type of NI as in the passive construction. This divergence between form and meaning caused by NI can be said to make this type of NI difficult to interpret. This fact would be useful in considering the reason for their extremely high markedness.

4 A subtype of Object NI and a strange gap in Ainu NI

We have so far surveyed the major types of NI in Ainu. However, there remains a complicated problem concerning Ainu NI. Taking a close look at the major types of NI in Ainu, we can find that there is a strange "gap" in the system. In order to understand this, we will first consider a number of related problems.

Among Object NI, there are in fact a number of examples of a special subtype, i.e., Derivational Possessor Prefix + Possessor Requiring Object NI. Examples are as follows:

- (25) *i-par-oyki* 4.O-mouth-do.with 'support someone'
- (26) yay-**par**-oyki REFL-mouth-do.with 'support oneself'

As noted in 3.3, in Intransitive Possessor Requiring Subject NI, the possessor of the incorporated "subject" noun is marked, whereas in Derivational Possessor Prefix + Possessor Requiring Object NI (i.e., derivational Possessor Requiring Object NI) the possessor of the "object" noun is marked. So, both types are similar in that the possessor of the incorporated noun is marked. However, they differ in a critical respect: in Intransitive Possessor Requiring Subject NI, the possessor is marked in terms of an inflectional (i.e., pronominal) affix. In that case, an inflectional suffix presupposes the existence of an antecedent as an independent noun. Since an antecedent is an element outside a word, this type of NI results in stranding. However, although it is a kind of Possessor Requiring NI, Derivational Possessor Requiring Object NI does not mark the possessor with an inflectional affix: while it is true that forms like yay- 'self', or i- 'someone, something' denote a possessor, they are derivational affixes, i.e., word-internal (or anaphoric) elements. So they do not need a coreferential independent antecedent outside the NI verb. As a result, they do not cause the stranding which Intransitive Possessor Requiring Subject NI would cause. At a glance, it seems very easy to replace a derivational affix denoting a possessor such as yay- 'self' with an inflectional affix. However, this is actually impossible. Consider the following examples:

- (27) ϕ -vav-**par**-ovki. 3SG.S-REFL-mouth-do.with 'He supports himself.'
- (28) **a-i-par-oyki*. 4.A-4.O-mouth-do.with 'People support me.'

As seen from the above, the simple replacement of the derivational prefix *yay*-'self' with the inflectional prefix i- 'me' (homophonous with i- 'someone, something' but a different form: the first-person objective marker for oral literature) results in an ungrammatical expression like (28). Instead, in order to express the corresponding meaning, forms like (29) below should be used. Such forms are usually called "the third group yerb" in traditional Ainu linguistics. They are a kind of phrase where an object and a verb are positioned separately but grammatically as well as semantically closely combined: no element can be inserted between the object and the verb, and the whole meaning is so idiomatic that we cannot usually infer it directly from the meanings of its constituent morphemes ('people support me' from 'people do with my mouth').

(29) i-**par** a-oyki. 4.O-mouth 4.A-do.with 'People support me.'

(29) shows that contrary to our expectation, Possessor Requiring Object NI is impossible when the possessor is expressed by a person marker (i- first person objective in oral literature). It should be noted that this situation contradicts that in Intransitive Possessor Requiring "Subject" (not Object) NI, in which the possessor of the incorporated noun stem is expressed by a person marker. This can be referred to as a kind of asymmetry between subject NI and object NI in Ainu and requires some or other explanation.

Then, what is the difference between subject NI and object NI in Ainu? With regard to this point, we should remember that the NI of a nominal stem whose possessor is denoted by the derivational reflexive prefix yay- 'self' is possible without question. If we take a closer look at Possessor Requiring Subject NI, we can see that the situation is very similar to the NI with the reflexive prefix yay- 'self'. As follows, in spite of the fact that the possessor is marked with a specific person marker in Possessor Requiring Subject NI, the possessor in this construction must be coreferential with the subject and so in a sense it can be regarded as 'reflexive'.¹⁴

¹⁴ The reflexive interpretation of incorporated nouns is very common especially in the case of incorporation of body-part nouns. In an example such as koppu ku-tek-e-tursere 'I dropped a cup with my hand.' (koppu 'cup'; ku- 1SG; tek 'hand'; e- 'with'; tursere 'drop'), the possessor of tek 'hand' is coreferential with the subject and so reflexive in this respect. However, it should be noted that this

(30) Subject Possessor (referentially assumed but not indicated)

ku_i- 1SG

e_i. 2SG (self_i) tek-e-pase

φ_i- 3 hand-POSS-heavy

lit. 'I/You/He/She am/are/is self's-hand-heavy.'

In fact, the possessor is unmarked overtly but should be semantically assumed. In addition, it is reflexive and anaphoric (=co-referential with the subject in the same clause). That is, the reference of 'self' changes according to the subject. Thus, the incorporated noun is in a sense not specified for the person of the possessor proper and in a sense less definite. By contrast, if the possessor were marked with a person marker (i.e., a pronominal form) in Possessor-Requiring Object NI, it follows that a noun stem highly definite in meaning would be incorporated. Such an NI verb is ungrammatical as in (28) and instead an alternative construction like (29) (a verb of the third class) appears. In sum, NI is possible only marginally either when the possessor of the incorporated stem is marked with a derivational (i.e., word-internal) affix, or when it can receive reflexive interpretation as in Possessor Requiring Subject NI. By contrast, marking of the possessor by an inflectional (i.e., word-external) person marker makes object NI impossible. Therefore, the absence of a theoretically expected NI type, i.e., Possessor Requiring Object NI with an external object coreferential with a person marker denoting the possessor of the incorporated noun stem, can be said to be a serious gap in the Ainu NI system.

5 An explanation for the distribution of Ainu NI

Thus far, we have seen that there are four major types of NI in Ainu and that their frequency among the types varies far more greatly than would be expected by mere chance. It is true that the following suggestion is very tentative in nature, but I will try to explain this interesting inequality in the frequency of NI in Ainu in terms of the interaction of several restrictions and rescue rules, most of which we have already seen but only separately.

interpretation is based on pragmatic implication and not on the very nature of this type of noun incorporation. We should note that in an example like *kam-ahupte-an* 'we carry meat (of a game) inside our house' (*kam* 'meat': *ahupte* 'carry in'; *-an* 4.S), the possessor of *kam* 'meat' cannot be coreferential with the subject 'we'. In contrast, since reflexive interpretation is obligatory in Intransitive Possessor-Requiring Subject incorporation, this kind of construction can be considered to include a reflexive meaning. Here, this zero-element with this reflexive semantic feature is tentatively glossed with the indication 'self'.

5.1 Restrictions on NI: Subject NI restriction

As is seen from the distribution of Ainu NI in Figure 1, it is clear that subject NI, as compared with object NI, is extremely restricted:15 Intransitive (Natural Force/Phenomenon) Subject NI (6.8%), Intransitive (Possessor-Requiring) Subject NI (5.6%) and Transitive (natural force/phenomenon) Subject NI (1.7%). Looking at this, rather, it seems better to say that subject NI is essentially prohibited in Ainu and that only when special conditions are satisfied, may they be only marginally permitted. Then, the question is what conditions permit them. 16

5.2 Restrictions on NI: Possessor stranding restriction

Before we go into the problem of conditions that make NI possible mentioned above, we should note another restriction on NI. Looking at Figure 1, we can see that there

15 The fact that the frequency of subject incorporation is extremely low is reflected in the formation of compound nouns as well. In Ainu we can commonly find compound nouns with the type "object + vt + noun", but not "subject + vt + noun". First and foremost, verbs cannot normally become a constituent of a compound noun, because a verb in principle must inflect. However, the structure 'object + vt" can be an intransitive verb due to the object incorporation, and in turn an intransitive verb can convert itself into a noun; i.e., intransitivization serves to avoid verbal inflection which is usually not permitted in a nominal compound. By contrast, the construction "subject + vt" cannot normally be interpreted as noun incorporation. So, it cannot be subject to either intransitivization or conversion to a noun. Therefore, compound nouns of the type "subject + vt + noun" are not found in Ainu. If such were found, it would be interpreted as a noun phrase modified by a relative clause with a finite inflected verb, and hence it cannot usually be identified with a "word". Incidentally, the regular conversion of intransitive verbs into nouns in Ainu can be explained in terms of principles of formal semantics (Heim and Kratzer 1998): the extensions of intransitive verbs and nouns are of the same type (i.e., an entity). Thus, intransitive verbs can uniformly convert into nouns in Ainu. In contrast, the extension of transitive verbs is a relation present between a subject and an object. Thus, it cannot convert into a noun. This explanation can be supported by considering another type of verb. The extension of zero-place verbs should be in principle either true or false, as it does not take any argument. Thus, it cannot convert into a noun, either. Since the extensions of both transitive verbs and zero-place verbs are totally different from that of intransitive verbs or nouns neither can freely convert into nouns in Ainu. For details, see Satō (2020).

16 The difficulty in subject incorporation in Ainu is supported either by the Spec interpretation of subject in generative X-bar theory (Radford 1997: 116) or the Trajector interpretation of subject in cognitive linguistics (Langacker 1991: 31). If the subject is Spec, its incorporation inside of a verb would cause an inclusion of a specifying element in a word and it would give damage to the appropriateness of the word. Furthermore, if the subject is Trajector, the incorporation of the subject would involve the inclusion of an element with the highest focal prominence into a word and therefore it would usually be avoided. Finally, to add a word, though it is typologically exceptional, examples of Ainu subject incorporation suggest that current theories of subject are not sufficient and that there is some room for rethinking of the general theory of subject to include characteristics of the subject in Ainu subject incorporation.

is a little difference in frequency between Intransitive (Natural Force/Phenomenon) Subject NI (6.8%), and Intransitive (Possessor-Requiring) Subject NI (5.6%). As already mentioned in 3.2 and 3.3, the difference between these two types lies in stranding. So we could assume that stranding has the effect of increasing markedness in NI, since stranding is crosslinguistically highly restricted in morphology in general.

5.3 Restrictions on NI: Ambiguity restriction

Among the three types of subject NI, Transitive (Natural Force/Phenomenon) Subject NI is remarkable for its extreme low percentage (1.7%). Hence, we now need to assume some other factor for the low frequency. Here, it should be noted that this construction involves a serious ambiguity as seen from the following example:

(31) ku-koy-yanke 1SG.S-wave-raise 'I am wave-raised.'

As soon as we see the above example, we find that it is apparently the same construction as that of simple Object NI (i.e., object noun + transitive verb 'I raised a wave'). In this case we have no means to judge whether a given noun stem is an incorporated object or subject. We can only know from semantics which interpretation is plausible. Thus, the danger of ambiguity of the grammatical role of an incorporated noun (either subject or object) is supposed to restrict this type of NI severely. This accounts for the extremely low frequency of the type Transitive Subject NI.

5.4 Rescue principles

We have so far seen a number of restriction principles that limit the productivity of Ainu NI. Then, a question arises: Why are subject NIs possible in Ainu, even though they violate serious restrictions (Subject NI Restriction, Stranding Restriction, and Ambiguity Restriction)? We will then take a look at this side. First of all, it should be noted that subject NI is basically rare. In fact, incorporated stems in subject NI are almost totally limited to natural forces or body parts. From this, it follows that these kinds of noun enable subject NI to appear for some or other reasons. We will consider the reasons why these nouns are permitted in subject NI.

5.5 Backgrounding rescue principle

What we can see at once when we consider subject NIs is "backgroundedness" of their incorporated noun stems. It is natural that backgroundedness and the incorporation of a noun stem into a verb stem should be closely related. In fact, it is very likely that it is this property that plays an important role, as it were, to rescue subject NI which would be completely prohibited without it. We call such a principle that serves to rescue NI a rescue principle. Backgroundedness is one of such rescue principles. First, it goes without saying that noun stems for natural forces like 'weather, atmosphere' or 'cold' tend to be backgrounded, because they are expletive and are supposed to have intrinsically low salience in discourse. So, in most cases they are expressed with NI in Ainu. On the other hand, body part nouns used in Possessor Requiring Subject NI are also supposed to have lower salience in that the possessor is normally more salient than its body part in discourse. Hence, body part nouns tend to lose their independent status and be incorporated. This necessity sometimes enables subject NI to occur, though it is usually prohibited and therefore highly marginal even if not impossible.¹⁷

5.6 Reflexive interpretation rescue principle

As already mentioned in Section 3.3 concerning Intransitive (Possessor-Requiring) Subject NI, this type makes at least two serious violations in NI: subject NI and stranding. So, we should assume another rescue principle in addition to Backgrounding Rescue Principle in order to pardon such a marked structure like this type. We have already seen that reflexive interpretation of the possessor of an incorporated noun stem functions semantically in much the same way as the derivational reflexive prefix does. This contributes to pardoning Possessor Requiring Subject NI in much the same way as derivational Possessor Requiring Object NI, because marking of the possessor with the derivational reflexive prefix does not affect the grammaticality of the relevant NI (see (26) and (30)). So we will call this property the Reflexive Interpretation Rescue Principle.

¹⁷ Since Possessor Requiring Subject Incorporation is not obligatory as opposed to Natural Force Intransitive Subject Incorporation, in this case the effect of backgrounding should be less than [-5], for example [-4]. In that case, then, the value of other factors like reflexive interpretation should be increased so as to compensate for this loss of rescuing power.

5.7 Interaction of restrictions and rescue principles

Using the restrictions and principles above, we can explain the irregular distribution of the Ainu NI types. For this purpose, we will introduce a kind of scoring for simplicity and clarity of explanation: we will give each violation a score according to its effect on the wellformedness of a form. The scores are tentatively defined in view of the relative frequency of the NI types. If the score is plus, markedness will increase, while if the score is minus, markedness will decrease. We assume tentatively that when the total score reaches the score [10], the given form becomes ungrammatical. Thus, the score [10] given to Subject NI and Stranding is fatal (i.e., ungrammatical).¹⁸ The score [4] given to Ambiguity is rather serious in view of the extremely low frequency of Transitive Subject NI. On the other hand, we assume that there are scores that would reduce markedness. Thus, natural forces and body parts are less salient. So they are easier to be incorporated and it has a power to reduce penalty scores greatly (Backgrounding [-5]).

Furthermore, reflexive interpretation reduces definiteness caused by an external stranded possessor and has a still greater power to reduce markedness ([-14]).

Each total of these scores is represented in Table 1 in the next section. That is, the total score of Object NI is [0] (i.e., there is no penalty, so this type is the most unmarked (85.9%)). The total score of Natural Force Intransitive Subject NI is [5]: The fatal [10] is given by violation of the restriction of subject NI, but since the incorporated noun stem is natural force, Backgrounding Rescue Principle [-5] reduces markedness to [5]. Though greatly reduced, markedness [5] itself still remains. So this type is severely restricted (6.8%). Possessor Requiring Intransitive Subject NI, in turn, violates two serious restrictions (Subject NI Restriction [10] and Stranding Restriction [15]). So the total score of markedness goes up to [25] from the beginning and this type would be rejected as ungrammatical at once if other things were equal. However, two rescue principles (Backgrounding Principle [-5], Reflexive Interpretation Principle [-14]) work together and so the total is reduced to [6]. Though greatly reduced, markedness [6] itself still remains. So this type is still more severely restricted (5.6%).

Similarly, in the case of transitive subject incorporation, first by subject incorporation restriction it acquires the fatal score 10. Then, the penalty score 4 for ambiguity deriving from the difficulty in distinguishing it from object incorporation is further

¹⁸ It should be noted that the scores introduced here are assumed merely as a convenient means to explain relevant facts. While it would not be a great problem to give language-universally marked factors a high penalty score, we have to admit that it would be rather difficult or arbitrary all the time how to choose rescuing factors or how to decide the assignment of each score to them. However, though there are many weak points in this type of approach, we would not be able to overcome various difficulties easily by some existing theory like Optimality Theory alone in dealing with problems mentioned here. For in this case, markedness varies among types of noun incorporation not in a binary way, but in a continuous way. Here I present this analysis as a material for further discussion.

added and the total of the penalty score goes up to 14. So transitive subject incorporation would be rejected if other things were equal. However, since the subject is natural force, backgrounding begins to work so as to reduce the penalty score by 5. As a result, the total penalty score reduces to 9 from the fatal 14. In sum, though it can be accepted, the frequency is extremely low, i.e., 1.7% because the final score is very close to the fatal 10.

Finally, in the case of "Transitive Possessor-Requiring Object NI", which is in principle considered to be non-existent in Ainu, though the penalty score produced by stranding, which is supposed to be language-universally marked, should be the greatest, for example, 15, unlike the case in Intransitive Possessor-Requiring Subject NI, it cannot accept the great reduction -14 by reflexive interpretation, since it is not Subject Incorporation, but Object Incorporation. On the other hand, backgrounding triggers the reduction of the penalty score by -5. Nevertheless, the total penalty score goes to the fatal 10, which makes this type utterly unacceptable.

It is true that further study or consideration of other different types of noun incorporation in Ainu, if possible, may change the score of penalty or penalty-rescuing discussed here, but it should be noted that only the adoption of our system in which factors of both penalty and penalty-rescuing interact closely, leads to an explanation of the great differences among frequencies of types of noun incorporation in Ainu in a rather rational fashion.

6 A hierarchy of accessibility to NI in Ainu and quasi-incorporation

In this Section, I present Table 1 impying a hierarchy of accessibility to NI in Ainu. According to this Table, we can see that object is the most accessible, while transitive subject is the least accessible. In this respect, a gap in the Ainu NI system and a special idiomatic phrasal expression are worth noting. As has been already mentioned, the expected 'Inflectionally Marked Possessor Requiring Object NI' is actually not possible and constitutes a gap in the Ainu NI system. Instead of NI, we find a special idiomatic phrasal expression ("the third type verb", a term used in traditional Ainu linguistics) at the position of the gap. Object NI with external possessor stranding would get the fatal score [15]. On the other hand, in this case only one rescue rule, Backgrounding [-5], can reduce the entire penalty score to [10] and so it is natural that this type of NI with heavy markedness is not permitted in Ainu.

Indeed, Ainu idiomatic [O+V] phrases which replace Possessor Requiring Object NI can be seen as a subtype of quasi-incorporation (QI), which is discussed in Booij (2009: 5) for Dutch, because they are a kind of 'tight phrasal lexical unit'. In other words, they are grammatically a phrase, but semantically a 'lexical' unit. This prop-

Penalties and rescue principles	Object NI	Intransitive (natural force/ phenomenon) Subject NI	Intransitive (possessor- requiring) Subject NI	Transitive (natural force/ phenomenon) Subject NI	*Transitive (possessor- requiring) Object NI
	85.9%	6.8%	5.6%	1.7%	0%
Subject NI		10	10	10	
Stranding			15		15
Ambiguity				4	
Backgrounding		-5	-5	-5	-5
Reflexive interpretation			-14		
TOTAL MARKEDNESS:	0	5	6	9	10

Table 1: Interaction of restrictions and rescue principles.

erty is also found in the relevant idiomatic phrases in Ainu. So it seems not so inappropriate to regard them as a kind of QI.

Examples of Ainu QI:

- (32) $ka_1 opas_2$ lit. 'run₂ to one's surface₁', = save
- (33) $ka_1 oyki_2$ lit. 'do something to₂ one's surface $_1$ ', = take care of
- (34) $kes_1 anpa_2$ lit. 'catch₂ one's end₁', = chase
- (35) $tom_1 oytak_2$ lit. 'talk to₂ one's center₁', = persuade
- (36) $aske_1 uk_2$ lit. 'take₂ one's hand₁', = invite
- (37) $par_1 oyki_2$ lit. 'do something to₂ one's mouth₁', = feed, support

The case of Ainu suggests that NI and QI are not essentially unrelated phenomena, but rather should be unified as a means for including a nominal concept into a single (whether a word or not), closely-knit verbal complex. We can add QI to a hierarchy of NI. QI comes into play only after all possibilities of NI are exhausted, as summarized in (38).

7 Conclusion

In this chapter, I first described the basic properties of Ainu NI. Second, I presented the distribution of various NI types in Ainu. Thirdly, I explained the inequality of the NI distribution in Ainu by means of the interaction among restrictions and rescue principles. Finally, I showed that Ainu is a good example to prove a more comprehensive morphosyntactic hierarchy containing both NI and QI: stranding NI is usually avoided and the hardest stranding NI with a possessor-requiring object is finally compensated by QI. Of course, further study on more languages will be required to establish this kind of hierarchy. This is only a first step towards establishing such a hierarchy and also an attempt to show that the case of Ainu is very useful in considering various interesting general linguistic problems.

Appendix: Further examples of each type of NI discussed in this chapter

Object NI

(i) toy ku-hok wa or-o ta ku-cise-kar land 1SG.A-buy and place-POSS LOC 1SG.S-house-build wa k-an ruwe ne wa. and 1SG.S-exist.SG INFR.EVID COP SFP 'I bought land and there I built a house and lived.'

Intransitive (Natural Force/Phenomenon) Subject NI

(ii) nisatta anak **sir-**pirka nankor. tomorrow TOP weather-good probably 'It is likely that it will be fine weather tomorrow.'

Intransitive (Possessor-Requiring) Subject NI

(iii) ku-**ram-u**-tuy wa ku-si-y-etu-esikari.

1SG.S-mind-POSS-cut and 1SG.S-REFL-EP-nose-grab

'I was surprised and grabbed my nose (not to let my spirit go/fly away).'

Transitive (Natural Force/Phenomenon) Subject NI

(iv) *ku-ikka* wa or-o wa ku-**kamuy-**panakte. 1SG.S-steal and place-POSS ABL 1SG.S-god-punish 'I stole and I was god-punished.'

Quasi-incorporation

ku-matnepo-ho SORE WA TAIHEN DA sekor 1SG.A-daughter-POSS Oh.mv.God (Jap) OUOT voice-POSS-exist.SG kor nani en-ka opas ek. wa and quickly 1SG.O-surface run.to and come.SG 'My daughter said, "Oh, my God!", and then guickly came and helped me.'

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Hiroshi Nakagawa

17 Verbal number

1 Introduction

Verbal number is a grammatical phenomenon in which the verb itself shows number, without being in an agreement relation with a noun, such as the subject. Ainu does not mark nouns for number and a morphological distinction between singular and plural is found only on the verb, qualifying it as a language having verbal number. Languages having verbal number are comparatively limited among the world's languages. Corbett (2000: 245) describes their distribution as, "North America, the four major families of Africa, certain Paleoasiatic languages, various languages of the Caucasus, the South Central Dravidian group, some Austronesian languages, and Papuan languages." Ainu is not included in this list, but the same volume adduces Ainu examples in several places and counts Ainu as a language having verbal number.

According to the chart of WALS feature 80A in Veselinova (2005: 328–329), languages on the Eurasian continent, especially the northern part, having this characteristic are very limited. It is worth noting the fact that, among those languages, three language isolates, Ainu, Ket, and Burushaski, have verbal number. In particular, considering the fact that the proposal by Edward Vajda that Ket belongs to the same language family as the North American language group Na-Dene (Vajda 2010) has been gaining broad confirmation, a historical explanation for this distribution may be a topic for the future, see also Bugaeva (Chapter 1, this volume).

Number in Ainu is basically expressed by stem alternation. In many languages held to have verbal number, plurality is shown by reduplication of the verb, and, while Ainu is a language that has developed a rich variety of reduplications, since they are treated as a means of showing lexical aspect rather than expressing the category number, they will not be taken up in this chapter. However, there are a number of clitics that have traditionally been treated as plural suffixes and it is necessary to clarify the relation between stem alternation and such clitics.

Sections 2–3 primarily discuss stem alternations. Section 2 examines the morphology of stem alternations and Section 3, the semantics; Section 4 examines derived verbs from both points of view. Section 5 takes up the clitics, including dialect variation, and Section 6 presents a summary of the chapter.

Since there is comparatively little dialect variation in stem alternations in Ainu, Sections 2–4 will proceed using the Saru dialect of southwestern Hokkaido. Examples cited will be followed by their source in the form (DIALECT: Source: page reference: e.g., SARU: S. Tamura 1985: 46); examples cited without attribution are from the author's own collected data and those with no annotation at all are from Saru dialect data collected by the author.

2 Expression of number in Ainu

Ainu is held to express a distinction in number between singular and plural primarily through verbal stem alternations. Morphologically, they can be further classified into the following three types.

Type-A. Suppletion

Type-B. -n/-p alternation

Type-C. -V/-pa alternation

The distinctions among these three types are intimately related to the semantics of the verb and to the transitive-intransitive distinction.

2.1 Type-A. Suppletion

In this type, the stems for singular and plural forms are completely different, as shown in Table 1. They are limited to a small number of high-frequency verbs expressing existence and change of location.

Ta	bl	e	1:	Τv	n		Α.	2
ıa		·		1 4	יע	_	т.	

meaning	intr/tr	sg	pl
be, exist	intr	an	oka .
go	intr	arpa	paye
come	intr	ek	arki
stand	intr	as	roski
sit	intr	а	rok
wander	intr	omanan	payeoka, payoka
kill	tr	rayke	ronnu
put up	tr	asi	roski
take	tr	uk	uyna
put	tr	anu	ari

¹ Concerning whether or not this should be considered a singular/plural distinction, see Section 3.2.3.

² In addition to these, *oma/o* 'exist in' is sometimes given as a singular/plural pair, but there are a number of points that are open to debate, so they are not included in this table.

2.2 Type-B. -n/-p alternation

In this type, the singular form ends in -n and the plural form ends in -p, as summarized in Table 2. The suffixes -n/-p also form intransitive verbs. This type is limited to a small number of intransitive verbs relating to motion by the subject.

Table	2:	Ty	pe-	В.
-------	----	----	-----	----

meaning	intr/tr	sg	pl
go up	intr	riki-n	riki-p
go down	intr	ra-n	ra-p
go forward	intr	sa-n	sa-p
go back	intr	maka-n	maka-p
land, go toward shore	intr	ya-n	уа-р
go in	intr	ahu-n	ahu-p

2.3 Type-C. -V/-pa alternation

In Type-C, the singular form ends in a vowel (-*V*) and the plural form ends in -*pa*. -*V*/-*pa* are also suffixes forming transitive verbs (Table 3). A comparatively large number of verbs belong to this type and are transitive verbs bringing about a change in the state of object of the verb, what Vendler (1967) calls achievement verbs or accomplishment verbs.³ Many more verbs than those in the table below belong to this type and the table presents only a portion of them.

Table 3: Type-C.

meaning	intr/tr	sg	pl	
go outside	intr	soyne ⁴	soyenpa	
cut	tr	tuy-e	tuy-pa	
break	tr	kay-e	kay-pa	

³ Kobayashi (2007) presents a detailed analysis regarding the verb categories using a lexical conceptual structure analysis.

⁴ The intransitive verb *soyne/soyenpa* is an exception. It should semantically belong to Type-2. It is composed of *soy* 'outside' and *ne* 'become'. The plural form is made by replacing -*e* by -*pa*, but because the form **soyn-pa* is blocked by the syllable structure of Ainu, an *e* is thought to be inserted between the *y* and the *n*. Evidence supporting the view that this is an inserted vowel is found in the inconsistency of vowels found in other dialects: Saru and Abuta *soyonpa* and Horobetsu *soyunpa*. Furthermore, a form *soyene* formed by back formation from *soyenpa* is also found in the Saru dialect.

meaning	intr/tr	sg	pl
fold	tr	kom-o	kom-pa
bend	tr	rew-e	rew-pa
smash	tr	yak-u	yak-pa
boil	tr	suw-e	su-pa⁵
push	tr	rut-u	rut-pa
split lengthwise	tr	pet-u	pet-pa
lift up	tr	pun-i	pun-pa
extend, lengthen	tr	tur-i	tur-pa

3 Characteristics of Ainu verbal number

3.1 Lexical restrictions

As a characteristic of verbal number, Corbett says, "We typically find that relatively few verbs show verbal number distinctions" (Corbett 2000: 257), and Ainu shares this characteristic. The number of verbs that morphologically mark number is limited and it can be said that the majority of verbs do not have this distinction.

- (1) onuman **mokor** wa an hi ne evening sleep and exist.SG NMLZ COP 'when (the girl) is sleeping at night,'
- (2) **mokor** wa oka ruwe ne and exist.PL INFR.EVID COP 'People are sleeping.'

The subject in (1) is a single girl and that of (2) is a large number of people, but the verb mokor 'sleep' does not change; only the verb of existence an/oka showing stative aspect reflects the number of the subject. Verbs that, like *mokor* here, do not have a number distinction are overwhelmingly in the majority.

In addition, there is a tendency for verbs that do have a number distinction to be limited cross-linguistically to those with a common meaning. Mithun (1988: 213)

⁵ From the singular form *suwe*, the root may be thought to be \sqrt{suw} , but, since the syllable structure /suw/ is not permitted in Ainu, /suw-pa/ becomes /su-pa/. Since the syllable structure of the singular form is /su-we/, the w does not drop.

states as follows: "In many North American languages, verb stems alternate according to the number of participants involved. The set of alternating stems consists of a limited number of common verbs, in some languages only two or three, in others up to several dozen. They usually include intransitives such as 'sit', 'lie', 'stand', 'go', 'walk', 'run', 'fly', 'die', and transitives such as 'take', 'pick up', 'carry', 'throw', 'kill'." Ainu shows the same tendency in that verbs that show number with suppletion include such intransitive verbs as *an/oka* 'exist', *a/rok* 'sit', *as/roski* 'stand', *arpa/paye* 'go', *ek/arki* 'come' and transitive verbs *uk/uyna* 'take' and *rayke/ronnu* 'kill'.

3.2 Meanings expressed by number

3.2.1 Event number

Corbett (2000: 246) distinguishes two types of verbal number: participant number and event number. Participant number refers to the verb varying to reflect the semantic number of noun phrases forming arguments to the verb, and event number refers to the verb varying to reflect the number of actions or events. However, there are many cases in which it is often difficult to decide in reality which of these applies.

That number in Ainu shows event number has already been pointed out by in S. Tamura (2000).

The concepts of 'singular' and 'plural' are different from those in English and French and the like. In those languages, number corresponds to number of the subject, but in Ainu, number relates to the action expressed by the verb and the number of events. For example, *tuye* 'to cut SING' expresses one person cutting one time, while *tuypa* 'to cut PL' expresses two or more people cutting; one person cutting more than one object; or one person cutting one object more than once. When more than one object is cut, or when one object is cut into several pieces, because the action of cutting occurs more than once, the plural form is used. (S. Tamura 2000: 39)

On the other hand, S. Tamura points out that, although what a transitive verb shows is event number, there are many cases where, since ultimately the form matches the direct object, it can be seen as showing participant number.

For *rayke* :: *ronnu* 'to kill', no matter how many people are involved in the killing, since that event occurs only at the moment that the person or animal dies, the singular is used. For example, no matter how many people are involved in the hunt, if one bear is killed, the singular *rayke* is used, and if two or more bears are killed, the plural form *ronnu* is employed. Accordingly, for transitive verbs, the number often agrees with the number of the object. (S. Tamura 2000: 39)

Satō (2008: 101) makes a similar observation.

The plural of an intransitive verb shows the plurality of the subject, but the plural form of a transitive verb, as a rule, shows the plurality of the object. However, as in example (5) [given below], even though the object may be one fish, if a number of actions are taken with regard to the object, the plural form is used.

```
cep ohaw not
                          ne ku-tuv-pa
                                                    ohaw ku-kar
                                              wa
                              1SG.A-cut-TR.PL and soup 1SG.A-make
fish soup one.mouthful in
'I cut the fish into bite-sized pieces and made soup.'
(Satō's (2008: 99) example (5))
```

However, to give a more accurate description, the transitive verbs described above that have a singular/plural distinction are basically achievement or accomplishment verbs. As such, the number such verbs express is not simply the number of actions; it can be said to be the number of times the action is accomplished, that is, the number of changes that the object undergoes.

- mak-a hine hoku-hu (3) *apa* kamuv tono door open-TR.SG and husband-AFF god lord ahu-n hine inside.house-INTR.SG and 'Opening the door, her husband lord entered, . . .'
- (4) *cise* arki mak-pa sov ta hine apa hine house outside LOC come.PL and door open-TR.PL and ahu-p akusu inside.house-INTR.PL then 'When (the people of the village) came to the outside of the house and opened the door and came in, . . . ' (SARU: S. Tamura 1985: 46)

In the case of mak-a/mak-pa 'open', in (3) the subject is one person and the singular mak-a is used while in (4) the subject is plural and the plural form mak-pa is used. In both cases, the object apa 'door' is singular so it may appear that the alternation mak-a/mak-pa is agreeing with the subjects, but, in a traditional Ainu house, the door was a straw mat hung across the doorway and, unlike a modern swinging door, unless one were roll up the straw mat and tie it out of the way, there is no way that a door could be left open, and thus each time someone entered, the straw mat would have to be lifted up and opened. That is, if a number of people were to enter, the event of opening the door would have to be achieved multiple times. From examples like this, it can be said that what transitive verbs in Ainu show is event number.

3.2.2 Participant number

The description given in 3.2.1 cannot be applied directly to intransitive verbs. Ainu nouns do not have a grammatical number distinction, but the expression of personal affixes is obligatory and intransitive verbs that have a number distinction alternate to agree with the plurality of the personal affixes.

- (5) maciya or ta **e-arpa** town place LOC 2SG.S-go.SG 'You (SG) went to the town.'
- (6) e-yup-ihi e-siren wa eci-paye
 2SG.A-elder.brother-AFF 2SG.A-take.with and 2PL.S-go.PL
 'You took with you your elder brother and you all went.'

In (5), the singular form *arpa* appears agreeing with the personal affix *e*- showing a second-person singular subject, and in (6) *paye* appears, agreeing with the second-person plural subject affix *eci*-. That this is a change based on the number of the subject and not an event number showing repetition of an action is shown by examples like (7).

(7) a-hekote kamuy nea Iskar etok-o
4.A-be.married.to god that Iskar upstream-POSS
un arpa ranke ek ranke
ALL go.SG HAB.AUX come.SG HAB.AUX
'My god husband goes to and comes from (the village) upstream on the Ishikari River.' (SARU: S. Tamura 1984: 30)

The auxiliary verb *ranke* 'repeat (an action)' here, clearly shows that the actions are repeated many times, but the subject *a-hekote kamuy* is singular and the verbs agreeing with it are the singular forms *arpa* 'go' and *ek* 'come'.

From data like these, it may look like subject-verb agreement in Indo-European-type languages, but there are no third-person personal affixes. Also, there is no singular/plural distinction in fourth-person affixes and in some dialects like the Saru dialect, it is only through the verb itself that the plurality of the subject is shown.⁶

- (8) *e-hotke-y* ta **arpa-an** ine inkar-an akus at.APPL-sleep-place LOC go.SG-4.S and look-4.S then 'when I tried going to the bed, . . . '
- (9) **paye-an** ciki e-sir-amkir ya? go.PL-4.S if 2SG.S-appearance-know Q 'If we (inclusive) go, can you find the way?'

⁶ In many dialects, intransitive verbs are only used in the plural form when it is used with the fourth-person personal affix.

In both (8) and (9), the fourth-person subject is shown by the suffix -an, but this in itself does not show a singular/plural distinction. The plurality of the subject is shown solely by the singular and plural verbs arpa and pave.

Furthermore, with a derived verb form based on these intransitive verbs, the agreement is not with the grammatical subject but with the semantic agent.⁷

(10) a-utar-ihi nimar-i Iskar emko a-paye-re rusuy kusu 4.A-kin-AFF half-AFF Iskar upper 4.A-go.PL-CAUS DESI because 'Since I want to make half our clan go upstream of the Ishikari River, ...'

The subject of (10) is '1', as shown by a-, but the reason for the use of the plural form paye-re (singular would be arpa-re) is that it agrees with the semantic agent of paye, a-utarihi nimari 'half of our clan', the grammatical object.

From such facts as these, it can be seen that what agrees with the number expressed by the intransitive verb stem is not the grammatical subject but the semantic agent. Accordingly, this is not subject-verb agreement like that of Indo-European languages, but can be said to be participant number, a characteristic of verbal number.

Furthermore, in imperative sentences in Ainu, when the recipient of the command is singular, a singular form with no subject personal affix is used, and when the target is two or more people, a form composed of the plural form with no subject personal affix plus a sentence final particle yan is used.

- (11) hokure sam-a arpa arpa! un quickly near-LF ALL go.SG go.SG 'All right! Go over next to it! Go!' (SARU: S. Tamura 1986: 6)
- (12) eci-uni un pave van pave van! 2PL.A-home.POSS ALL go.PL IMP.POL go.PL IMP.POL 'Go to your homes! Go!' (SARU: Chiba Univ. 2015: 1567)

When the target of the command is plural as in (12), a plural form of the verb alone, such as *pave! cannot be used and van must always be added. Also, van cannot be added to a singular form to make a form like *arpa yan! From the data so far, it appears that plurality and the presence or absence of yan are coupled, but, as shown in (13), when the causative form is used, *yan* can appear with a singular form.

⁷ This will be discussed in detail in Section 4.

(13) aynu ottena ahu-n-te yan
the.Ainu master inside.house-INTR.SG-CAUS IMP.POL
ahu-n-te yan!
inside.house-INTR.SG-CAUS IMP.POL
'Let the Ainu master in! Let him in!' (SARU: Chiba Univ. 2015: 226)

The ones who are being given the order are the servants of the Japanese lord, and, although there are more than one of them, the stem of *ahu-n-te* [enter CAUS] 'allow to enter' is the singular form *ahu-n* (the plural is *ahu-p-te*). That is, while *yan* is showing the plurality of the lord's servants, who form the grammatical subject, *ahunte* can be thought to be showing the singularness of *aynu ottena* 'Ainu master', which is the grammatical object but the semantic agent of 'enter'. In other words, since it is the form *yan* that expresses a command with a plural target, merely making the verb plural will not express the imperative meaning. On this point also, the plurality of an intransitive stem verb does not agree with the grammatical subject but can be viewed as showing the participant number.

3.2.3 Singular as a default value

Up to this point, the value of number in Ainu has been treated as an opposition between singular and plural (and has been represented consistently in this work as singular/plural), but in the case of transitive verbs, even in cases when the object is semantically plural and when the events themselves can be interpreted as having been accomplished a number of times, it is not necessarily the case that the plural form will be used.

- (14) *yuk ne ciki kamuy ne ciki a-rayke wa* deer COP if bear COP if 4.A-kill.SG and 'I killed deer and bears then'
- (15) yuk ne yakka kamuy ne yakka **a-ronnu** kor deer COP although bear COP although 4.A-kill.PL then 'I killed deer and bears then'
- (16) *usa cikap usa isepo cironnup ne yakka a-rayke wa* various birds various hares foxes COP although 4.A-kill.SG and 'I killed various birds, various hares and foxes then'
- (14) and (15) are conventional expressions often used in stories and are something that can be used in the same way in the same places and can be thought of referring to the same thing as an event. That is, even though *rayke* is used in the singular form

in (14) it is not expressing an event in which one each of deer and bears were taken but, like (15) is clearly an expression of the fact that many prey were taken. In (16) as well, where usa 'various' makes the plurality clear, the singular form rayke is used.

Furthermore, there are also cases with transitive verbs in which, even though the objective case personal affixes are plural, the singular form of the verb is used.

- (17) i-ruska-an hi kusu, a-eci-rayke ANTIP-be.angry.with.sth-4.S NMLZ because 4.A-2PL.O-kill.SG rusuv kusu sa-n-an because front.place-INTR.SG-4.S DESI 'Because I got angry, I came down to kill you all.'
- (18) a-wen-ona-ha/ otu ikinne/ ore ikinne/ ko-arpa 4.A-bad-father-AFF/ two times/ three times/ to.APPL-go.SG ki wa⁸ a-eci-rayke kunihi do and/ 4.A-2PL.O-kill.SG in.order 'My bad father went there many times and (asked) to kill you all.' (SARU: Monbetsu-chō Kyōdoshi Kenkyūkai 1969: 569)

(17) and (18) are utterances by different persons whose places of residence are also vastly different. In both cases, even though it is clear from eci- that the objects are second-person plurals, the verb appears in a singular form such as rayke. From examples like these, it is apparent that the plurality of a transitive verb does not directly reflect the plurality of the object. In contrast to this, in the case of intransitive verbs, forms like *eci-ahun 'you all enter' with plural personal affixes attached to a singular verb form do not appear.

It has been thought ever since Kindaichi (1931) that, when number is expressed clearly using a numeric expression, even though semantically plural, the singular form is used. Kindaichi gives the example of being corrected to tu aynu ahun ruwe ne 'Two people came in' when he tried saying *tu aynu ahup ruwe ne (ahun/ahup 'enter') and states:

In Ainu, in the case described above, if one does not attach the numeric expression tu and just says aynu, the verb will appear in the plural form ahup, indicating that it is not one but two or more people who have entered. In contrast to that, if the numeral tu is used, since it is clear that it is two people, there is no need to use *ahup*, and in fact *ahup* feels redundant.

(Kindaichi 1931: 209)

⁸ The virgules (/) mark boundaries in verse.

⁹ At the HALS Field Seminar held at Helsinki University in November of 2014, Anna Bugaeva suggested that a realis-irrealis distinction may be involved in this example. This is a definite possibility. If this should prove to be true, it could be viewed as valuable evidence in favor of the singular form default hypothesis described here.

On the other hand, S. Tamura states that there is a restriction on the number when the singular form is used, saying that the singular form is used with the number four but that the plural form is used with over five.

It should be noted that when the number is specified by a numeral, if that number is small, such as two, three, or sometimes four, the singular form of the verb is used. For larger numbers the plural form is used.

(S. Tamura 2000: 39)

Veselinova, accepting S. Tamura's description, points out that this is similar to several North American languages that also use the singular form with small numbers.

Apart from Ainu, there are five other languages on Map 80A which behave in a similar way in that they group the dual and small quantities together with the singular and not with the plural. They are all from North America: Eastern Pomo (Hokan; California), Navajo, Hupa (Athabaskan; California), Wichita (Caddoan; Oklahoma and Kansas) and Kiowa (Kiowa-Tanoan; Kansas and Oklahoma). (Veselinova 2005: 326)

However, there is a problem with declaring that the Ainu singular form shows a small quantity. In the folkloric literature that forms the majority of Ainu language materials, the cases using number four and above are quite scarce, but six is a special number that expresses the meaning of 'many' and thus is used more often compared to other numbers. The singular form is sometimes used with the number *iwan* 'six'.

(19) iwan a-yup-i an iwan a-sa-ha
six 4.A-elder.brother-AFF exist.SG six 4.A-elder.sister-AFF
an hine oka-an hike
exist.SG and exist.PL-4.S but
'We were living there with six older brothers and six older sisters, but ...'

Examples such as these are also found in dialects other than the Saru dialect.

(20) *cise* so-pa ta **iwan** pu **an** wa house seat-upper.part LOC six storehouse exist.SG and 'Above the house there are six storehouses, and . . .'

(SHIRANUKA: "Shitaku Yae no Denshō" Kankōkai 2012: 17)

In addition, S. Tamura points out that, when using words like 'many' or 'several' indicating an indefinite number greater than two, the plural form is used.

(4.24) a. **inne** utar **arki** many people come-PL 'Many people came.'

b. cise poro-n-no roski wa oka
house many-EP-ADV stand-PL CON to-be-PL
'There are many houses standing.'
(S. Tamura 2000: 40)

However, in many dialects, including Saru, *poro-n-no* 'many' cooccurs with both singular and plural forms. Overall, there is a tendency to hesitate to use the singular with a human subject, but a definitive statement cannot be made.

- (21) hat-punkar **poro-n-no an** kor grape-vine many-EP-ADV exist.SG then 'There are lots of grape vine, then' (TOKACHI: Sawai 1997: 128)
- (22) usa kamuy cikirpe **poro-n-no** an various god garments many-EP-ADV exist.SG 'There are a lot of various beautiful garments.' (HOROBETSU: M. Chiri 1981 [1937]: 110)
- (23) amam ikir a-mi-p ikir icen ikir poro-n-no rice pile 4.A-wear-thing pile money pile many-EP-ADV an pe ne.
 exist.SG NMLZ COP
 'There are lots of rice, lots of clothes and lots of money.'
 (SARU: S. Tamura 1986: 24)
- (24) *pewre* or ta an-e-p ka **poro-n-no** an be.young place LOC 4.A-eat-thing even many-EP-ADV exist.SG 'When being young, there were lots of food.'

 (ISHIKARI: Sunazawa 1983: 180)
- (25) yuk ciyoki kamuy ciyoki **poro-n-no an** yakun deer hide god hide many-EP-ADV exist.SG if 'If there are lots of deer and bear hides.'

 (SHIZUNAI: Okuda 1999: 0140187)
- (26) *ikka sisam* **poro-n-no an** usi ta steal Japanese many-EP-ADV exist.SG place LOC 'the place where many Japanese thieves live' (CHITOSE)

Given these facts, it is difficult to think of the singular form as a form that expressed only singularity or a small number; rather, revising Kindaichi's observation slightly, while the plural form clearly expresses plurality, the singular form can be thought of

as an unmarked default form. Accordingly, if some other element clearly indicates something is plural, there is no need to go out of one's way to use the plural form of the verb, but should one wish to emphasize a large number, then, in addition to the expression by other elements, the verb can be made plural as well.¹⁰ However, it should be reiterated that in the case of intransitive verb stems, when plural personal affixes are attached, the plural form is used.

4 The relation between derivation and meaning

Ainu is a so-called polysynthetic language that makes various derived verbs using a variety of derivational affixes and can form compound verbs incorporating objects and sometimes subjects or adverbial elements. This section will examine the expression of number in such derived and compound verbs and explain the meaning of what they express.

4.1 Causative

A causative form can be formed from both intransitive verb stems and transitive verb stems through the addition of the suffix **-re** (**-te**, **-e**) or sometimes **-ka**. As already described in Section 3.2.2, when a causative form is built on an intransitive verb stem, the plurality of the verb agrees not with the grammatical subject but with the agent of the original verb.

- (27) aynu ottena i-sam un ek-te yan! the.Ainu master 4.O-near ALL come.SG-CAUS IMP.POL 'Have the Ainu master come over to me!' (SARU: S. Tamura 1986: 6)
- (28) *a-kor okkay-po utar*, *kusu a-eci-arki-re p anak* 4.A-have man-DIM PL because 4.A-2PL.O-come.PL-CAUS NMLZ TOP 'You young people, the reason why I have made you all come to me is.'
- (27) is an imperative sentence and, as in the earlier example (13), the grammatical subject of *ek-te* is the person given the order (the servants of the Japanese lord), but, since the agent of the original verb *ek* 'come' is the Ainu master, it remains singular.

¹⁰ Accepting this finding, Bugaeva (p.c.) states that perhaps, following what Corbett (2000: 16–17) says about "nominal number", this could be called "singular/general vs. plural marking".

In contrast, the grammatical subject in (28) is 'I', but, since the agents of the original verb *arki* are *eci*- 'you all', it takes the plural.

4.2 Conversion of a transitive verb to an intransitive verb (anticausative, etc.)

An intransitive verb can be derived from a transitive verb stem through the addition of prefixes expressing anticausative and other functions. Such prefixes include the anticausative he- 'head', ho- 'buttocks', antipassive i- '(indefinite) something', reflexive yay-'self', si-'self', and reciprocal u-'mutual', for details see Bugaeva and Kobayashi (Chapter 15, this volume).

A verb created in this way from a Type-C transitive verb generally comes to behave in the same way as a Type-B intransitive verb stem and changes form depending on the derived verb subject (= agent). For example, when the prefix ho- (normally translated as 'buttocks') is added to the transitive verb stem pun-i/pun-pa 'lift up', the intransitive verb ho-pun-i 'buttocks + lift up' = 'rise up, jump up' is formed. Like Type-A and Type-B intransitive verbs, this changes to **ho-pun-i/ho-pun-pa** agreeing with the agent and taking the plural form if the agent is plural.

- (29) a-ona-ha ho-pun-i hine 4.A-father-AFF bottom.PF-lift-TR.SG and 'My father got up.'
- (30) *a-yup-utar-i* ka ho-pun-pa 4.A-elder.brother-PL-AFF even bottom.PF-lift-TR.PL 'My older brothers got up.'

However, many of the intransitive verbs formed in this way undergo a change in meaning and sometimes it is difficult to relate them semantically to the original transitive verb stem; that is, they have been lexicalized in their changed form and that can be thought to be why they behave like intransitive stem verbs. Examples include ho-tuy-e/ho-tuy-pa 'shout, yell' < ho- 'buttocks' + tuy-e/tuy-pa 'cut' and ho-yup-u/ ho-yup-pa 'run' < ho- 'buttocks + yup-u/yup-pa 'tighten, brace', etc.

In contrast to these, there are the prefixes **e**- and **o**- similar in form to he- 'head' and ho- 'buttocks' and translated as 'head of ~' and 'rear end of ~', respectively. These do not change the valency of the derived verb and, even when attached to a Type-C transitive verb, the result remains a transitive verb. Like transitive verbs, they change to reflect event number.

- (31) kanputa-ha ci-sina at-u ka **e-tuy-e**,
 lid-AFF RES-tie string-AFF even head.POSS.PF-cut-TR.SG
 kanputa-ha e-turse-re
 lid-AFF with.APPL-fall-CAUS
 '(The woman) cut **the top of** the string holding the lid (of the box) and removed the lid.' (SARU: Chiba Univ. 2015: 2160)
- kitay/ (32) kina hav a-e-tuy-pa wa/ а-е kor/ 4.A-head.POSS.PF-cut-TR.PL and/ 4.A-eat and/ grass tips summit/ hike sa-n-an front.place-INTR.SG-4.S but 'The tips of the grass / I cut **the ends** / while eating / I descended the mountain, but . . . ' (SARU: Kubodera 1977: 100)

The addition of the prefix *e*- to the transitive verb *tuy-e/tuy-pa* 'cut' derives a transitive verb meaning 'cut the head of ~' and, given that the subject is singular in both cases, the *e-tuy-e/e-tuy-pa* alternation reflects the number of times the act of 'cutting' takes place.

One prefix worthy of note is u-, which is often described as adding a reciprocal meaning 'mutually'. Accordingly, it might be expected that the verb would become semantically plural reflecting both the agent and the patient and would thus naturally appear in its plural form, but in reality, it can appear in either the singular or the plural form. Taking the verb rayke/ronnu 'kill' as an example, the following examples are attested.

- (33) *u-kovki* kusu **u-**ravke kusu ne ka р intention COP NMLZ even RECP-attack RECP-kill.SG intention ne р ka COP NMLZ even 'both those trying to fight each other and those trying to kill each other' (SARU: S. Tamura 1989: 72)
- (34) kotan epitta somo u-ronnu-an no village all.over NEG RECP-kill.PL-4.S and 'Throughout the village we didn't kill each other (we didn't engage in massacre).' (SARU: S. Tamura 1987: 42)

This can be thought to be due to the fact that **u**- is not only a simple reciprocal. In other words, while **u**- is a form that shows there are two or more participants involved, it is not necessary for the agent and the patient to be in an equal relationship. For example, *uonakor* is composed of **u**- 'mutually', *ona* 'father', and *kor* 'have', but it

simply means 'be in a relationship of father and child' (= 'have a father') and not that they are mutually each other's fathers or that the two both have the same father. That is, *ona-kor* 'have a father' has only one participant, and **u**-serves the role of showing that there are two participants in the relationship, that is, the so-called dyadic construction. Accordingly, just because **u**- is prefixed, neither plurality of agent nor of patient necessarily arises, and of course no event number plurality arises either.

Caution is needed because, as shown here, what singular or plural reflects differs according to the characteristics of the derivative affixes.

4.3 Applicatives

Constructions in which a noun phrase that is not an object argument of the verb is made into one are called applicatives and the prefixes e-, ko-, and o- have the function of forming applicatives in Ainu. When these prefixes are affixed, intransitive verbs become transitive and transitives increase the number of their arguments by one, but the agreement relation with number does not change from that of the original verb; with an intransitive verb it agrees with the agent and with transitive verbs it agrees with the event number.

- (35) nis-o-sit-ciw e-**o-**arpa wa clouds-bottom.PF.POSS-appearance-stick 2SG.A-to.APPL-go.SG and 'you have gone to the ends of the earth, and ...' (SARU: Chiba Univ. 2015: 860)
- (36) *a-unu-utar-i* sinrit mintar **o**-paye kuni 4.A-mother-PL-AFF ancestors earth.floor to.APPL-go.PL in.order 'so that my mother (and other relatives) could go to the gardens of their ancestors'

Examples (35) and (36) show the applicative prefix **o**- attached to the intransitive verb arpa/paye 'go' adding the semantic goals nis-o-sit-ciw and sinrit mintar as arguments (in Ainu grammar, they become direct objects), and in both cases they become transitive verbs, but **o-**arpa is singular agreeing with the subject (=agent) e- 'you', and **o-**paye is plural agreeing with a-unu-utar-i 'my mother and relatives'.

(37) tan poro ape/ ape teksam-or/ **e-as-i** ki kor fire/ fire near-place/ at.APPL-stand-TR.SG do and '(regarding a skewer a bad god is stabbing a young man with) that big fire / by the fire / he stood it up' (SARU: Chiba Univ. 2015: 703)

(38) oraun apa-sam-un kamuy a-roski. cise tum then door-near-belong.to god 4.A-stand.PL house inside a-e-roski hine 4.A-at.APPL-stand.PL and 'And then I stood up the gods of the doorway, I stood them up in the house.' (SARU: Chiba Univ. 2015: 165)

Examples (37) and (38) show the applicative prefix *e*- attached to transitive verbs with which the place where something is stood up has been made an argument of the verb. In (37), since what is stood up is a single barbeque skewer, the singular form *e*-asi appears and in (38), since the *apasamun kamuy* normally come in sets of two, the plural *e*-roski is used. In both examples the alternation in the verb stem reflects the number of the direct object (=patient).

4.4 Incorporation

Ainu is a language that shows so-called polysynthetic characteristics forming compound verbs incorporating an object, or in some cases, the subject. Other than some examples like <code>ikutasa/ikutaspa</code> 'hold a banquet' that have become frozen lexically (<code>taspa</code> is not used independently), examples of Type-C transitive verbs incorporating their objects and becoming intransitive are comparatively rare.

Examples that are noteworthy for their ties to number in incorporation are ones like <code>haw-e-an/haw-e-oka</code> 'say' and <code>e-ram-(u)-an/e-ram-u-oka</code> 'understand' that are formed incorporating the existence verb <code>an/oka</code> with the noun phrases that correspond to its subject. The semantic subjects of <code>an/oka</code> in these examples are <code>haw-e</code> 'voice' and <code>ram-u</code> 'thoughts', but these are in their affiliative forms and their possessors are the subjects of the incorporated verbs as a whole.

- (39) toan kur ko-pisi yak e-e-**ram-(u)-**an na that person to.APPL-ask if 2SG.A-about.APPL-heart-AFF-exist.SG SFP 'If you ask that person, you'll understand.' (SARU: Honda 2001: 49)
- (40) aynu oka uske eci-e-**ram-u**-oka ciki human exist.PL place 2PL.A-about.APPL-heart-AFF-exist.PL if 'If you all understood (found) a place where people are living, . . .' (SARU: Chiba Univ. 2015: 2244)

The words e-ram-(u)-an and e-ram-u-oka are composed of e-'concerning', ram-(u)'(someone's) thoughts, heart', and an/oka 'exist', and semantically the subject of an/oka is ram-(u). The word ram-(u) itself has no singular or plural, but the subject personal affixes e-eci- grammatically speaking show the possessors of the ram-(u) and,

as a result, there is agreement between the intransitive verb stems an/oka and the overall subjects of e-ram-(u)-an/e-ram-u-oka, that is, e-/eci-.

5 Expression of number by clitics

The verb stem alternations described so far constitute, narrowly speaking, number expression in Ainu, but expression of number by clitics is closely related and is often viewed as the same phenomenon. This section considers this phenomenon.

5.1 pa in dialects like Saru

5.1.1 Suffix -pa and clitic pa

In some dialects, such as the Saru, Chitose, and Ishikari dialects, there is an independent form pa that resembles the -V/pa pattern very closely but is not the suffix -pa forming a plural form that alternates with the -V forming a singular form. The independent form pa can follow the singular and even the plural form of a verb. This form is not a suffix, but should be viewed as a clitic and, from the point of view of Ainu parts of speech, can be called an auxiliary verb.

The fact that this *pa* is something with different characteristics from the suffix -*pa* forming plural forms has already been pointed out in M. Chiri (1942).

Type 1 "identical singular and plural forms". For words like tura 'accompany' for which the singular and plural forms are the same, it is unclear whether they are singular or plural unless it is given by something in the context. However, this does not mean that there is no way to make the number explicit and show it morphologically. The means for showing it is by suffixing -pa [Note: pa² below]. tura-pa 'accompany-plural'. itak-pa (itax-pa) 'say-plural'. Words that belong to this type include both those ending in a vowel like tura and those ending in a consonant like itak (itax) and when -pa is affixed to a word ending in a vowel, unlike the case to be discussed in the next section [Note: pa^1 below], the vowel is not eliminated. Also, that forms without -pa and forms with it do not stand in opposition as singular versus plural is an important difference from what is discussed in the next section. (M. Chiri 1983 [1942]: 489)

In addition, Asai (1969), writing about the Ishikari dialect, regards the two as suffixes having different functions, and offers the following explanation.

Unlike the plural forms introduced up to here, -pa attaches to the verb directly. As in forms like minapa 'laugh', kirapa 'flee', kikpa 'hit', erepa 'feed', osikkotepa~osikotepa 'love', or even ronnupa 'kill', there are times when it may be regarded as a plural form, but it is a form that might better be termed a "greater plural".

This is used when an action is repeated many times or when the results of an action can be captured by multiple conceptualizations. Also, it can be used when the subject and/or the object of an action is felt to be of a great number. [part omitted] The plural form and the greater plural form can pretty much be thought of as separate forms, but both in terms of their forms and in terms of their functions, no clear line can be drawn between them. (Asai 1969: 781)

On the other hand, S. Tamura considers them both to be the same and says the following.

The pluralizing suffix -pa, discussed above, may be attached to a plural verb, or to verbs without a singular/plural distinction to express the performance of an action by plural subject or of action performed on a plural object, or both. (S. Tamura 2000: 40–41)

For convenience, the Type-C plural form-forming suffix will be designated pa^1 and the clitic pa under consideration here will be designated pa^2 . There is no doubt that etymologically the two are closely related, but synchronically they are separate forms and, at least in the Saru dialect, they show the following differences.¹¹

- 1. Only pa^2 can follow the personal suffixes with intransitive verbs; pa^1 cannot follow yielding a form like *hosip-as-pa^1 instead of hosip-pa^1-as 'we return'. In other words, pa^1 is a form that must always attach to the verb root while pa^2 can follow conjugational forms. The intransitive verb personal suffixes -as and -an have a high level of independence compared to other verbal affixes and have such characteristics that they should be regarded as clitics. As pa^2 can attach after them, it should be regarded as a clitic and not a suffix.
- 2. pa^1 is placed inside (to the left of) derivational affixes but pa^2 is placed outside derivational affixes. For example, when deriving 'cause (someone) to shoulder (something)' by adding the causative suffix -re to se 'shoulder (something)', the result is se-re- pa^2 , not *se- pa^2 -re. On the other hand, in the case of pa^1 , tuy- pa^1 'cut (something)' becomes tuy- pa^1 -re, not *tuy-re- pa^1 .

5.1.2 The meaning of pa^2

In Section 3.2, it was stated that transitive verbs of Type-C are basically achievement/ accomplishment verbs and that number with such verbs reflects the number of times a change of state in the object takes place as a result of the action expressed by the verb. Pa^2 is not subject to this kind of semantic restriction on the verb. For example, limiting consideration to the folkloric text the author elicited and recorded from Ms. Kimi Kimura of Biratori-chō, Saru-gun in Hokkaido, pa^2 is used attached to a semantically extremely varied set of verbs.

¹¹ I have not been able to confirm characteristic 1. below in dialects other than Saru.

¹² One such characteristic is that, in a construction like *cis-an a cis-an a* 'I cried and cried', the verb stem can be elided leaving only the reduplicated *-an* as in *cis-an a -an a*.

Intransitive verbs: apkas 'walk', cis 'cry', cise-kar 'build a house', hotke 'lie down', ikoytupa 'envy', inkar 'see', i-rura 'carry things', ipe 'eat', ipe-rusuy 'be hungry', kamuynomi 'pray to a god', onne 'age', pirka 'be good', pokor 'have a child', ray 'die', rewsi 'stay overnight', sam-car-kor 'be able to speak Japanese', sike 'carry luggage on one's back', sinnurappa 'hold a memorial service for one's ancestors', suke 'cook', tori 'stay overnight', vavnu 'think', etc.

Transitive verbs: e-punki-ne 'protect ~', e-rampokiwen 'have pity on ~', e-ramu-oka 'understand ~', e-sinot 'play with ~', etun 'borrow ~', e-u-ko-ytak 'discuss ~', eywanke 'use~', hotanukar 'visit ~', ipe-re 'cause ~ to eat', kasuy 'help with ~', ki 'do ~', kira-re 'allow ~ to escape', ko-ker-kerpa 'exterminate ~', ko-o-terke 'trample ~ into ~', kor-e 'give ~ to ~', *mi-re* 'put (clothes) on ~', *ne* 'become ~', *nurappa* 'hold a memorial service for ~', ramu 'think about ~', ronnu 'kill ~ (plural)', tura 'take ~ along', u-ko-puntek 'be mutually happy', *u-ko-usaraye* 'divide up ~', *wen-pakasnu* 'discipline ~ severely', etc.

Many of these verbs do not have singular/plural variations and when pa^2 is added to intransitive verbs, it shows the plurality of the subject.

(41) *sekor* haw-e-oka kamuy-nomi **pa** kor vak QUOT voice-AFF-exist.PL and god-pray pa^2 if 'when, so saying, they prayed to the gods, . . .'

With a transitive verb there are both cases when it indicates the plurality of the subject and cases when it indicates the plurality of the object.

(42) *sekor* a-yup-utar-i ye ne kus, **pa** p QUOT 4.A-elder.brother-PL-AFF say pa^2 NMLZ COP because kotan kor utar a-e-punki-ne pa. village have people 4.A-about.APPL-guard-COP pa^2 'Since my older brothers said so, I protected the villagers.'

The pa^2 of ye pa shows the plurality of the subject 'brothers', but the subject of epunkine pa is 'I' and the pa^2 shows the plurality of the villagers being protected.

However, when the subject is plural, frequently the object is plural as well and there are cases where it is difficult to discern which plurality is being expressed.

(43) *mat sak* okay pirka no kusu ora, **pa** p ne then beautiful wife lack and exist.PL pa² NMLZ COP because menoko etun рa wa, woman receive.a.bride pa^2 and 'Since (the older brothers) had no wives, they made beautiful women into their wives, and ...'

Since the subject of *etun pa* 'take as a bride' is 'brothers', it is plural, but since the women they are taking as wives is naturally also plural, the object *pirka menoko* can be taken as plural. Examples like this can be said to express distributive number.

Among the verbs that do have a singular/plural alternation, pa^2 does not follow the singular form of intransitive verbs. When pa^2 follows the plural form, it is often taken as emphasizing the plurality of the subject.

- (44) i-os ne menoko utar arki **pa** kusu ne
 4.O-back those woman PL come.PL pa² intention COP
 ruwe ne wa
 INFR.EVID COP and
 'Since those women will probably come along later, . . . '
- (45) ho-pun-pa akusu, konto osor-oho toy-kotuk рa bottom.PF-lift-TR.PL pa² then then buttock-AFF ground-stick.to pa hine ho-pun-pa ka e-avkap рa bottom.PF-lift-TR.PL pa² pa^2 and even about.APPL-be.unable 'When they went to stand up, their buttocks were stuck to the ground and they could not stand up.'

Since arki 'come' in (44) is in the future and hopunpa in (45) is also an unrealized action, this pa^2 is not showing a plurality of actions. Since the plurality of the subject is expressed by the form of the verb itself, pa^2 is not especially adding new information and can be considered to be emphasizing the already existing plurality (namely, the plurality of the subject).

In contrast, in the case of a transitive verb, pa^2 can follow both singular and plural forms, but in the case of a singular form, it shows the plurality of the subject.

- (46) *a-yup-utar-i* nep rayke pa somo ki no 4.A-elder.brother-PL-AFF anything kill.SG pa^2 NEG do and 'My older brothers were unable to capture any prey.'
- (47) *a-unu-hu* asinkar utar tura hine ek hine 4.A-mother-AFF soldier PLaccompany and come.SG and a-sa-ha ningiyo ne sewri-hi tuy-pa р ра 4.A-elder.sister-AFF doll COP NMLZ throat-AFF cut-TR.PL: pa¹ pa² hine . . . a-sa-ha rayke **pa** p ne kunak ramu kusu 4.A-elder.sister-AFF kill.SG pa² NMLZ COP NMLZ think because and 'My mother brought the soldiers and had them cut the throat of my older sister's doll (which was in her bed in her place) many times and thought they had killed my sister.'

In (46), since the singular verb rayke 'kill' is an unrealized action, the pa^2 can be considered to be reflecting the plurality of the subject *a-yuputari* 'my older brothers'. In (47), in tuypa pa, pa^2 follows the plural form tuypa, and, since tuypa 'cut' shows the plurality of the action, pa^2 can be thought of as showing the plurality of the subject asinkar utar 'soldiers'. On the other hand, rayke 'kill' is in the singular form and, since the object of killing, a-saha 'my sister' is one person, it reflects the fact that the act of killing is only realized once and the pa^2 added to it can be said to reflect the plurality of the subject, as in with tuypa pa.

When pa^2 follows the plural form of a transitive verb, as in (47) and (48), below, in many cases it basically shows the plurality of the subject.

(48) i-tura okkay-po utar ka wentarap neno pa 4.O-accompany man-DIM PL even same as have a dream pa^2 ruwe yak kor, ora easir maratto-ho ve рa INFR.EVID COP COMP say pa² and then truely bear's.head-AFF **pa** wa e-kay-ni ka oma-re tuy-pa even cut-TR.PL: pa^1 pa^2 and head.POSS.PF-break-tree top enter-CAUS pa^2 'When the young people who had come together with me said they had had the same dream, they next carved off the (bear's) head and offered it on a broken tree.'

In (48), besides wentarap 'have a dream', the verbs ye 'say', tuy-pa 'cut', and oma-re 'insert' are all transitive verbs; tuy-pa is Type-C and ye and omare are verbs with no singular/plural alternation. The fact that they all are followed by pa^2 can be said to reflect the plurality of the subject *okkaypo utar* 'young people'.

In this way, pa^2 follows verbs that cannot themselves show the plurality of their subjects and has the function of clearly marking that plurality. However, since, like pa^1 , this marking is not obligatory, pa^2 is optionally added when it is desired to clearly show plurality.

As described earlier, pa^1 and pa^2 are often treated as being the same and there is an example of this sort of treatment leading to a misunderstanding of the nature of number in Ainu. In a section of Corbett (2000) where he argues for ergativity as a characteristic of verbal number, Ainu is treated as offering a counterexample to the general trend.

"One exception is Ainu, where verbal number may be sensitive not only to the number of a plural object but also to that of a plural subject" (Shibatani 1990: 50-54) (Corbett 2000: 253)

This statement is based on the following description in Shibatani (1990).

"Ainu, then, is a rare language which shows cases of plural verbs co-occurring with plural transitive subjects."

```
Sisam so kor goza sinep hok-pa wa arki.
Japanese from mat one buy-PL and come(PL) (Ishikari)
```

'(They) bought one mat from a Japanese and came'" (Shibatani 1990: 53)

However, as described earlier, Type-C transitive verbs are verbs that show the number of changes in their objects and do not reflect the number of their subjects. *Hok* is a verb that does not have a singular-plural distinction and *hok* pa 'buy' can be said to be reflecting the number of its subject, but this is an example of pa^2 and should not be taken as the plural form of a verb. In other words, Ainu is, in this sense, not a counterexample.

Considering the facts above, it can be concluded that pa^2 basically shows participant number. Since when the subject of a transitive verb is plural the object is also often plural, it often shows distributive number. However, when pa^2 follows the plural form of an intransitive verb, it can be viewed as emphasizing the plurality of the subject. In addition, in an example like the following, it can be taken as showing the plurality of the action.

(49) *a-kik* **pa** hum-i/ korimnatara/ koyak-natara 4.A-hit pa² sound-AFF/ bang.bang/ kong.kong-continually.INTR 'the sound of me striking / bang bang / kong kong' (SARU: Chiba Univ. 2015: 727)

There are, however, not many examples like this. With a verb like *kik*, reduplication is the usual means to show repetition and in the next scene in the same text is example (50), which does not use *pa* but uses *kikkik*.

(50) *u arwen kamuy/ utar-orkehe/ a-kik-no hum-i/*RTM very.bad god/ PL-place/ 4.A-hit-much sound-AFF/ *a-kik-kik hum-i*4.A-hit-hit sound-AFF
'the evil god / gods / heavily striking sound / striking and striking sound'
(SARU: Chiba Univ. 2015: 745–746)

The reduplicated form can additionally be followed by pa^2 .

(51) neno a-kik-kik pa wa a-pakasnu pa p ne kusu same.as 4.A-hit-hit pa^2 and 4.A-punish pa^2 NMLZ COP because 'since (the men) were struck like that and were punished, . . .' (SARU: Chiba Univ. 2015: 1857)

In this example, the repetition of the action of striking is shown by the reduplication of kik and the pa^2 can be seen as showing the plurality of the object of the striking.

One reason that can be offered for why the description of number in Ainu is so complicated is that pa^1 and pa^2 cannot always be decisively separated and there are cases that have the characteristics of both. Namely, there is a small set of verbs that, although they do not correspond with Type-C -V/pa morphologically, have pa appearing inside personal affixes and the causative suffix, functioning more like an affix than a clitic. Representative examples of such verbs include kor 'have, hold', kar 'make', kus 'pass through', and iki 'do'.

For example, kor is a transitive verb but neither morphologically nor semantically corresponds to the Type-C -V/pa, and in the following examples, kor pa shows a distributive meaning in one and shows the number of the things possessed in the other. In short, it has the characteristics of pa^2 .

- (52) sinna okay pe sinna oka wa mippo kor pa another exist.PL person another exist.PL and grandchild have pa^2 'Those (children) living in a separate houses have grandchildren with each.'

Since, when used in the incorporated form N+kor, forming an intransitive verb, pa follows the personal affixes -an and -as, the probability of at least the first of the previous examples being $mippo-kor\ pa^2$ is high.

- (54) *cikara-kor-an* **pa** strength(Jap.)-have-4.S *pa*² 'We have strength.'
- (55) *po-kor-an* **pa** child-have-4.S pa^2 'We have children.'

However, when used with *kore* 'give', which corresponds to the causative form, at least in a broad range of Hokkaido dialects, including Saru, Chitose, Horobetsu, Abuta, and Ishikari, the form *korpare* is used as the plural. The morphological structure is thought to be *kor-pa-re* and, judging from the fact that the pa appears to the left of the causative suffix -re, this pa can be concluded to be pa^1 morphosyntactically.

(56) cep kovki wa va-p-te kor, onne utar ne va fish catch and land-INTR.PL-CAUS and old COP people 0 e-ikovtupa utar a-kor-pa-re р ne kusu about.APPL-envy people 4.A-have-pa¹-CAUS NMLZ COP because 'since when (the son) catches fish, I give them both to the elderly and to people who are in need'

In this example, the *pa* can be taken as having a distributive meaning agreeing with 'the elderly', the semantic subject of *kor*, or it can also be taken as showing the plurality of the action of giving fish.

(57) a-vup-utar-i inaw tuv-pa inaw ke rok wa, 4.A-older.brother-PL-AFF inaw cut-TR.PL: pa¹ and inaw shave ITERA.PL ke rok pa hine, inaw kor-pa-re hine рa ITERA.PL pa^2 and inaw have- pa^1 -CAUS pa^2 shave 'My older brothers cut inaws (ritual wood-shaving stick) and shaved and shaved the *inaws* and offered them (to the gods).'

This example has pa^2 following kor-pa-re. The reason kor-pa-re is in the plural form is to reflect the plurality of 'the gods', the object of kor-pa-re and the semantic subject of kor; the pa^2 that follows can be seen as reflecting the plurality of 'older brothers', the subject of kor-pa-re as a whole.

In contrast to this form kor-pa-re, there also exists the pattern of kor-e, the causative of kor, followed by pa^2 , which appears to occur often in a form with the object incorporated, compared with the form kor-pa-re.

- (58) oraun atuv-so a-mat-**kor-e** ра hike, ka wa sea-surface top ABL 4.S-wife-have-CAUS pa2 NMLZ then kusu ipor-o retar oka. complexion-AFF white and exist.PL 'The ones who were given wives from out in the sea were very pale.' (SARU: S. Tamura 1986: 38)
- (59) *i-tura* pa utar a-puma-kor-e pa.

 4.0-accompany pa^2 people 4.A-reward-have-CAUS pa^2 'I also gave rewards to the ones who accompanied me.'

The pa^2 in (58) shows the plurality of those who were given wives, that is, the plurality of the recipients (those people who got wives). In (59) as well, it can be thought to show the plurality of the recipients (those who accompanied me).

In contrast to (59), there is the following example by the same speaker using the same verb and object in an unincorporated form.

(60) *puma ka* **kor-pa-re** *ka somo ki no* reward even have-*pa*¹-CAUS even NEG do and '(The Japanese) didn't even give a reward (to the two men).'

Since the plurality of *korpare* can be said to reflect the plurality of the recipients (the two men), the difference between (59) and (60) lies in whether or not the noun *puma* 'reward' is incorporated into the verb. That is, whereas (59) is *puma kor* \rightarrow *pumakor-e* \rightarrow *puma-kor-e pa*², in (60) the presence of the adverbial particle *ka* 'even' prevents the incorporation of the object *puma* with the verb *kor* and that difference appears in the difference in word formation, *puma ka kor* \rightarrow *puma ka kor-pa*¹ \rightarrow *puma ka korpa-re*. This is compatible with the appearance of pa^2 in (54) and (55) where the objects are incorporated.

However, this seems only to apply to kor; the situation is different for kar 'make' and kus 'pass through'. The plural of the causative form of kar nearly always appears in the form kar- pa^1 -re, with no examples found of kar-e- pa^2 . The plural of the causative form of kus appears both as kus- pa^1 -re and kus-te- pa^2 , but, in contrast to kor, the form used with an incorporated object is overwhelmingly kus-pa-re.

- (61) mosir-so ka **a-sik-kus-pa-re** ruwe land-surface top 4.A-eye-pass.through-TR.PL: pa¹-CAUS INFR.EVID ne akusu COP then 'when I pass my eyes over the vast land,' (SARU: Chiba Univ. 2015: 579)
- (62) huype or emus kus-te pa hine liver place knife pass.through-CAUS pa² and a-i-ko-pun-i hike
 4.A-4.O-to.APPL-lift-TR.SG but
 '(The young people) stabbed the liver with knives and held them out to me, but . . . '

Since (61) is a conventional expression with added prosodic constraints, it is difficult to judge what *pa* agrees with, but, given that this expression is used without regard to the number of the subject, it could be thought to reflect the plurality of the action of 'passing one's eyes over'. In contrast, in (62) it can be seen as showing the plurality of the agents.

Thus, verbs that can cooccur with both pa^1 and pa^2 in their causative forms are limited in number and their semantic and syntactic behavior differs with each verb. This point is especially striking with the intransitive verb iki 'do'.

- (63) *ene* **i-ki-pa-an** *hi ka isam pe ne kus* like.this ANTIP-do-*pa*¹-4.S thing even not.exist NMLZ COP because 'since there is nothing we can do'
- (64) *a-po-utar-i* ene i-ki-an рa hi neno i-ki 4.A-child-PL-AFF like.this ANTIP-do-4.S pa^2 thing ANTIP-do same.as рa wa pa^2 and 'the children made it as though we had done it, and'
- (65) ene i-ki-an hi neno, ene haw-e-an-an like.this ANTIP-do-4.S thing like.this voice-AFF-exist.SG-4.S same.as i-ki neno. a-po-utar-i ka рa thing same.as 4.A-child-PL-AFF even ANTIP-do pa^2 and 'as I did, as I said, the children did, and'

It may appear that, whereas (63) reflects the plurality of the subject, (64) reflects the habituality of the action, but, since when the subject (=agent) is singular as in (65), pa^2 does not appear, (63) and (64) can both be thought of as reflecting the plurality of the agents with pa^1 and pa^2 , respectively, appearing with no discernable difference in meaning. As a result, strictly speaking, the third person $iki\ pa$ in (64) and (65), that is, the one with no personal suffix, is undeterminable whether it is pa^1 or pa^2 . The reason why I designate pa^2 to it is that it doesn't satisfy -V/pa condition.

As mentioned earlier, S. Tamura (2000) describes the plural suffix -pa as being able to attach either before or after the personal affixes stating, "In cases like this, -pa often attaches outside the personal affix (after the personal suffix)", and gives the following examples.

- a. uwenewsar-as-pa
 enjoyably-talk-together-1p-PL-NOM-PL
 'We chatted enjoyably.'
- b. uwenewsar-an-pa
 enjoyably-talk-together-INDEFP-NOM-PL
 'You and I both chatted enjoyably together'

S. Tamura (2000: 40–41)

But this is a mistaken description that considers pa^1 and pa^2 as being the same. The pa in these examples is pa^2 , and no examples using pa^1 as in uwenewsar-pa-an are to be found. It is only with the intransitive verb iki, an extremely unusual example, that pa^1 and pa^2 appear to be able to freely interchange.

5.1.4 The distribution of pa^1 and pa^2

An important point concerning geographic differences in the pa^1 and pa^2 is that, while pa^1 suffixes to the same kinds of verb stems is found across the entire area, pa^2 is found primarily in the Saru, Chitose, and Ishikari dialects with only a few examples attested from other dialects. Pa^1 is found not only in Hokkaido dialects but is attested also in Sakhalin dialects with the same kinds of semantic restrictions on the verbs it occurs with, for details see Tangiku (Chapter 9, this volume).

- (66) neya emus ani **an-nas-a**that knife INS 4.A-split-TR.SG
 'With that knife I split open (the stomach).' (SAKHALIN: Murasaki 1976: 99)
- (67) pon emus ani nean hon-ihi an-kahkawe wa small knife INS that stomach-AFF 4.A-stab and an-nas-pa wa 4.A-split-TR.PL and 'With a small knife I stabbed that stomach and split it open.' (SAKHALIN: Murasaki 1976: 98)

nas-a/nas-pa correspond to Saru *yas-a/yas-pa* and show the same *-V/pa* singular/plural alternation.

On the other hand, many examples of pa^2 are found in the Ishikari and Chitose dialects.

- (68) cikoykip utar uekari-re. orano i-ka kucir. i-ka ene animals PL gather-CAUS then 4.O-top ALL urinate 4.O-top ene kucir i-ka ene osoma рa ALL urinate 4.0-top ALL defecate pa² 'The animals gathered. And then they urinated on me. They urinated on me and defecated on me.' (ISHIKARI: Otsuka 1990: 56)
- (69) *sake-kor-an kor a-tak*. *sake-kor pa kor i-tak*. liquor-have-4.S then 4.A-invite liquor-have pa^2 then 4.O-invite 'When I make *sake*, I invite them. When they make *sake*, they invite me.' (CHITOSE)

Concerning the Shizunai dialect, Okuda (1999) writes, "pa4 [auxiliary verb, suffix] Number of examples: 221. (attaches to a verb and shows plurality. Few examples compared to ci2) 2. (used in *yaykorpare* 'have, hold')".

Of the 22 examples Okuda mentions, 18 are of the verb *yay-kor-pa-re* 'cause oneself to have = have', and of the remaining four examples, three are *sik-kus-pa-re* 'cause

one's eyes to pass over = see', all borderline examples discussed in Section 5.1.3. Only the following is clearly an example of pa^2 .

```
(70) suy kosimat isam pa.
again bride not.exist pa<sup>2</sup>
'Again, the bride had disappeared.' (SHIZUNAI: Okuda 1999: 2050539)
```

Regarding the Horobetsu dialect, Kirikae (2003) recognizes a distinction between a "verb base plural form forming suffix" and a "verb plural form forming suffix" and for the former gives examples of forms with what is called pa^1 in this work attached. For the latter, he gives the six examples epa 'eat', korpare 'give ~ to ~', kuspa 'cut across', soyunpa 'go outside', ueunupa 'pair ~ with ~', and yaykorpare 'have' (Kirikae 2003: 355–356). Of these, kor-pa-re and yay-kor-pa-re are among the borderline examples discussed in the previous Section. Kirikae analyzes soyunpa as soyun-pa, but in this dialect soyun is only attested as an adnominal modifier meaning 'of outside'. Rather, it should be viewed as the plural form of soyne, of which there are examples in the Shin'yō $sh\bar{u}$, and this pa should be seen as pa^1 (see footnote 4). The remaining three, e pa, kus pa, and ue-unu pa are examples of pa^2 and show that, while few, there are attested examples of pa^2 for this dialect. Additionally, in the Horobetsu materials, examples of ki pa 'do' and isam pa 'disappear' are attested.

No examples of pa^2 are found in dialects ranging from eastern Hokkaido to Karafuto (Sakhalin) for which a certain amount of texts have been published, like Tokachi, Kushiro, Shiranuka, or Rayciska. From the differences in distribution, one can hypothesize that pa^2 is a form that arose in the Saru or Ishikari river region when the suffix $-pa^1$ expanded to verbs other than Type-C.

5.1.5 Summary of facts concerning pa

The findings of Section 5.1 are summarized below:

- In the restricted region of the Saru, Chitose, and Ishikari dialects, in addition to the suffix pa^1 that is considered to show plurality, a clitic pa^2 arose that is similar in form and meaning but must be distinguished grammatically.
- pa^1 is basically restricted to a semantically constrained set of verbs with -V/pa morphology, but pa^2 has no such restrictions.
- pa^2 adds a plural meaning that cannot be fully expressed by the verb alone. Basically, it shows plurality of participants, especially of agents. However, when the plurality of the agents is shown by the verb itself, addition of pa^2 may show emphasis or plurality of actions.
- There are cases in which pa attaches to verbs that do not have the -V/pa alternation and behaves the same morphosyntactically as pa^1 , but this is a phenomenon seen only with an extremely limited set of verbs.

5.2 ci found in Shizunai and other dialects

There is a form ci found in many dialects in Hokkaido with the same function as pa^2 . In some dialects it appears as a suffix limited to a very small set of verbs, or it may be used as a clitic over a broader range of verbs. What is deeply interesting is the fact that ci is not found in the Saru, Chitose, and Ishikari dialects where pa^2 developed, and, in the Horobetsu dialect where only a few examples of pa^2 are found, ci is found with only a limited set of verbs as described below; ci and pa^2 show a kind of situation of complementary distribution.

5.2.1 Horobetsu dialect

In the Horobetsu dialect located west of the Saru dialect area, *ci* appears overwhelmingly as a suffix to the verb *iki* 'do' forming *iki-ci* and examples of it being attached to other verbs like *kar-ici* or *kor-ici* are extremely few.

- (71) *ramma ramma sake kar-ici ko* as.usual as.usual liquor make-*ici* when 'when one always, always makes *sake*' (HOROBETSU: Y. Chiri 1978 [1923]: 32)
- (72) yaykota kor-ici poneself have-ici NMLZ'our own possessions' (HOROBETSU: Kitamichi 1999: 90)

In these examples it appears as -ici rather than -ci. Whether -ci is the base form or whether -ici is the basic form and -ci is derived from it is difficult to determine, and since there are only a few examples, it is hard to say with any certainty, but the reason it is not *kar-ci* or *kor-ci* may be that, under the rules of Ainu phonology *kar-ci* would become *kat-ci* and *kor-ci*, *kot-ci*, so the -ici form may prevent too much of a change from the original form of the stems.

That the form is a suffix in the dialect is shown by the fact that it appears inside personal affixes.

(73) nekona ka **i-ki-ci-as** wa kira-as somehow even ANTIP-do-ci-1PL.EXCL.S and escape-1PL.EXCL.S rusuy kusu

DESI because
'since I want somehow to escape' (HOROBETSU: Y. Chiri 1923: 70)

In contrast to this, examples of a form like *i-ki-as ci* are not found. These facts show that the productivity of *ci* in the Horobetsu dialect is low and forms like *i-ki-ci* and

kar-ici can be thought to be used as lexicalized forms. Kirikae (2003) treats these as individual words and gives the following description.

```
iki-ci [single argument verb] ~ repeats the same action as previously described; ~ repeats a detailed action (Kirikae 2003: 292)
```

```
kar-ici [two argument verb] ~ makes ~ repeatedly (Kirikae 2003: 307)
```

Kirikae's descriptions show that a form with *ci* attached is taken as expressing event number.

5.2.2 Shizunai dialect

In the Shizunai dialect, which abuts the Saru dialect area on the eastern side, very much unlike the Horobetsu dialect, *ci* follows a variety of verbs as a clitic. Okuda gives the following description: "*ci2* [auxiliary verb] Number of examples: 118. (Following a verb, it shows that the subject or the object is a large number)" (Okuda 1999: 11).

Okuda describes ci as expressing participant number and one certainly gets that feeling from examples like the following.

```
(74) hoski-no hotke-an ci akus
early-ADV lie-4.S ci then
'when we went to bed earlier' (SHIZUNAI: Okuda 1999: 2030865)
```

A list of the verbs *ci* appears with in the materials Okuda bases his descriptions on (Okuda 1999) looks like the following.

Intransitive verbs: aciw 'throw a spear', ahun 'enter (singular)', arki 'come (plural)', askay 'be skillful', caroruy 'be talkative', ekimne 'go hunting in the mountains', ese 'give an affirmative response', hawki 'say', hetuk 'grow', hotke 'lie down', iki 'do', iokaamkir 'have an ulterior motive', ipe 'eat', irara 'get into mischief', iruska 'get angry', kiyanne 'be older', oka 'exist (plural)', pirka 'be good', ramusinne 'be reassured', ray 'die', rimse 'dance', sampeatnu 'regain one's health', sap 'go forward (plural)', sinot 'play', sitcasnuka 'straighten up', suke 'cook', uenewsar 'talk over', ukoytak 'have a conversation', yaynu 'think', yuptek 'be a hard worker'.

Transitive verbs: epa 'harvest ~', epakasnu 'teach ~', epunkine 'protect ~', eramuskare 'not know ~', estan 'search ~', ipere 'cause ~ to eat', kar 'make ~, fetch ~', keweniwkes 'be unable to ~', ki 'do ~', kor 'have ~, hold ~', koyaykus 'be unable to ~', mokore 'put ~ to sleep', ne 'copula, be ~', nisuk 'make ~ request', nukar 'see ~', ramu 'think ~', ronno 'kill ~ (plural)', se 'carry ~ on one's back', suye 'shake ~ (singular)', ye 'say ~'.

Some of these verbs are transitive and some are intransitive and semantically they include a wide variety; one can see a parallel with the list given in Section 5.1.2 of verbs cooccurring with pa^2 .

5.2.3 Shiranuka dialect

M. Tamura (2010) provides a detailed analysis concerning the use of *ci* in the Shiranuka dialect, of eastern Hokkaido. Like the Shizunai dialect, in the Shiranuka dialect *ci* can follow a variety of verbs, both transitive and intransitive; M. Tamura thinks it to be an auxiliary verb. Providing the examples below, he states, "When it follows the plural form of a verb with the singular/plural distinction or in the case of *iki ci*, it can be interpreted as clearly showing the event number, but basically, *ci* shows the number of the subject." (M. Tamura 2010:138).

- (75) hanke nispa "tan-pe ku-kor tuyma nispa arki wa close master far master come.PL and this-thing 1SG.A-have ku-kor pe" hawki **ci** kane ре tan-pe ani thing this-thing 1SG.A-have thing QUOT say *ci* while carry **ci** ayne ci finally 'It ended up that masters from close by and masters from far away came (to my house) and saying, "This is mine, this is mine," carried (things) off." (SHIRANUKA: M. Tamura 2010: 133)
- (76) Tomisanpet un mat/ etor-o/ tu para re para Tomisanpet belong to woman/ two broad snot-AFF/ three broad etor-o/ e-soyna-raye ki/ "yup-i yaypo"/ snot-AFF/ head.POSS.PF-outside-move do/ elder.brother-AFF ADM/ ciskotenke/ u ki **ci** ki ko/ cry.out/ RTM do ci do then/ 'when the woman of Tomisanpet came outside (wiping with her hand) two fat streams, three fat streams of snot and cried out, "Oh, brother" (SHIRANUKA: M. Tamura 2010: 135)

This kind of use is extremely close to the use of pa^2 in the Saru dialect. However, M. Tamura also provides the following example, saying the explanation given above cannot explain it.

(77) ekayta nispa rewsi wa, arusa an-kor ipe sa-po elder.sister-DIM then master lodge and various food 4.A-have suve wa e-re wa. rewsi tek osip-pa ci ike cook and eat-CAUS and lodge and return-PL ci then 'And then the master ended up deciding to stay the night and my older sister made various kinds of food and served it to him and he stayed and (together with his wife and the children he had brought) he returned home.' (SHIRANUKA: M. Tamura 2010: 136)

In this example, as predicates to the same subject (*nispa* and his family), there appear *rewsi* 'stay the night' twice and *osippa* 'return' once, but *ci* only appears following the plural form *osippa* that appears last. Since it is difficult to interpret this as either showing the plurality of the subject or the plurality of events, M. Tamura (2010: 137) states that *ci* "may be thought to perhaps have a nuance of modality indicating surprise or unexpectedness, similar, for example, to clause-final *sir okay*."

It is also possible to view (77) as being similar to examples (44) and (45) given in Section 5.1.2 concerning the use of pa^2 in the Saru dialect to "emphasize plurality" and handle this use of ci as having the same function.

Summarizing the above discussion, it can probably be said that the ci found in dialects like Shizunai and Shiranuka in the eastern part of Hokkaido has a use extremely close to that of pa^2 in dialects in the western part of Hokkaido like Saru, Chitose, and Ishikari and that they show a distribution that is close to being complementary. In Horobetsu, further west, both pa^2 and ci remain in a lexicalized form, so to speak, as a suffix limited to a specific set of verbs.

5.3 hci in Karafuto (Sakhalin) dialects

There is a form in the Sakhalin dialects, appearing as *(a)hci* in the northern Raychishka dialect and as *(a)hsi* in the southern dialect of the Aniva coast that is similar in form to the *ci*. After a word stem ending in a consonant, it appears as *ahci/ahsi* and after a vowel as *hci/hsi* (represented as *hci* below). In the case of an intransitive verb first-person plural subject, it appears in the form *ahci* after the personal affix *-an*, yielding *-an ahci*.

Murasaki (1979) includes this form as a personal affix, but Sakaguchi (2018) presents a detailed analysis of hci and argues that these should be treated as auxiliary verbs (clitics) for the following reasons. Reason ④ in particular can be said to be the same as a characteristic as pa^2 .

- 1. Attachment of -*ahsi* is not obligatory. This is a clear difference from the obligatory attachment of other personal affixes showing the subject and object.
- 2. It does not reflect/agree with any particular grammatical person.

- 3. It does not just attach when the subject or object is third-person plural but attaches to the verb's personal affix even with the first-person.
- 4. It attaches outside of the personal affix -an, a form with a high degree of independence.
- 5. It does not only attach to verbs, but it also attaches to auxiliary verbs.

(Sakaguchi 2018: 64)

Tables 4 and 5, made from the table of Murasaki (1979: 49–50) and her explanation on 51–52, show the combination of personal affixes and *hci*.

Table 4: Intransitive verb personal affixes + -hci.

	SG	PL
1	ku-	-an hci
2	e-	eci-
3		hci

Table 5: Transitive verb personal affixes + *hci*.

	1SG	1PL	2SG	2PL	3SG	3PL
1SG	,		eci-	eci-, -yan	ku-	ku-, hci
1PL			ane-	eci-, -yan	an-, hci	an-, hci
2SG	en-	i-			e-	
2PL	en, -yan	i-, -yan ecii-			eci-, hci	e-, hci eci-, hci
3SG	en-	i-	e-	eci-,		hci
3PL	en-, hci	i-, hci	e-, hci	eci-, hci	hci	hci

According to this table, in the case of a transitive verb, basically *hci* will be used when either the subject or the object is semantically plural.

(78) sine monimah-po hoku-koro horokey-po tura okay ahci COM exist.PL ahci one woman-DIM husband-have man-DIM ahci ike manu ike okav sine mahtekuh aynu-po koro REP.EVID and exist.PL ahci and one woman human-DIM have hci manuu.

hci REP.EVID

'(They say) that woman was living with her husband and had one daughter.' (SAKHALIN: Murasaki 1976: 13)

The subjects of the intransitive verb *okay* 'live' are *monimahpo* and *horokeypo* so *hci* naturally agrees with the subjects. The plurality of the subject is thus doubly marked, and the form ends up having a function like that of pa^2 with intransitive verbs in the Saru dialect. The verb *koro* 'have' is transitive, but since the object is *sine mahtekuh aynupo* 'one female child', this *hci* also agrees with the subject.

It is quite common for *hci* to agree in this way with the subject rather than the object. Even in cases where it agrees with the object, many cases are like the following example in which *hci* agrees with the original agent that has become the object of a causative.

(79) nean henke (...) sine poo-ho-hcin sine-h ranke that old.man one child-AFF-hcin one-thing.CLF each eusahpare hci an-pa-re **hci** teh poo-ho-hcin hand.out hci hold-TR.PL-CAUS hci and child-AFF-hcin kira-re hci manuu. escape-CAUS hci REP.EVID '(They say) that the old man handed out (treasures) and caused each of the children to have one each and caused the children to escape.' (SAKHALIN: Murasaki 1976: 18)

The verbs *eusah-pa-re* 'hand out', *an-pa-re* 'cause to have', and *kira-re* 'cause to escape' are the causative forms of *eusah-pa*, *an-pa*, and *kira*, respectively, and the agent for all of them is *poo-ho-hcin* 'the children'.

Even with transitive verbs hci basically expresses participant number and moreover, its primary use is to show the agent. In this respect it differs in function from the Hokkaido dialect plural suffix $-pa^1$ which basically expresses event number. In addition, use of -hci is not obligatory as Murasaki points out saying, "even if it is the third-person plural, -hci is not necessarily attached; there are cases when -hci is not used, depending on the subjectivity of the speaker at the time." (Murasaki 1979: 49) In the next sentence, even though the subject utah 'people' is clearly plural, the verb nukara 'see' is not followed by hci.

(80) tani rep-un ayne utah **nukara** manu ike now open.sea-belong.to finally people see REP.EVID but 'Now, people are watching (the man) going out to sea.' (SAKHALIN: Murasaki 1976: 65)

This was reason 1. in Sakaguchi (2018) cited earlier and provides another reason why *hci* should be thought of independent of the personal affixes, which demand obligatory expression.

According to Murasaki (1979), in addition to the third person, if the pronouns anokay-ahcin or eciokay-ahcin are assumed for first- or second-person plural sub-

jects, which are distinct from the ordinary forms anoka and ecioka, respectively, hci is found used in the form of an-, -hci, -an-ahci, and eci- -hci. Regarding these pronouns, Hattori (1961) says, "they are words used by people above *yuhpo* and *nanna*. (Hattori 1961: 6)". That is, they are forms used by people older than their 20s or 30s, but Murasaki contradicts this, saying, "I think they are forms emphasizing plurality. (Murasaki 1979: 78)."

Since use of pronouns in Ainu is not obligatory, in actuality, even if combinations such as -an ahci or eci- or hci should appear, it is not necessarily the case that the pronoun is clearly shown as subject. Among the examples given by Murasaki as part of this explanation there is such an example.

(81) renkayne aynu u-ko-itak-an ahci kusu okav-an. human RECP-to.APPL-speak-1PL.S ahci because exist.PL-1PL.S many 'With a large group of people, we are discussing it with each other.' (SAKHALIN: Murasaki 1979: 52)

At first glance, renkayne aynu appears to be the subject in this example, but it is clear from -an ahci that the subject is first-person plural. That can be thought to be saying that the subject can be supposed to be anokay-ahcin. However, in spite of the fact that okay-an ought to have the same subject, it does not appear as okay-an ahci.

What is complicating matters is that in Sakhalin dialects, the first-person plural (corresponding to the fourth-person form in Hokkaido dialects) affix and pronouns are used when semantically singular in the same way as ku- to mean 'I', and, moreover, even with intransitive verbs that have singular/plural alternating forms, basically, the plural form is the one used.

(82) kahkemah simma nah oman kusu an-nuu kusu QUOT 1SG.A-hear because lady tomorrow go.SG because tani **ariki-an-ihi** nee koh. now come.PL-1SG.S-ihi COP and 'Since I heard that the young lady is going tomorrow, I have come now.' (SAKHALIN: Murasaki 1976: 7)

It is clear from the surrounding context that the subject of this sentence is the singular 'I', but for 'came' it is not the singular *eh* that is used but the plural form *ariki*. Like the fourth person in Hokkaido dialects, since the personal affix -an is attached to the plural form of an intransitive verb, whether the subject is semantically single or plural cannot be determined from the form of the verb. It may be the reason why hci is used after the personal affix -an. For the third person as well, since many verbs do not have a singular/plural distinction, it can be thought that the distinction is made with hci.

The fact that, as shown in Table 4, hci does not follow intransitive verbs with second-person subjects supports this idea. Since, unlike first- and third-person forms, the plural is clearly indicated by the personal affix *eci*-, there is no need to additionally mark the subject as semantically plural with *hci*.

(83) horokew-po uta, nah-wa eci-ariki hii? cise or-o-wa man-DIM PL where-from 2PL.S-come.PL Q house place-LF-from ariki hci hee? come.PL hci Q

'You men, where did you all come from? Did they come from the house?' (SAKHALIN: Murasaki 2001: 43–59)

In this example, even though the same event is being expressed by the same verb, when the second-person plural is expressed as in *eci-ariki*, *hci* does not appear, but the third person is expressed by *ariki hci*. Murasaki (1979) gives the following example but, at least in published texts, both examples with *eci*- together with *hci* and examples using the pronoun *eciokay-ahcin* are extremely rare.¹³

(84) eciokay-ahcin naa eci-paye hci hi nee nanko. 2PL-PL also 2PL.S-go.PL hci NMLZ COP probably 'You all went, didn't you?' (SAKHALIN: Murasaki 1979: 52)

From these facts, it can be thought that, as Murasaki said with regard to pronouns, the addition of *hci* to first- and second-person plural forms is probably a case of showing and emphasizing the plurality especially clearly.

Sakaguchi (2018), viewing *hci* as basically showing distributive number, sums up the uses of *hci* as follows:

- The basic meaning of *-ahci* is that the same event takes place multiple times. In particular:
- When -ahci is added to an intransitive verb, multiple people experience the same event.
- When -*ahci* is added to a transitive verb also, multiple people experience the same event (and as a result, the object is also plural).
- *-ahci* is also used to express the meaning that the same event occurs in multiple places or at multiple times.
- Expressions indicating plurality like *issinne* 'all together', *opista* 'everyone', *utara* 'pluralizer', or *emuyke* 'all' are often added to a subject, but when *-ahci* is added to the verb, it can be considered to express the fact that all of the members forming the group experience the same event.

(Sakaguchi 2018: 126)

¹³ Examples of a noun with *eci*- and the plural suffix *-hcin* as in *eci-macihi-hcin* 'your (plural) wives' (Murasaki 2001: 60) are found comparatively often.

Thus, the hci of the Sakhalin dialects can be said to express participant number (of which distributive is one use) and both morphologically and semantically gives one the feeling of a close relationship with the ci of the Shizunai and Shiranuka dialects; there is a high possibility that they were once the same.

6 Conclusion

A summary of the facts and data examined in this chapter is given below.

- Ainu is a language having verbal number and the values it takes should be treated as default/plural rather than singular/plural. That is, when cooccurring with a numeral expression or when referring to an unrealized event, the singular form is used in principle, and the plural form is used when it is necessary to clearly express the plurality of the verb itself.
- However, when an intransitive verb occurs with first- or second-person subject personal affixes, the number agrees with the personal affixes.
- Ainu verbal number is realized in the following forms:
 - (I) Verb stem alternation
 - (II) clitics
- Verbs that use (I) verb stem alternation to show number are highly limited in number and they also have semantic restrictions.
 - Type-A: suppletion. Verbs that use suppletion are a subset of basic transitive and intransitive verbs that express existence or motion, and they show participant number.
 - Type-B: -n/-pa alternation. Verbs of this type are basically intransitive verbs of movement and they show participant number.
 - Type-C: -V/-pa alternation. Verbs of this type are basically transitive achievement or accomplishment verbs, and they show the number of changes of state in the object that are accomplished, but at the same time, they often show plurality of the object.
- There are dialect differences in the use of (II) clitics. The Saru, Chitose, and Ishikari dialects of western Hokkaido use pa; the Shizunai and Shiranuka dialects of eastern Hokkaido use ci; the Sakhalin dialects use hci or hsi. The clitic pa (pa^2) tends to be confused with the pa^1 in the -V/pa alternation of Type-C verbs, but they are different and the clitic pa^2 has characteristics in common with the clitics ci and hci.
- Among these clitics, pa^2 adds a meaning of plurality that the verb itself is unable to fully express. Basically, it shows participant, especially agent, plurality. However, when the verb itself shows the plurality of its agents, the addition of pa^2 serves to add emphasis or to show the plurality of the action. In that they basically express participant plurality, ci and hci have some commonality with pa^2 .

- It can be hypothesized that historically forms including ci were widely distributed across Hokkaido and Sakhalin, but in the dialects like Saru and Ishikari the pa^2 that developed through analogy with pa^1 spread, replacing ci, and in the Horobetsu dialect, as a result of competition between the two, both are now used only in a lexically extremely limited set of frozen forms.

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18 Aspect and evidentiality

1 Introduction

Aspect and evidentiality are not obligatory grammatical categories in Ainu. However, a variety of constructions related to these grammatical categories are found. An overview will be provided of grammatical constructions related to aspect and evidentiality. In addition, a number of phenomena that are interesting from the perspective of linguistic typology will be taken up.

2 Aspect and evidentiality: An overview

2.1 Aspect overview

Aspect has been defined as "different ways of viewing the internal temporal constituency of a situation" (Comrie 1976: 3). In Ainu, aspect is basically expressed by complex predicates made up of combinations of the conjunctive particles kor and wa and the existence verb an/oka(y). In most dialects there is a contrast between progressive aspect and resultative aspect. The following examples are from the Tokachi dialect.¹

- (1) *e-mi p sos-ke* **kor an**.

 2SG.A-wear thing split-INTR.SG and exist.SG

 'Your clothes are (in the process of) tearing.' (progressive)
- (2) *e-mi p sos-ke* **wa an**.

 2SG.A-wear thing split-INTR.SG and exist.SG

 'Your clothes are torn.' (resultative)

Syntactically, the complex predicates expressing aspect can be said to have originally been formed of adverbial clauses. These complex predicates still retain many biclausal properties, see Bugaeva (2018: 258). In the following, the two verbs contained in the complex predicate change forms due to the person affixes.

¹ Tokachi dialect examples are from data from linguistic surveys by the author. I would like to express my deep appreciation to Ms. Tomeno Sawai for her cooperation in the survey.

(3) taan itanki pirka-no ku-sikkama **wa ku-an**. this bowl be.good-ADV 1SG.A-preserve and 1SG.S-exist.SG 'I was taking good care of this bowl.'

In addition to these, forms made up of combinations of conjunctive particles and such verbs as 'go', 'come', 'end', and 'not.exist' are found as complex predicates related to aspect.

- (4) *a-kor pon esper sattek wa oman.*4.A-have be.small bear.cub grow.thin and go.SG
 'Our bear cub has lost weight.'
- (5) etutanne eus a hi hup wa ek. mosquito pierce PRF.SG place swell and come.SG 'The place the mosquito bit swelled up.'
- (6) aynu itak emenpi wa okere.

 Ainu language completely.not.exist and finish

 'The Ainu language ended up completely ceasing to exist.'
- (7) sarki usa a-mosekar wa isam. reeds FOC 4.A-cut and not.exist 'The reeds ended up getting cut down.'

Also, verbs like 'go' and 'end' are sometimes used like auxiliary verbs without conjunctions.

- (8) tane pon-no sir-kunne **oman**.
 now be.little-ADV appearance-be.black go.SG
 'Now the sun has partially set.'
- (9) tane onuman-ipe ci-e **okere.**now evening-eat 1PL.EXCL.A-eat finish
 'Now we have already finished eating dinner.'

Constructions using forms like *wa oman* and *wa okere* and constructions using the auxiliary verbs *oman* and *okere* can coexist. It is thought that there is a semantic difference between the two constructions. Sentences with forms like *wa oman* or *wa okere* are thought to be marked forms expressing a special meaning (like "regret" or "lament"). On the other hand, the auxiliary verbs *oman* and *okere* do not express any special meaning, see Satō (2008: 89) who first pointed out the difference in meaning based on data from the Chitose dialect.

2.2 Evidentiality overview

Evidentiality has been defined as "a linguistic category whose primary meaning is source of information" (Aikhenvald 2004: 3). In Ainu, evidentiality is expressed by complex predicates composed of combinations of nominalizers and verbs. A four-way contrast among visual sensory, non-visual sensory, hearsay, and inferential can be found in many dialects. The following are examples from the Tokachi dialect (Northeastern group).

- (10) *iisoneka etap ruyanpe ruy* **sir an.**fortunately FOC rain be.violent VIS.EVID exist.SG
 'Fortunately, it is raining.' (visual perception)
- (11) iisoneka etap ruyanpe ruy **hum an.**fortunately FOC rain be.violent NONVIS.EVID exist.SG
 'Fortunately, it is raining.' (sensory perception)
- (12) toon ekaci ranma-no paraparak **aw an.**that child always-ADV cry REP.EVID exist.SG
 'That child always cries.' (vocal perception)
- (13) toon cise or wa supuya at **ru an.**that house place ABL smoke rise INFR.EVID exist.SG
 'Smoke is rising from that house.' (inferential, definite perception)

Syntactically, the complex predicates expressing evidentiality can be said to be formed of complement clauses. There are both cases like (10)-(13) in which the complement clauses correspond to the subjects of the existence verb and those like (14) in which they correspond to the complement of the copula.

(14) numan anakne upas ruy kan an a
yesterday TOP snow be.violent and exist.SG PRF.SG
ru ne.
INFR.EVID COP
'It's the case that it was snowing yesterday.' (inferential, definite perception)

3 Previous research on aspect and evidentiality

3.1 Research on forms expressing aspect

Early mentions of forms expressing aspect can be found in Kindaichi (1931), Kindaichi and Chiri (1936), and Chiri (1942).

Kindaichi (1931: 165) termed one of the aspectual forms, kor an, "shinkōtai 'progressive".

Chiri and Kindaichi (1974[1936]: 101–102) wrote about aspectual forms, calling kane an "jizokutai 'durative'", kor an "shinkōtai 'progressive'", and wa isam and wa okere "kanryōtai 'perfective'".

Chiri (1942) is valuable as a comprehensive description of forms expressing aspect. The following is quoted from Chiri's description (Chiri 1973[1942]: 503–504)

The compound forms consisting of a particle + verb also show aspect. Forms like hine an 'be . . . ing', wa an 'be . . . ing', and kane an 'be . . . ing' can be viewed as expressing resultative aspect. Forms like wa isam 'end up . . . ing, . . . completely' and wa okere 'end (...) kus[u]-ne also has a similar use. (...) In Sakhalin, kusu kara also has a similar use. (...) The Sakhalin *kusu an* shows durative aspect like the Hokkaido *kor an*.

Tamura (1972: 150, 154) writes about aspect in the Saru dialect and gives kor an the Japanese translation . . . shi tsutsu aru 'be in the midst of . . . ing' and wa an the translation . . . shite iru, shite aru 'have done . . . ' with the former expressing the progressive aspect of an action and the latter the continuation of a result (perfect). Tamura adds the following regarding the syntactic characteristics of these forms.

There are several verbs that, when placed immediately after a verb phrase with wa attached, the entire V1 wa V2 functions as a single verb phrase. In such a case, the wa does not conjoin two sentences but can be regarded as conjoining only the verb phrase V1 and the verb V2. (...) Semantically as well, V2 adds some kind of meaning (often so-called aspect or the actor's attitude) and, speaking figuratively, the wa V2 part has a function like that of a single auxiliary verb. However, V2 also takes person affixes and is a main verb formally. A variety of verb phrases can appear in the V1 position according to the circumstances, but the V2 position is limited to the several verbs listed below. A verb in the V2 position is called a "complement auxiliary verb".

Following descriptive research on forms expressing aspect, separate research concerning phenomena related to aspect came to be pushed ahead. Nakagawa (1981) is a study regarding the categorization of verbs with aspect as the standard. Nakagawa (1981: 132) divides Ainu verbs into stative and non-stative verbs and then divides non-stative verbs into the following two basic types.

Type 1: Verbs that express "a change in the state or location of the subject or object" (achievement and accomplishment verbs)

Type 2: Verbs that are not involved in "changes in the state or location of the subject or object" (action verbs)

Nakagawa (1981) can be said to be an important work empirically analyzing the widely used distinction of stative, accomplishment, achievement, and action verbs with regard to Ainu.

Satō (2006, 2007) are studies concerning problems like the action perfect and perfect negation in Ainu. Satō (2006: 63) says that the form wa an showing the perfect in Ainu cannot cooccur with an action verb and analyzes it as not having an action perfect use.

- (15) *yaki yaki sekor yaki haw-e-an* **kor an.**buzz buzz QUOT cicada voice-POSS-exist.SG and exist.SG
 'The cicadas are crying, "buzz, buzz".'
- (16) *yaki yaki sekor yaki haw-e-an wa an.
 buzz buzz QUOT cicada voice-POSS-exist.SG and exist
 'The cicadas are crying, "buzz, buzz".' (made-up example)

Satō's research can be said to be important when considering forms in Ainu expressing perfect aspect in terms of language typology.

Bugaeva (2018) analyzes the structural properties of aspect forms. Because the two verbs contained in the complex predicate can both take person affixes (Tamura 1972), Bugaeva (2018) points out that the complex predicates have retained many biclausal characteristics.

(17) eun arpa-an hi ka a-erampewtek wa there.at/to go.SG-4.S NMLZ even/also 4.A-not.know and a-tere wa an-an 4.A-wait and exist.SG-4.S 'I didn't know where to go, so I was waiting.' (Bugaeva 2018: 251)

Bugaeva (2018) develops the syntactic analysis of Ainu complex predicates from a typological perspective and is an important contribution to consideration of the syntactic properties of forms expressing aspect.

3.2 Previous research on evidentiality

Early mentions of forms expressing evidentiality are found in Kindaichi (1931), Kindaichi and Chiri (1936), and Chiri (1942). Kindaichi and Chiri (1936) take up forms expressing evidentiality as part of discussion of mood and use the four terms *kakusetsuhō* 'established mood' (*ruwe*), *kensetsuhō* 'visual mood' (*siri*), *bunsetsuhō* 'audio mood' (*hawe*), and *kansetsuhō* 'feeling mood' (*humi*) to describe them.

kakusetsuhō 'established mood' (ruwe): the content of the sentence is established as predetermined fact kensetsuhō 'visual mood' (siri): established concerning facts before one's eyes bunsetsuhō 'audio mood' (hawe): statement as simple hearsay kansetsuhō 'feeling mood' (humi): statement as the speaker's "feeling"

Tamura (1988: 36), who described the grammar of the Saru dialect, analyzed forms showing evidentiality from the perspective of nominalization and gives the following description.

Rather than saying they are modified by the prenominal modifier like the several words above [words low in independence like uske 'place' and kur 'person' Y.T.], these are words that are placed after a clause and have the function of converting it to a noun phrase. These are called nominalizers. Among the nominalizers, there are those that are low in independence and can be seen as particles, but, on the other hand, there are also those, strong in independence, that can break their syntactic relation with what precedes them and appear at the beginning of a sentence. The following are such words; they have their own accent kernel and the significance of that itself is clear. Etymologically, they are converted from ordinary nouns [in their possessive forms, short as ruwe or long as ruwehe Y.T.].

ruwe cf. ru (conceptual form), ruwehe (possessive form) 'trace of passing, road' hawe cf. haw, hawehe 'voice' humi cf. hum, humihi 'sound, feeling' siri cf. sir, sirihi 'appearance'

These have fairly parallel uses and can be used together with forms like ne 'be, copula' and un 'affirmative sentence-final particle', forming constructions corresponding to Japanese ~(shita) noda 'it's the case that (x) did ~' and ~(shita) no yo 'it's the case that (x) did ~'

Note that in some Ainu dialects such as Tokachi above (Northeartern group) evidentials appear in their conceptial forms (10)-(14) while in Saru (Tamura 1988) and Chitose (Southwestrn group) they appear in their possessive forms (19).

As to Chitose, Nakagawa (1995: 12) uses the term bunmatsushi 'sentence-final words' and gives an analysis from the perspective of evidentiality.

The term bunmatsushi 'sentence-final words' basically refers to the four words ruwe, siri, hawe, and humi and forms with ne, an, and un attached ruwe ne, ruwe an, ruwe un and, in terms of their form, they are nouns with abstract meaning with verbs or sentence-final particles attached, but as forms that have the function of expressing on the basis of what information the speaker has made a judgement on the content of the utterance, it is convenient to treat them all together, and since they can be placed before a sentence-final particle, they are termed bunmatsushi 'sentence-final words' and treated as a single part of speech.

Following that, Satō (2013) conducted a detailed analysis regarding evidentiality as a grammatical category in Ainu. Satō argues that, since one can see a contrast between *kakugen* 'assertion' and *gaigen* 'abstraction' in Ainu evidential expressions, they should be analyzed as a category separate from mood. (18) and (19) are both expressions based on visual evidence, but (18) uses the gaigen siran and (19) uses the kakugen **ruwe ne** (Satō 2013: 11).

- (18) nep-ene-po pirka pon-matkaci ne wa what-like.this-DIM be.beautiful be.small-girl COP and sir-an a ka a-eramuskari.

 appearance-exist.SG Q even 4.A-not.know

 'The girl is ever so pretty, and no one knows that situation exists.'

 (= The girl is so beautiful that no one even knows how beautiful.)
- (19) icatkere wa kusu ku-siru-siru wa ku-huray-e wa dirty and because 1SG.A-rub-rub and 1SG.A-wash-TR.SG and pirka ruwe ne wa.

 be.good INFR.EVID COP SFP

 'It was dirty, so I rubbed it here and there and washed it and the case is, it became clean.'

Besides the descriptive linguistics research on evidentiality, separate studies on phenomena related to evidentiality have been published. Bugaeva (2013) analyzed forms expressing evidentiality based on the structural concept of a "noun-concluding sentence".

4 Progressive and restriction on first-person subjects

In the Tokachi dialect, a person restriction is seen on the *kor an* form expressing progressive aspect (Takahashi 2006). As seen in the examples below, *kor an* cannot cooccur with first-person subjects. For an action in progress by a first-person subject, the form *kan an* is used instead.

- (20) *kuani anak terebi ku-nukar **kor ku-an**.

 1SG TOP TV 1SG.A-watch and 1SG.S-exist.SG
 'I am watching television.'
- (21) kuani anak terebi ku-nukar **kan ku-an**.

 1SG TOP TV 1SG.A-watch and 1SG.S-exist.SG
 'I am watching television.'

In other words, two kinds of progressive aspect are found in the Tokachi dialect of Ainu. In contrast to *kor an*, which has a person restriction, *kan an* is an unmarked form without such a restriction. It is hypothesized that the reason *kor an* has such a restriction is that this form expresses the meaning "observing the event by the speaker". On the other hand, this phenomenon is unknown in other dialects. Clarifying the diachronic process of this phenomenon is a topic for the future.

b. susu

Cross-linguistically, this phenomenon can be said to be cross-linguistically marked. This kind of person restriction is also found in the Shuri dialect of Ryūkyūan (Tsuhako 1989).

Aspect and asymmetric negation

In the typology of negative constructions, standard negation is often seen as a problem. In standard negation, if affirmative and negative sentences differ by the presence or absence of a negative morpheme, both are said to be symmetric. On the other hand, in case affirmative and negative have differences other than the presence or absence of a negative morpheme, they are said to be asymmetric (Miestamo 2005).

Standard negation is symmetric in Ainu, but when negative constructions appear in subordinate clauses, a certain kind of asymmetric structure can be observed. Ainu has a number of adverbial clause markers (conjunction particles) showing temporal relations, such as wa (22a) and kan (23a), but when used in a negative construction in showing a temporal relation, only the conjunction particle no (22b, 23b) is used (Tamura 1988, 1996). When this no is used in an affirmative sentence, it is used in an adverbial clause showing a stative event or an incidental circumstance (24). The following examples are from the Tokachi dialect.

- (22)a. i-ka ku-mi icakkere kus ku-ama wa р ANTIP-top ABL 1SG.A-wear thing dirty because 1SG.A-put.away ku-urav-e. and 1SG.A-wash-TR.SG 'Since my jacket was dirty, I took it off and washed it.'
 - sine-p kay somo willow.leaf one-thing.CLF FOC NEG put.away and gather mom-te wa and drift-CAUS and 'I gathered and made drift the willow leaves so there wasn't even one left.'

ama

no

eumare

(23)a. nean cikap nean ni kamuy or wakka wa ran that bird that tree god place ABL go.down.SG water keravpo ku kan an ru estap **FOC** drink and exist.SG PRF.SG INFR.EVID FOC an ne. exist.SG SFP

'It is the case that that bird was there drinking only the water that dripped from the place of that tree's god.'

- b. somo ipe somo wakka ku no an.
 NEG eat NEG water drink and exist.SG '(She) is neither eating nor drinking.'
- (24) *pirka-no yayetupare* **no** *ipe yan*. be.good-ADV be.careful and eat IMP.POL 'Please eat being very careful.'

Aikhenvald and Dixon (1998) analyze grammatical dependency between grammatical categories from a typological perspective. According to their analysis, choice of polarity is made at the very highest level of dependency relations as a category relating to a sentence (Aikhenvald and Dixon 1998: 63). On the other hand, the grammatical categories of tense, aspect, and evidentiality are related to the predicate and are located at a lower level than polarity. Also, there are cases where tense, aspect, and evidentiality are dependent on polarity (Aikhenvald and Dixon 1998: 72).

Viewed from the perspective of this kind of dependency relation between grammatical categories, one can say there is a kind of dependency relation in Ainu negative constructions. One can say that it is possible to capture this dependency relation by saying "aspect is dependent on negation" (Takahashi 2016).

This kind of phenomenon seen in Ainu negative constructions can also be considered a decrease in transitivity (Hopper and Thompson 1980) in negative sentences. Regarding this question, Tamura (1972: 160) presents an analysis that "the negative is not an action and can be taken as a state".

6 Evidentiality and the stage/individual-level distinction

One thing notable about evidentiality in Ainu is its connection with the type of predicate (stage/individual-level distinction: Kratzer 1995; Kageyama 2009). The stage/individual-level predicate typology is the concept of the distinction between stage-level predication (predication of incomplete events or temporary events) and individual-level predication (predication of permanent, lasting events). For example, in English the difference between stage-level predicates and individual-level predicates is reflected in grammatical constructions (Kageyama 2009: 3).

- (25) Stage-level predicates (temporary, fleeting)
 - a. The doctor was drunk/sick at that moment. (designates a particular time)
 - b. *The service is being available only in the daytime.* (progressive)
 - c. *There were three doctors drunk in the office.* (existential sentence)

- (26) Individual-level predicates (permanent, lasting)
 - a. The doctor was altruistic/kind-hearted (*at that moment)
 - b. John is (*being) intelligent/tall.
 - c. *There were three boys tall in the room.

The use of nominalizers to express evidentiality is connected with the type of predicate (stage/individual-level distinction). Sir, which expresses visual perception, is used with stage-level predication. On the other hand, even in cases that could be considered to be visual information, with individual-level predication, ru, which is unmarked regarding type of information, is used (Takahashi 2013).

- (27) *ciwca* poro hike nekon an kus tap exist.SG because FOC cracks.in.ice be.big and how wor-un-cikap sine-p keraypo an sir water-live.at/belong.to-bird one-thing.CLF FOC exist.SG VIS.EVID *a*? an exist.SG O 'In spite of the cracks in the ice (of the river) being large, why is there just one duck?' (Since an '(cracks) exist' is a stage-level predicate, *sir* is used.)
- (28) *ayapo* siwnin etap taan imo ru potato green/bitter INFR.EVID goodness FOC this cik siwnin nankor. an. *a-e* exist.SG 4.A-eat if green/bitter probably 'Goodness, this potato is green. If one ate it, it would probably be bitter.' (Since siwnin '(potato is) green' is an individual-level predicate, ru is used, not sir.)

From a language typology perspective, the Ainu phenomenon described above can be said to be an example of a constraint regarding the stage/individual-level distinction. In particular, it can be said that the constraint regarding the stage/individual-level distinction appearing in the nominalizers involved in evidentiality is distinctive.

Furthermore, in the Chitose dialect, the use of nominalizers expressing evidentiality is connected to aspect. In contrast to siri, which is used to show "the state or appearance of an action in progress at the reference time", ruwe is used "in cases when there is a state already in existence or, even should there be an action, the action is not in progress at the reference time" (Satō 2008: 178–179). This can be said to be an important example in capturing dialectal structural differences in Ainu.

(29) sine okkay-po ekusne arpa siri ku-nukar wa. one man-DIM other.side.of.river go.SG VIS.EVID 1SG.A-see PRF.SG SFP 'I saw one young person go to the other side of the river.' (Siri is a form corresponding to Tokachi dialect *sir*.)

(30) *kotan* kes-ehe homar kane kotan pake-he village edge-POSS be, overshadowed to, the, extent village head-POSS homar kane poro-n-no cise an be.overshadowed to.the.extent be.big-EP-ADV houses exist.SG ku-nukar, a wa INFR.EVID 1SG.A-see PRF.SG SFP 'I saw that there were many houses to the extent that the lower part of the village was overshadowed.' (*Ruwe* is a form corresponding to Tokachi dialect *ru*.)

7 Grammaticalization of evidential markers

In Ainu, the markers involved in evidentiality function as markers of a complement clause. The following are examples from the Horobetsu dialect (Orthography changed in places).

- (31) a-kor aynu a-wenokbare **shiri** a-eshikarun chiki 4.A-have human 4.A-lack.filial.piety VIS.EVID 4.A-recall if tu kishnu nupe a-yai-ko-ran-ke. two wretched tears 4.A-REFL-to.APPL-go.down.SG-CAUS 'When I realized I had been unfilial to my father, I cried a multitude of secret, private tears alone.' (Kannari and Kindaichi 1966: 246)
- (32) a-ewak sir-or pirika ruwe an-e-reyap-ka.
 4.A-live appearance-place good INFR.EVID 4.A-about.APPL-admire-CAUS
 'I praise the fact that the state of my house is beautiful.'
 (Kannari and Kindaichi 1966: 83)
- (33) kamui rametok kat-kor **hawe** a-oyanene na. god hero shape-have REP.EVID 4.A-think.regretful SFP 'What the gentleman like a god says, I don't understand.'

 (Kannari and Kindaichi 1964: 336.)

On the other hand, in the Horobetsu dialect evidentiality markers function as adverbial clause markers (Kindaichi and Chiri 1936; Takahashi 2018).

- (34) ouse ushiu bakusa a-ne **shiri** kamui korachi mere servant subordinate 4.A-COP VIS.EVID god like tonoto ari i-eham-an. sake INS 4.O-detain-4.S

 '**Though** I am a mere servant, a paltry god, (he) detained me with sake.' (Kannari and Kindaichi 1959: 86)
- (35) *a-kor* rorumbe kash-i chi-o-bash e-i-y-ekarkar
 4.A-have battle top-POSS RES-to.APPL-run 2SG.A-4.O-EP-do
 shiri shino nupetne-an.
 VIS.EVID truly rejoice-4.S

 'Since you came to my aid in my battle, I am very happy.'
 (Kannari and Kindaichi 1966: 221–222)
- (36) ouse shine pakesh kusu tumi ne vakka orsaureko only one drinking.leftovers because battle COP although fiercely a-i-ko-ash-i hawe sonno irushka-an koroka. 4.A-4.O-APPL-stand-TR.SG REP.EVID truly get.angry-4.S however **Since** I am treated so badly though it's a battle over drinking one cup of leftovers (of sake), I am truly angry.' (Kannari and Kindaichi 1959: 164)
- shukup menoko shukup matkachi a-ne (37)wa kamui grow woman grow girl 4.A-COP and god tura-no chi-vai-nikor-oshma-re a-i-v-ekarkar ruwe COM-ADV RES-REFL-inside-enter-CAUS 4.A-4.O-EP-do INFR.EVID yay-e-kat-u-wen a-ki kusu sonno am REFL-about.APPL-shape-POSS-bad 4.A-do because truly exist.SG a-yai-keu-or-o-chiwe kuni korka. be a-ramu NMLZ 4.A-REFL-body-place-at.APPL-throw in.order 4.A-think but 'Since I, a young woman, a young maiden, was disgraced along with the god, I truly thought to throw my life away, but . . . '(Kannari and Kindaichi 1959: 1777)
- (38)kemkakarip haw-okai awa itak hetapne okai scarlet.ring.princess voice-exist.PL but words FOC exist.PL kuni a-ramu awa, pon menoko shiretok kor ruwe in.order 4.A-think but be.small woman beauty have INFR.EVID shiyor keutum a-yai-kor-e. be.amazed heart 4.A-REFL-have-CAUS 'The scarlet ring princess said it, but, in spite of the fact that I thought it was just words, **since** the young girl was beautiful, I was amazed.' (Kannari and Kindaichi 1964: 205)

It is clear that the evidential markers in Ainu are formed from nouns through grammaticalization (Hopper and Traugott 1993), as shown below (Kindaichi 1931; Kindaichi and Chiri 1936; Tamura 1988).

```
sir(i) 'appearance (of surroundings)' (noun) > sir(i) 'visual perception' (nominalizer) hum(i) 'audio or physical perception' (noun) > hum(i) 'perception through senses other than visual' (nominalizer) haw(e) 'voice' (noun) > haw(e) 'perception due to vocalization' (nominalizer) ru(we) 'road, trace' (noun) > ru(we) firm perception based on evidence' (nominalizer)
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In addition to this process, in the Horobetsu dialect, one can see a grammaticalization process of nominalizer > adverbial clause marker 'since, though'. This grammaticalization can be understood as one in which its function as a nominal argument is lost.

In terms of language typology, this phenomenon can be considered to be a case of "versatile nominalization" (Noonan 1997) and can be said to be an important phenomenon in consideration of nominalization in Ainu.

8 Concluding remarks

A large number of phenomena notable from the perspective of language typology are found in Ainu aspect and evidentiality. This chapter has taken up the phenomena of aspect and a constraint on person, aspect and asymmetric negation, evidentiality and the stage/individual-level distinction, and the grammaticalization of evidential markers.

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Yoshimi Yoshikawa

19 Existential aspectual forms in the Saru and Chitose dialects of Ainu

1 Introduction

The phenomenon of existential verbs grammaticalizing into aspectual forms is found in various languages (Bybee 1985). Following Kinsui (2006), Oka (2013), and others, I call these "existential aspectual forms" in this paper. Regarding Japanese existential aspect forms, Kinsui (2006) says, "The fact that the existential verb expressing human existence is chosen as a resource for the core aspectual form indicates that the aspectual form is relatively close to the existential expression." (Kinsui 2006: 266). In Ainu, the core aspectual forms and the existence verb *an* are also closely related.

In this chapter,¹ forms that may express aspectual meaning and include the Ainu verb an (plural oka(y))² 'exist (inanimate), exist (animate), become', are identified as "existential aspectual forms". I will then discuss the semantic functions of the existential aspect forms. The forms to be analyzed are kor an, wa an, kane an, hine an (all of which are conjunctive particles + existential verb an), the auxiliary verb a, and the auxiliary verb a-an. Although the auxiliary verb a does not fit into the definition of existential aspectual forms here, it is included in the analysis because it is necessary to discuss a and a-an in relation to each other. The target dialects are the Saru dialect and the Chitose dialect. The examples were collected from existing published materials and audio materials already available on websites. The examples include those found in dictionaries and grammar books. Interviews were not conducted, as they are almost impossible due to the rapid decrease in the number of native speakers of Ainu in recent years.

In Section 2, I will take up issues regarding *kor an* and *wa an* and examine the position of aspect in Ainu. As already mentioned by Takahashi in Chapter 18 (this volume), in Ainu, aspect is basically expressed by a compound predicate consisting of the conjunctive particles *kor* and *wa* combined with the existential verb *an*, and in many dialects, there is an opposition between progressive and resultant aspects. *Kor an* and *wa an* are often translated by Japanese *te iru* [conjunctive particle *te* + existential verb *iru*] partly because of their syntactic and semantic similarities (*wa an* is sometimes also translated as *te aru* [conjunctive particle *te* + existential verb *aru*]). Other similar forms in the Saru and Chitose dialects are *kane an* and *hine an*. However, these four forms actually differ from the Japanese *te iru* form in many ways.

¹ This chapter is a summary of Yoshikawa (2021) (doctoral dissertation) with some additions and corrections.

² Unless otherwise noted, the form *an* will be used in the following.

The functions of each form are outlined in Section 3, and Section 4 discusses the auxiliary verb a and the auxiliary verb a-an. The auxiliary verb a is a grammaticalized form of the intransitive verb a 'to sit', and has commonly been considered in previous research to express the past, especially the perfect. In Japanese, it is often translated by the ta-form. The auxiliary verb a-an is thought to be composed of the auxiliary verb a + the existential verb an and has been considered to be used to express surprise or admiration. In this paper, *a-an* will be discussed in relation to *a* and analyzed in terms of tense, aspect, and evidentiality. Conclusions are given in Section 5.

2 Various issues concerning kor an and wa an

Since kor an and wa an are often translated as te iru, they are often equated with the te iru form, but these are just "forms that may express aspectual meanings", and, though they resemble the *te iru* form, they are different.

First of all, let us focus on the lexical aspect of Ainu verbs and consider aspect in Ainu. According to Nakagawa (1981), there are two types of verbs: "stative verbs" and "non-stative verbs" (Chiri 1973 [1942]; Nakagawa 1981). According to Nakagawa (1981), stative verbs are so-called adjectival verbs such as pirka 'good', poro 'big', and so on and verbs like eraman 'understand, know', an 'exist (inanimate), exist (animate), become', ne 'be (copula), become', and others that "can express 'static states' by themselves" (Nakagawa 1981: 132).

On the other hand, non-stative verbs³ are verbs that cannot express "static states" by themselves.

In addition to expressing an adjective-like meaning (i.e., a state), stative verbs also have the meaning of change (i.e., 'become (that state)' and can take personal affixes.⁴

For example, the word *poro* can mean 'big' as in example (1), or 'become big' as in example (2). And it can take personal affixes, as in example (3). The lexicon itself has no morphological distinction between perfective and imperfective aspects,⁵ and the aspectual meaning varies from time to time.

(1) teeta wa-no tan pet poro ruwe ne. long.ago from-ADV this river big INFR.EVID COP 'This river has always been big. (has a lot of water)' (Nakagawa and Nakamoto 2004: 41)

³ In Nakagawa (1981), the verb *kor* 'have' is included in the category of stative verbs, but it is actually a verb that falls somewhere between non-stative and stative verbs (Nakagawa, personal communication).

⁴ See Nakagawa (Chapter 14, this volume).

⁵ Regarding adjectival verbs in Ainu, Chiri (1973 [1942]) writes, "Every adjective has two kinds of aspect, corresponding to hikanseitai 'imperfecive aspect' and kanseitai 'perfective' in meaning. (p.483)".

- (2) apto as nisap-no wa pet poro ruwe ne. stand.SG and sudden-ADV river big rain INFR.EVID COP 'Rain fell and suddenly the river **became big**. (water level rose)' (Nakagawa and Nakamoto 2004: 41)
- (3) tane pak-no e-poro ruwe ne vakun already till-ADV 2SG.S-big INFR.EVID COP if 'If you have already **become so big**, . . .' (Tamura 1984: 32)

The next thing to consider is that aspectual forms in Ainu are not obligatory in their use. For example, even in the case of expressing the continuation of the result of the change of state expressed by the verb 'sit', there are cases where the verb a 'sit' is used alone (example (4)), and cases where the verb a is followed by wa an (example (5)). In these examples (4) and (5), there is no aspectual semantic opposition, and both represent the continuation of the result of the act of 'sitting'. In examples (4) and (5), the verb a or a wa an is followed by the adverbial rapok 'during the time when' or 'while doing'. In Japanese, when the verb suwaru 'to sit' is followed by suru uti ni 'to do while' or aida ni 'during', the verb suwaru must take the -te iru form, as in suwatte iru uti ni 'while sitting' or suwatte iru aida ni 'while sitting'. In the case of Ainu, however, the verb a alone can express the continuation of 'sitting', as in example (4). The same is true for kor an, a verb can express the continuation of an action even without kor an attached to the verb (see examples (6) and (7)).

As described above, the opposition between perfective and imperfective is not clear in Ainu, either lexically or grammatically.

- (4) a-an rapok kamuy utar ahu-p pa hine PLsit.SG-4.S while god inside.house-INTR.PL PL and 'While we were sitting, the gods gathered and . . .' (National Ainu Museum Ainu Archive: C0147KM 34609ABP)
- (5) a-an rapok wa an-an sit.SG-4.S and exist.SG-4.S while 'While I am sitting, . . . ' (National Ainu Museum Ainu Archive: C0147KM 34609ABP)
- (6) menoko utar **suke pa rapok** woman PLcook PL while 'While the women were cooking, . . . ' (National Ainu Museum Ainu Archive: C0178KM 34720ABP)

⁶ The phrase suwaru aida ni may be possible in the meaning 'while moving from a state of standing to a state of sitting', but it does not fit the situation in example (4).

(7) menoko **suke kor an** rapok-ke nea pon that young woman cook and exist.SG while-POSS 'While that young woman was cooking, . . .' (National Ainu Museum Ainu Archive: C0216UT_35237AP)

And perhaps the biggest problem is that it is not possible to set a clear boundary between *kor an* and *wa an* as showing aspect or as representing incidental situations. For example, in the following examples (8) and (9), the verb *ramu* 'think' is followed by kor oka (oka is the plural form of an), and the continuation of the action 'think' is expressed. However, while example (8) is translated as "we were thinking," in example (9), *oka* is translated as 'live', as in 'we had been living thinking'. In other words, in example (8), the emphasis is on the verb ramu 'think' before the conjunctive particle and it is interpreted aspectually, while in example (9), the emphasis is on the verb *oka* 'be' following it and *ramu* 'think' is interpreted as an incidental parallel situation.

This happens because the *an* in *kor an* and *wa an* requires a personal affix. In contrast to the highly grammaticalized existential verbs iru and aru in the Japanese te *iru* and *te aru* forms, *an* in *kor an* and *wa an* is less grammaticalized, and *an* retains its concrete "existential" meaning.

- (8)sine tuy-or-o-p a-ne humi one stomach-place-attach.to-thing/person 4.A-COP NONVIS.EVID kunak **a-ramu** kor oka-an ne COP COMP 4.A-think and exist.PL-4.S PST.SG but 'In spite of the fact that we were thinking that we were born of the same belly, . . . ' (ATMA 1983b: 123)
- (9)tane pak-no a-unu-hu ne kunak a-ramu now till-ADV 4.A-mother-POSS COP COMP 4.A-think korka kor oka-an and exist.PL-4.S but 'Until now we had been living thinking [that devil cat] was our mother, but . . .' (Ainu Museum 2015: 25)

⁷ In some dialects, kor an has a person restriction. In the Tokachi dialect, kor an is a form that expresses continuation of action or progression of change, but kor an does not co-occur with verbs displaying the first-person nominative form, and the form kan an is used to express continuation of action by a first-person actor subject. For more information on aspect in the Tokachi dialect, see Takahashi (Chapter 18, this volume).

There are other problems: (i.) aspect forms may receive the previous verb phrase or the whole clause/sentence, (ii.) multiple use of aspect forms is possible, and (iii.) modality elements may come ahead of the aspect forms.

Regarding (i.), in example (10), wa an is not connected to the verb isam 'not exist', but to the whole clause ene a-kar hi ka isam 'I can't do anything about it'.

(10)a-kar hi ka isam ene wa an ре like.this 4.A-make NMLZ even not.exist and exist.SG NMLZ ruwe ne 4.A-COP INFR.EVID COP 'I was in a position where I couldn't do anything about it.' (lit. 'I was a thing that **existed and there was nothing I (could) do like this.'**)

(Nakagawa 2012: 198)

The use of multiple aspectual forms (ii.), for example, "verb kor an wa an" does exist, but here it does not have the aspectual properties of both kor an and wa an. In the following example (11a), wa an is essentially unnecessary, and it is not clear whether it was intentionally added by the speaker or not. However, even if the aspect forms are consecutive like this, it is unlikely that there will be any overlap in meaning. For example, there is no grammatical or semantic problem if we use a-ko-y-car-pa kor an-an as in example (11b).

- (11)a. asinuma ka kamuy katkemat a-ko-y-car-pa 4SG even god lady 4.A-to.APPL-ANTIP-sprinkle-TR.PL kor an-an wa an pe and exist.SG-4.S and exist.SG NMLZ 'Even I was living giving offerings to [lit. 'worshiping'] the goddess.' (ILCAA Ainu Language Resource: Kawakami Matsuko minwa 3)
 - b. asinuma ka kamuv katkemat **a-ko-y-car-pa** kor 4SG lady 4.A-to.APPL-ANTIP-sprinkle-TR.PL and even god an-an ре exist.SG-4.S NMLZ 'Even I was living giving offerings to [lit. 'worshiping'] the goddess.' [example created from (11a)]

As for (iii.), there are examples like (12).8 *Kusu ne* (conjunctive particle *kusu* + copula verb ne) is normally used as a sentence-final expression showing will or a future ori-

⁸ This is a scene where I am served a meal by a couple who are not my real parents, but when I try to eat the meal, my real parents' faces come into my mind, and I am unable to eat.

entation, but this kusu ne is followed by kor an. In a case like this, it is difficult to analyze kor an as syntactically expressing aspect.

kotca-ke (12)а-е kusu ne kor ta an-an, 4.A-eat intention COP and exist.SG-4.S before-POSS LOC a-ona-ha a-unu-hu pirka nan-uhu 4.A-father-POSS 4.A-mother-POSS beautiful face-POSS si-suv-e pekor yaynu-an kor REFL-shake-TR.SG as.if think-4.S 'When about to eat (lit. 'I was about to eat'), the beautiful faces of my real father and mother seemed to flicker before my eyes, and . . . ' (National Ainu Museum Ainu Archive: C0157KM 34681ABP)

As shown above, although kor an and wa an are treated as aspectual forms, in reality, grammatically and semantically, there are only some cases that allow for aspectual interpretation. And also, although it is a well-established theory that kor an represents progressive aspect and wa an resultant aspect, there are cases where the criterion for the use of *kor an* and *wa an* is not clear, and the two do not show complete opposition.

The clearest opposition to be found in Ainu aspectual forms is in the opposition between wa an and wa isam. For example, in example (13), ray wa an indicates that a third person dead in front of you (there is a dead body in front of you), while wa isam is used when there is no dead body at the time of speech, as in example (14a). In example (14a), a Japanese man who went out on a boat and came back breathless is explaining to his Ainu counterpart that "all the foot soldiers on the boat with him died, and he came back alone as a survivor". As wa an does not have the function of expressing indirect results (Satō 2006, 2007a, 2007b), it means that ray wa an cannot be used in the situation in example (14a). (cf. example (14b))

hoku-hu (13)uni ta ahu-p-an akus ne house.POSS LOC inside.house-INTR.PL-4.S when that husband-POSS ape e-ko-hop-i hokus ne aan pe with.APPL-to.APPL-part-TR.SG fall ADM.SG thing/person fire hine ray wa an. and exist.SG and die 'When I entered the house, the person who was my husband had fallen **dead** with his back to the hearth.' (Chiba University 2015: 1854)

⁹ With the second person, it shows a periphrastic imperative.

neno an puri e-kor kusu ne na PROH like.this exist.SG behavior 2.A-have kusu ne SFP 'You absolutely mustn't behave that way.' (Nakagawa 1995: 163)

- (14)a. nea asinkaro opitta a-tura utar ka those 4.A.-accompany foot.soldiers PL all even ray wa isam. die and not.exist 'All the foot soldiers that boarded the boat with me **have died**.' (Kavano 1998: 84)
 - asinkaro b. nea a-tura utar ka opitta rav those 4.A.-accompany foot.soldiers PL even all die wa an. and exist.SG 'All the foot soldiers that boarded the boat with me *are dead.' (example created from (14a))

As far as Yoshikawa (2021) investigated, a total of 30 cases of ray wa an (including ray wa oka(y)) were extracted from the Saru and Chitose dialect materials, but all of them were in situations where a dead body existed at the time of speech. In addition, there were 30 cases of ray wa isam in the Saru and Chitose dialects, but there were few cases in which ray wa isam was used in the presence of a dead body.¹⁰

There are examples of the verb *ray* and the verb *an* being used in the first person to say ray-an wa an-an 'I am dead' when the speaker, who is already dead, talks about himself in the story. Naturally, there are no examples of ray-an wa isam-an or ray-an wa isam 'I have died' in similar contexts. The sequence ray-an wa isam-an 'I have died' was found only when it appeared as a conditional (irrealis) clause with a conjunctive particle such as yakun 'if', as in the following example (15).

(15) ray-an wa isam-an **yakun** a-kotan-u ne die-4.S and not.exist-4.S if/then 4.A-village-POSS COP anakne earkinne supuya sak kuni PST.SG NMLZ TOP really smoke lack COMP 4.A-think ne kor an-an wa рe and exist.SG-4.S NMLZ COP and 'If I had died, I thought the smoke would completely disappear from the place that was the village.' (Tamura 1997: 126)

In most cases, wa isam is translated into Japanese as te simatta 'I've done it' but its meaning is more limited than the Japanese te simatta. While the basic meaning of the Japanese phrase te simatta is the completion of the situation expressed by the verb, wa isam can only express the completion of a situation that presupposes the

¹⁰ It is not the case that ray wa isam was never used when a dead body was present; there were three examples in myths.

disappearance of the subject or object of the action. ¹¹ For example, given a sentence like Kabe ni kodomo ga rakugaki site simatta 'A child scribbled on the wall.', since there is no meaning of something disappearing, wa isam could not be used to express such a situation. In addition, wa isam does not actively express the mood meanings of "unfortunately" and "regretfully" that appear in the Japanese *te simatta* pattern. 12 Even if a modal interpretation is possible, there is always the premise of "the disappearance of things".

There are cases in which wa an is used even when there is no actor present, but it is characteristic that even in such cases, the actor is mentioned in some way. For example, in the following example (16), the protagonist's wife and son/daughter have already gone to the other world, but immediately after this, it is mentioned that the wife and son/daughter are actually still on the verge of crossing over. In other words, it can be posited that wa isam is chosen when the subject no longer needs to be mentioned, and wa an is chosen when its existence must be called into question for some reason.

```
(16)
     a-mac-ihi
                         i-kotcawot arpa
                                                          a-po-ho
                    ka
     4.A-wife-POSS also 4.O-before go.SG and exist.SG 4.A-son-POSS
           a-mat-ne-po-ho
                                      ka
                                           i-kotcawot arpa
     also 4.A-woman-COP-child-POSS also 4.O-before go.SG
     wa
           an
                    pe.
     and exist.SG but
     'My wife has gone on ahead of me and my son and my daughter have also gone
     on ahead of me.'
     (National Ainu Museum Ainu Archive: C0246KM 34612BP)
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However, the opposition between an and isam is a semantic opposition of "existencenonexistence", not an opposition of what is commonly called aspectual meaning, i.e., the way in which the internal temporal structure of a situation is perceived. However, if we define aspect as something that divides aspects of existence, we can find such a criterion of "existence / nonexistence" in the aspectual oppositions in Ainu. If we consider the undergrammaticalization of **an**, kor an and wa an are first and foremost to express the aspect of existence, and the aspectual meaning of the internal time of the situation is subordinate to it.

¹¹ The opposition between wa an and wa isam is similar to the opposition between zanson kekka sō 'residual result aspect' and shōshitsu kekka sō 'vanishing result aspect' in Ryukyuan languages. For more information on Ryukyuan residual result aspect and vanishing result aspect, see Shimoji (2018). 12 A similar point is made by Bugaeva (2018: 261).

3 Aspectual meanings expressed by kor an, wa an, kane an, and hine an

3.1 Kor an and wa an

Taking into consideration the problems already mentioned, Yoshikawa (2021) exhaustively examined the verbs that co-occur with kor an, wa an, kane an, and hine an, and analyzed the aspectual meaning of each form. In this chapter, I will present only a summary. First, the basic oppositions of kor an and wa an when they co-occur with non-stative verbs are shown in Table 1 below.

		kor an	wa an
Non- stative verbs	Action verb (-bounded)	Continuation of action Habitual Repetitive	(Basically not used)
	Verbs that show both action and change of state	Continuation of action Habitual Repetitive	Continuation of result of change (conclusion of action)
	Change of stative verb (+bounded)	Progression of change Habitual Repetitive	Continuation of result of change

The basic aspectual meanings of *kor an* and *wa an* when they co-occur with non-stative verbs does not differ significantly from previous studies. However, there are some minor details that are newly pointed out. For example, the function of kor an to express habituality and repetition was found only with some verbs in previous studies, but in the present data, it is a phenomenon that is widely observed regardless of the nature of the verb. Among action verbs, some so-called dual aspect verbs, verbs expressing cognitive, linguistic, and expressive activities, and some verbs of thought, emotion, and perception show both action and change. In this case, with kor an, the action nature appears in the foreground, expressing continuation of action, habituality and repetition, while with wa an, the change nature appears more in the foreground, expressing continuation of the result of change.

For stative verbs, the basic oppositions between *kor an* and *wa an* are as shown in Table 2 below. In the case of stative verbs, the aspectual meaning of the same verb changes depending on whether it is considered bounded or not. Kor an denotes habituality, repetition, or mere state of an action when boundedness is not an issue and denotes a progressive process of change when it is an issue. Wa an denotes mere state when boundedness is not an issue, and the continuation of the result of change when it is an issue. Although previous studies have pointed out that when wa an co-occurs with stative verbs, the temporariness of the state can be expressed, the present data show that the appearance of temporariness is graded and may express a permanent nature.

		kor an	wa an
Stative	-bounded	Habituality	Simple state
verbs		Repetition	
		Simple state	
	+bounded	Progression of change	Continuation of result of change

Table 2: Basic semantic functions of *kor an* and *wa an* (in the case of stative verbs).

3.2 Kane an

Kane is a form with auxiliary, conjunctive, and adverbial uses, and has already been described by many (Kindaichi 1993 [1931]; Kindaichi and Chiri 1974 [1936]; Chiri 1973 [1942]; Tamura 1960; Refsing 1986; Nakagawa 1995; Satō 2002, among others).

The structure of *kane an* is [conjunctive particle *kane* + existential verb *an*]. Concerning the conjunctive particle *kane* in the Saru and Chitose dialects, Tamura (1996: 273) gives (nanto) site '(however) doing and', sita mama de 'having done (it)', and suru hodo 'to the extent of doing' as Japanese equivalents. In the meaning of site 'doing and', kane is used in the same way as wa and hine (Nakagawa 1995: 144). (Chiri (1973) [1942]: 571) says *kane* shows "the continuation of a state or of the result of an action" and (Kindaichi and Chiri 1974 [1936]: 101), characterizes kane as a "durative form".

Satō (2002), after reviewing previous studies of kane in various dialects, and based on data from the Chitose dialect, recognizes the following uses of kane in the Chitose dialect: "kane for extreme degree", "kane for comparison", "kane for euphemism", and "kane for continuity or simultaneity". However, by synthesizing them, the meaning of kane may be better described as "a degree sufficient to satisfy the criterion of being equivalent to a certain thing or matter", which may explain the various meanings of *kane* in a unified manner (Satō 2002: 85).

Of these, the aspectual interpretation of *kane an* as an equivalent of *te iru* 'be doing' is included in the usage of "kane for continuity or simultaneity", but the reason why the meaning of continuity or simultaneity can be explained by "degree" is that "the predication of the degree of a thing expresses a property or state that exists simultaneously with it" (Satō 2002: 84).

In Yoshikawa's (2021) study, the verbs that co-occurred with kane an and expressed continuity and simultaneity were often change verbs, especially verbs related to physical (material) features and states. There was also a high percentage of stative verbs, and there were a few cases where [verb phrase + kane an] was fixed as a kind of conventional expression.

Physical (material) characteristics include the subject's facial expression (example (17)), appearance (example (20)). (In example (18), the state of the beard indicates whether the person is older or younger.)

- (17) mina kane an wa uske un а wa an laugh doing.so exist.SG and sit.SG and exist.SG place ALL 'to a place where he/she was sitting and laughing (lit. 'was laughing')' (National Ainu Museum Ainu Archive: C0159KM_34683ABP)
- (18) rek-oma-tu kane kur ora rek kur poka an beard-enter-? dong.so exist.SG person then beard shadow only careavtare¹³ kane kur u-tura hine an beard.not.grown doing.so exist.SG person RECP-go.together.with and ahu-p hine inside.house-INTR.PL and 'A man with a beard (lit. 'a man whose beard is grown') entered together with someone whose beard was still not grown, and . . . ' (Chiba University 2015: 115)
- (19) cokusamip mi kane okkay-po an clothing.turned.inside.out wear doing.so exist.SG man-DIM ape-etok ta hine an fire-front LOC exist.SG and 'A man **wearing** mourning clothes was sitting in the head seat, and . . . ' (National Ainu Museum Ainu Archive: C0184KM 34739ABP)
- (20) pon kuwa **kor** kane an wa small cane have doing.so exist.SG and 'holding a small cane, . . . ' (National Ainu Museum Ainu Archive: C0161KM 34690AB 34691AP)

When *kane an* co-occurs with a stative verb, there is almost no semantic opposition with the case where the stative verb is used alone. Examples (21) and (22) both show a constant, simple state. Example (21) includes Japanese language elements, shown in capitals.

(21)pon-no sapa-ha DA-KA, DOKO DA-KA hure small-ADV head-POSS COP.NONPST-Q where COP.NONPST-Q red MON DA kane oka cikap IU HANASI DA QUOT thing COP.NONPST story and exist.PL bird COP.NONPST 'It's a story about a bird somewhere that's **become red**, probably the head.' (Chiba University 2015: 1638)

¹³ In the audio material, this sounds like careaytare or ciarehaytare. I take it to be the same as ciarehayta.

(22)kew-e pon kane an okkayo nukunne okkayo body-POSS small and exist.SG man face.is.black man 'a **small** man (lit. 'body is **small**') a man whose face color is dark . . . ' (Hiraishi 2003: 20)

Chiri (1973 [1942]: 503) states that *kane an* is a form that expresses a resultative aspect. Kane an is similar to wa an in that it expresses a resultative state. However, the examples show that with *kane an*, the subject's state tends to be a metaphor of some kind. ¹⁴

For example, example (23) can be taken as a continuation of the result of the change of 'bowing one's head', where the state of 'bowing one's head' here is a metaphorical description of carrying a large load on one's back. In contrast, in example (24), wa an (here, plural wa oka) is used, but in this case, 'bowing one's head' is simply the state of having one's head bowed, not a metaphorical description.

- (23)kim-osma hine suv poro sike mountains-enter and load again big ko-he-pok-i-ki iwak hine kane an wa to.APPL-head.PF-lower-TR.SG-P.RED somewhat exist.SG and return and '(He) went into the mountains and again returned carrying a big load **bowing** his head (lit. 'bowing his head at the load').' (National Ainu Museum Ainu Archive: C0184KM 34739ABP)
- (24)kamuy opitta **he-pok-i-ki** wa oka rok pe god head.PF-lower-TR.SG-P.RED and exist.PL PST.PL NMLZ he-tar-pa wa head.PF-raise-TR.SG and 'All the gods who had **lowered their heads** raised their faces, and . . . ' (National Ainu Museum Ainu Archive: C0152KM 34639ABP)

In many cases, kane an actively expresses the attributes (status) of the subject. For example, a kimono is a kind of accessory that expresses a person's attribute rather than just being something to wear (example (25)). In contrast, in the case of wa an in example (26), the object worn is merely material that can be put on and taken off.

(25)kunne kosonte u-tom-ciw-re kunne cipanup black short.sleeved.kimono RECP-middle-stick-CAUS black head.wrap e-pa-un-u kane an kamuv menoko head.POSS.PF-upper.part-be.at-TR.SG somewhat exist.SG god woman

¹⁴ This is in line with the "specific situation meaning" of *kane* pointed out in Satō (2002).

¹⁵ He-pok-i-ki is an intransitive verb. Ko-he-pok-i-ki is a transitive applicative verb, see Bugaeva and Kobayashi (Chapter 15, this volume).

ni hine ora opes ra-n tree along low.place-INTR.SG and then 'Wearing a black kimono and a black headpiece (lit. 'wrapping a black scarf around the head'), the goddess descended along the tree, and ...' (National Ainu Museum Ainu Archive: C0227UT 35298ABP)

(26)nani a-mi wa okay ре use a-anu immediately 4.A-wear and exist.PL thing ordinary 4.A-put/place.SG huray-e wa i-kor-e sinna amip wash-TR.SG and 4.O-have-CAUS another clothing sa-n-ke hine i-i-mi-re ne ya ki wa front.place-INTR.SG-CAUS and 4.O-ANTIP-wear-CAUS COP Q do and 'She took off and washed the clothes I was wearing. She did such things as putting out other clothes and dressing me in them.' (National Ainu Museum Ainu Archive: C0194UT 35224AP)

Although kane an and wa an do not always show the opposition described above, kane an has many examples of use as a conventional expression like this, and it is clear that its use is still more limited than wa an.

From the above, we can see that *kane an*, like *wa an*, basically shows the continuation of the result of a change. However, in the case of kane an, it tends to actively express an attribute (status) of the subject, and the action or state of the subject tends to become a metaphor of some kind. In addition, the *kane an* construction as a whole becomes fixed as a conventional phrase, and some of them show so-called adjective-like function, which is a non-aspectual phenomenon.

3.3 Hine an

Hine an has the structure [conjunctive particle *hine* + existential verb *an*]. Regarding the difference between hine and wa, Tamura (1996) says, "In everyday speech, wa is used when the relationship between the two is close and inseparable, when there is a causal relationship, or when the former expresses how the latter is carried out, and hine is used when saying that one thing happened and then the second thing happened" (Tamura 1996: 190). Nakagawa (1995) also notes that it indicates that "the before and after sentences were done in that order; there is less causality and closeness between the preceding and following actions than with wa" (Nakagawa 1995: 331). On the other hand, Tamura (1988a, 1996) states that "even in contexts where the conjunctive particle wa is used in everyday speech, hine is often used in folktales and mythological narratives" (Tamura 1996: 190). "This is not due especially to the nature of hine, but it is simply that when telling folktales hine is used in place of wa" (Tamura 1988a: 54). In other words, the distinction between wa and hine seems to be blurred in oral literature.

As for the aspectual meaning of hine an, Chiri (1973 [1942]: 503) regards it as a resultative aspect. Yoshikawa (2021) investigated the verbs that co-occur with hine an and found that, like wa an, they tend to be change of state verbs.

The frequency of occurrence of wa an is higher than that of hine an, so it is thought that wa an is more likely to be used to express the resultative aspect, but in some cases, hine an is used equally with wa an, and much is unclear regarding such cases.

For example, ne hine an (ne is the copula verb) in examples (27) and (28) was found in many of the examples of hine an, and is a common expression in stories, but there is also a similar expression using wa an (ne wa an), and it is not clear how the two differ. The choice of whether to use wa an or hine an may depend on the judgment of the speaker at the time. In addition, *ne hine an* and *ne wa an* have no aspectual meaning, and it is not clear how they differ from *ne* alone.

- (27)Tannesar sekor a-ve kotan kur or un Tannesar QUOT 4.A-say village place live.at/belong.to person a-ne hine an-an hike ре ne 4.A-COP and exist.SG-4.S NMLZ COP but 'It was I who lives in the village called Tannesar.' (lit. 'I am the one who is the person who lives in the village called Tannesar.') (National Ainu Museum Ainu Archive: CO201UT_35227AP)
- (28) tan menoko asinuma anakne nep avnu a-ne 4SG this woman TOP what person 4.A-COP ruwe ka upas-cironnup a-ne hine somo ne INFR.EVID even NEG COP snow-fox 4.A-COP and an-an ruwe ne а р exist.SG-4.S INFR.EVID COP PST.SG but 'Here, girl. I am not any kind of human. I am the white fox god, and ...' (Hiraishi 2003: 22-23)

In addition, there were some examples where hine an co-occurred with action verbs, but in this case, hine an is difficult to analyze as showing aspect. For example, in example (29), hine an is attached to the verb wakka-ta 'fetch water', 16 but hine an does not represent the continuation of the action, but only the apparent continuation of the action by connecting the preceding and following clauses.

¹⁶ Although there are examples of *wakka-ta* co-occurring with *kor an*, there are no examples of it co-occurring with wa an.

(29) cis kor suke cis kor wakka-ta hine an cry and cook cry and water-dig and exist.SG '(Uncle) cooked while crying and fetched water while crying.' (Chiba University 2015: 1544)

4 The auxiliary verbs a and aan

4.1 Functions of the auxiliary verb a

4.1.1 Presentation of the problem

Until now, the auxiliary verb a has been interpreted as a past or perfect form. Since Ainu is a non-tense language, it is possible to express past situations with unmarked verbs, but a clearly indicates that the situation is a past situation, and furthermore, it is perfect, which means that "the result of a past event remains in the present ("'perfect' refers to a past situation which has present relevance, for instance the present result of a past event (*his arm has been broken*)" Comrie 1976: 12). According to Satō (2007b, 2008), the "influence on the present" represented by a is "vague and indirect" (Satō 2008: 188), and Satō (2007b, 2008) states that wa an does not denote actional perfect, while a does denote actional perfect.

For example, in example (30), the use of *a* is thought to express "the feeling of not needing a knife because you have already eaten" (Tamura 1988a: 41), as indicated in the commentary. For example (31), Satō (2008) states that "it seems to be spoken with a nuance such as "the memory of it still remains vivid" (Satō 2008: 187).

- (30) *ku-mimak-i* ani *kap-u ku-kar* wa **k-e**1SG.A-teeth-POSS INS skin-POSS 1SG.A-peel and 1SG.A-eat
 - **a** wa.
 - a SFP
 - 'I peeled it with my teeth and **ate** it.'

(Said when someone brought over a knife to peel an apple. Has a feeling of "Since I already ate it, I don't need a knife".) (Tamura 1988a: 41)

(31) k-ona-ha k-unu-hu ku-kasuy wa poro-n-no 1SG.A-father-POSS 1SG.A-mother-POSS 1SG.A-help and big-EP-ADV ku-nepki a wa. 1SG.S-work a SFP

'I helped my mother and father and worked a lot.' (Satō 2008: 183)

In addition to appearing at the end of a sentence with the sentence-final particle wa, as in examples (30) and (31), a is often accompanied by a contrastive conjunctive particle, as in the following example (32). Tamura (1960) says that a expresses a comparison between past and present situations, and example (32) shows a "comparative" relationship between when it rained and when it did not get cooler.

(32) apto **as a** korka sir-meman ka somo ki. rain stand.SG a but appearance-cold even NEG do 'It **rained**, but it did not get cooler.' (Tamura 1960: 347)

In other cases, such as in example (33), *a* represents a situation in the past that is the opposite of the present.

(33) esir pak anakne upas ka isam a p tane upas earlier till TOP snow even not.exist a but now snow as kor an wa stand.SG and exist.SG SFP 'Even though there was no snow up to a little while ago, now it's snowing.' (Satō 2008: 184)

However, if a is perfect, it means that the past situation is effective in the present, but in examples (32) and (33), it is not clear how the indirect result of the rain or the lack of snow is manifested in the present. Rather, what stands out is the disconnection from the present. From the point of view of this disconnection, I decided that the aspectual meaning of a might be "perfective"

The tatta form in the Tōhoku dialects of Japanese is a form that expresses a past that is disconnected from the present. It takes the form [verb + tatta], as in mitatta 'saw' and ittatta 'went'. Takeda (2020) compares the tatta form in Morioka dialect of Iwate Prefecture with the ta form, which also expresses the past, and summarizes its characteristics as follows.

- (1) If the event is still in front of you at the time of speech, you cannot use the *tatta* form, but only the *ta* form, and if it is not still in front of you, the *tatta* form is used.
- (2) If the result of the event is still present at the time of speech, the *ta* form is used, if not, the *tatta* form is used.
- (3) As a result, the *tatta* form in Morioka dialect can be identified as a form that indicates the past of an event in terms of tense, and as a form that completes an event in terms of aspect.
- (4) In the case of the *tatta* form, there is a characteristic of "disconnection between the event and the present at the time of speech". This is considered to be a derivative modality from the completion of the past event.

- (5) The usage that brings to the surface the modality of the *tatta* form, "the disconnect between the event and the present at the time of speech", is the "reminiscence" usage of the tatta form.
- (6) The *tatta* form developed from a pattern [verb + *te atta*] that showed a continuing event in the past. However, at present, it has lost the aspectual meaning of continuity and instead has come to have the tense meaning of a past event separated from the present, as well as the mood meaning of recollection. This is an example of grammaticalization in that the semantic usage changed along with the change in word form. (Takeda 2020: 116)

The characteristics of the *tatta* form cited above have much in common with the situations in which a is used in Ainu. First, (1) the event is not in front of the speaker at the time of speech and (2) the result of the event is also not in front of the speaker.¹⁷ From this, it can be said that (3) the form is past in terms of tense and perfective in terms of aspect. And, since a is used to express a past situation in a contrastive relation with the present, a can be said to be a form that expresses (4) and (5) "a discontinuity between the event and the present time of speech". A has a nuance of reminiscing about a past situation, and in past studies it has been considered to have arisen from an aspectual perfect interpretation, but, considering the *tatta* form, it is possible to identify it as a modal (=reminiscence) interpretation stemming from (5) a discontinuity between the event and the present time of speech.

The aspectual nature of *a* can also be observed in its function in narratives: when a appears at the end of a sentence with the formal noun p 'thing, fact' or the conjunctive particles korka 'but' or wa 'and', it tends to be the point at which the scene, topic, or actor in the story changes. 19 This can be thought to be due to the fact that a represents perfective, that is, the situation is complete and separated from the present. In some cases, as in examples (34) to (36), an adverb that specifies time, such as 'now' or 'at some time', is used immediately after the bolded part. Example (36) is an example of a scene change that also includes a switch of actor.

¹⁷ For example, if you say, Tonari kara kireina suimitu morattatta 'I got a beautiful white peach from my neighbor', it would indicate that the peach is now gone (Takeda 2020: 111), and that there is no residual result of the morau 'getting' action.

¹⁸ The word p often functions like a conjunctive particle and ap is often translated as \sim sita p a 'did p, but . . .'. p is similar to korka '~sita ga' (although I did), but whereas korka functions exclusively as a contrastive conjunction, p is used to indicate a topic that forms a premise.

¹⁹ The same is true for conjunctive particles that contain a in their word structure, such as ayne 'ageku' (after, in the end), akusu '~suru to' (when one did ~), and awa '~sita tokoro' (just when one did ~). (ayne: a-hine a-' ~site' (after doing ~); akusu: a-kusu a- '~node' (since ~); awa: a-wa a- '~site' (after doing ~)).

- (34) a-ekas-i i-res-u hine oka-an a p 4.A-grandfather-POSS 4.O-raise-TR.SG and exist.PL-4.S a but tane pon-no poro-an wa inkar-an siri ene now little-ADV big-4.S and see-4.S VIS.EVID in.this.way an hi exist.SG NMLZ 'I was raised by my grandfather, but, now, I have become somewhat bigger and looking at it. I noticed this kind of thing.' (Tamura 1985: 48)
- a-e-sirkirap (35)nep ne vakka ka somo ki what COP although 4.A-by.APPL-be.troubled even NEG do no oka-an ne a p sineanta mak ne рe and exist.PL-4.S NMLZ COP a but sometime how COP va Iskar turasi arpa-an rusuy hine Q Ishikari.river upstream go.SG-4.S DESI and 'We were living with no problems. At some time, for some reason we came to want to go up the Ishikari River.' (Ainu Museum 2015: 36)
- (36)pet turasi hene arpa kusu i-ki hi kunak ne river upstream for.example go.SG for ANTIP-do NMLZ COP COMP a-ramu un a p pet ra-n ре ne 4.A-think a but river place ALL low.place-INTR.SG NMLZ COP kusu **neno** os ra-n-an pet parur ta a p since like.this back low.place-INTR.SG-4.S a but river edge LOC cicay ta ra-n kor tap aynu ne wa os river bank LOC low.place-INTR.SG when now person COP and back ra-n-an humi ne kunak a-ramu a p low.place-INTR.SG-4.S NONVIS.EVID COP COMP 4.A-think a but ciray wor-osma akusu poro ne hine water-enter then COP big ito and wot-cak-a-cak-a hine arpa water-open-TR.SG-open-TR.SG and go.SG

Even though I was thinking that (my brother) would do something like going up the river, though **I descended exactly after him** since he went down the river, when he went down to the edge of the river, to the bank of the river, **though I had been thinking until this very moment that (my brother) was human**, he entered the water and turning into a large *ito* [a large fish in the salmon family] went up the river splashing in the water.' (ATMA 1983a: 107)

4.1.2 Direct evidentiality expressed by the auxiliary verb a

However, even if we define a as a form that actually represents perfective, the explanation is inadequate. Although not mentioned in previous studies, there are examples of "exceptional" a usage that is neither past, nor perfective, nor perfect.

Examples (37) and (38) are all constants that are not affected by time, and it seems possible to express the same meaning even if *a* were not present. However, if there is a difference compared with the unmarked version, the difference is that the sentence with *a* has some kind of contrastive relation with the sentence immediately after it. In example (37), even though the speaker lives in the middle range of the Yūbetsu river, he is in a completely different place. Example (38) is a contrast between the case where the water has increased and the case where the water has disappeared.

- (37)Yupet emko un aynu sit-turaynu-an a-ne Yūbetsu.river middle LOC person 4.A-COP a but appearance-lose-4.S hine or-o ek-an ka a-erampewtek ta ruwe and place-POSS LOC come.SG-4.S INFR.EVID even 4.A-not.know ruwe mak a-ve uske ne wa ne ruwe INFR.EVID COP and how 4.A-say/tell place COP INFR.EVID ya a-ko-pisi akusu, COP O 4.A-to.APPL-ask then
 - 'I am a person from the middle of the Yūbetsu river, but I lost my way, and, since I didn't know where I had come to, I asked what this place is called, and ...' (Tamura 1989: 30)
- (38)a-kor Iskar anak pon uske ta anak nay pak-no LOC 4.A-have Ishikari.river TOP small tike TOP marsh till-ADV oraun, kane an poro kor anakne to neno exist.SG then big when TOP swamp as doing.so sat hine an poro pet ne p ne a p, pet exist.SG big river COP NMLZ COP a but river dry.up and nay neno kane rapok hike pet-kasu-an an ne marsh as doing.so exist.SG between COP but river-cross-4.S hine okusne wa va-n-an ruwe ne other.side ABL land-INTR.SG-4.S INFR.EVID COP 'When the water is low in the Ishikari River, it's like a marsh, and when the water is plentiful, it was a big river like a swamp, but when the water got low and it was like a marsh, I crossed the river on foot and climbed up the other side.' (Tamura 1988b: 77)

The contrastive relation is more pronounced in the case of past events, 20 but in the case of past events, it can be said to come from the aspectual nature of a (=perfective). However, considering the fact that contrastive properties are also expressed in the case of other constant properties, it cannot be fully explained in terms of aspect.

In this regard, Yoshikawa (2021) pointed out that a may mark direct evidentiality, hence the use of "exceptional a". Markers of direct evidentiality may involve the speaker's beliefs, internal states, knowledge, and convictions (Aikhenvald 2004). Kindaichi (1993 [1931]) believes that a expresses "the meaning of 'properly...done' (Kindaichi 1993 [1931]: 293)" and Kindaichi and Chiri (1974 [1936]) believes that it confirms the content of the sentence as an established fact (Kindaichi and Chiri 1974) [1936]: 157)". The modal aspect of a has not been much of a problem until now, but I think that a basically has the effect of making the contrast with the following sentence stand out by strengthening the certainty of the situation in question. At the same time, I think that a is used to refer to the speaker's internal state (example (37)) or knowledge (example (38)) as the object of contrast.

In the following examples (39) and (40), there is a contrast as well. In example (39), the speaker says, "My brother is a fine person, so even if you offered him an item of this value, he would not agree to it." The contrast between his brother's humanity and the value of the goods can be seen. It also shows the speaker's belief that his brother is a fine person. In example (40), the entire part in bold is like a kind of inserted sentence, in which the speaker's knowledge that "the chief lives in the center of the village and the younger one lives in the upper part" is contrasted with the scenery in front of him at the time of speech.

(39)nispa rak pe aynu rich.man belong.to.the.class.of thing/person human rak a-aki-hi pe ne a p belong.to.the.class.of thing/person 4.A-brother-POSS COP a but ene pak an ani a-ho-pun-i-re pe exist.SG thing/person INS 4.A-bottom.PF-lift-TR.SG-CAUS like.this till yakka ho-pun-i kuni although bottom.PF-lift-TR.SG should/going/surely thing/person

²⁰ Consider example (32). Although "comparison" in Tamura (1960) means a comparison between the past and the present, "contrast" in this paper is not limited to that temporal relation, and this chapter takes the position that *a* indicates a contrastive relationship even when there is no temporal relationship.

ka ne kusu akkari an somo na pe COP even NEG since more than exist.SG thing/person a-an-i-var vak pirka 4.A-hold-TR.SG-INDEF.CAUS if good

'My younger brother is a virtuous person and is a (real) human. If you try getting him up with something such as this, there's no reason to expect him to get up, so get someone to get something better than this and hand it over.' (Tamura 1989: 50)

(40) tomari or ta cip a-va-n-ke hine kotan or place LOC boat 4.A-land-INTR.SG-CAUS and village place port akusu **kotan** noski kiyanne kur kotan ta arpa-an kor LOC go.SG-4.S then village center elder village have person kur poniwne kur kotan pa ne ta an person COP vounger person village upper.part LOC exist.SG pe ne a p e-un patek supuya hine NMLZ COP a but there-ALL only smoke rise and 'When I landed the boat and went to the village, the elder person (living) in the center of the village is the village head and the younger one is in the upper part of the village, but smoke was rising only to those (two houses).' (ATMA 1983a: 153-154)

The modal aspect pointed out by Kindaichi (1993 [1931]) and Kindaichi and Chiri (1974 [1936]) is related to the speaker's certainty, which is also manifested when describing past events. In Hattori (1964: 302), among several dialectal examples of Ainu sentences corresponding to "I'm sure I saw it", *a* is used in the Saru dialect (example (41)) and the Obihiro dialect (example (42)).

- (41) sonno **ku-nukar a** p un (Saru) really 1SG.A-see a NMLZ SFP
- (42) *nekon an akkay ku-nukar a wa* (Obihiro) how exist.SG even.do 1SG.A-see a SFP

However, since there is no a in the examples of the same item in other dialects, and example (41) also uses the adverb sonno 'really', it cannot be said that only a is necessarily responsible for certainty. Also, it cannot be said that there is a complete opposition between the cases where a is added and unmarked cases, and it cannot be said that it is an obligatory form, but I believe that it is an important clue when considering the function of a.

4.2 Functions of the auxiliary verb aan

4.2.1 Presentation of the problems

In Kindaichi (1993 [1931]), Kindaichi and Chiri (1974 [1936]), Tamura (1988a, 1996), and Nakagawa (1995), *aan* is described as a form expressing "I now know for the first time what I did not know when the situation occurred" about a situation that occurred in the past. Kubodera (2020) considers aan to express the meaning of "completed and now having its consequences" (Kubodera 2020: 2) and calls it "completed existential state" (Kubodera 2020: 2).

Kindaichi and Chiri (1974 [1936]) and Kayano (1996) point out that aan indicates surprise at an unexpected fact or result, and similarly, Bugaeva (2004: 75) refers to anan in the Chitose dialect (the same as aan in the Saru dialect) as "admirative auxiliary verb", and Izutsu (2008) refers to aan as an expression of mirativity.

From these previous studies, aan can be seen as a form of indirect evidentiality or mirativity. Indirect evidentiality is when the speaker did not witness the event but learned of the fact after the event. Indirect evidentiality can be divided into two main categories: inference and hearsay. Mirativity is a semantic category that describes unexpected feelings of the speaker or new information (DeLancy 2001, Aikhenvald 2004). The phenomenon that forms of indirect evidence are associated with the meaning of mirative is found in many languages.

4.2.2 The auxiliary verb aan and indirect evidentiality and mirativity

The word *aan* is used to indirectly confirm a past event from traces in front of one's eyes or hearsay. As indirect evidentiality becomes more grammaticalized, the mirativity meaning takes precedence and it becomes possible to use the form even when based on direct evidence. Many of the examples of aan are in the combined stage of indirect evidence and mirativity.

Example (43) is a scene in which the speaker (the protagonist of the story) returns to his house and sees signs that the inside of his house has been ransacked, and he guesses that it was the work of a bear. In this scene, the bear is already gone. In example (44), the speaker is telling his personal story. The protagonist was originally the son of a village chief, but when he was a child, an epidemic swept through the village, wiping out all but the protagonist. The god of famine came down from the heavens and raised him, but the protagonist was not told about this until he was older, and he tells the story when he visits another village. The fact that he was the son of a village chief and that he was raised by a god is indirectly confirmed through linguistic information. Example (45) approaches the meaning of direct confirmation of the current situation at the speech site, and the meaning of mirativity is apparent.

- (43)a-uni ta ek-an akusu ruwe ne 4.A-home.POSS LOC come.SG-4.S INFR.EVID COP then a-uni ta kamuy sa-n aan hine 4.A-home.POSS LOC bear front.place-INTR.SG aan and 'When I came to my house, the fact is that a bear had come down to my house.' (National Ainu Museum Ainu Archive: CO215UT 35237AP)
- (44) *tapne* Iskar pene-ke-he rera in.this.way Ishikari.river upper-place-POSS wind/disease o-va-n wa or-o ta kotan kor kur to.APPL-land-INTR.SG and place-POSS LOC village have person po-ho aan korka i-res-u kamuv isam a-ne wa 4.A-COP son-POSS aan but 4.O-raise-TR.SG god not.exist and kusu kanto or kem-ram wa kamuy ra-n low.place-INTR.SG because sky place ABL famine-heart god i-resu hi ne aan pe and 4.0-raise NMLZ COP aan but 'This and that happened. A communicable disease ran through the upper reaches of the Ishikari River. The fact is that I had been the son of the village chief, but since there was no god to raise me, the god of famine descended, and the fact is **the god raised me**.' (Tamura 1985: 52)
- (45)inkar-an akusu tan sunku ni-tek look-4.S then this Ezo.pine.tree tree-hand e-poki-kom-om-se cise neno kane head.PF-downwards-be.cramped-P.RED-TR.SG house as somewhat ta an-an hi ne aan wa exist.SG place LOC exist.SG-4.S NMLZ COP aan and 'When I looked, a branch of this Ezo pine tree broke and fell and was like a house, and the fact is that is where I was.' (National Ainu Museum Ainu Archive: C0150KM 34626ABP)

4.3 The opposition between a and aan

If *aan* represents indirect evidence, then it represents perfect in terms of aspect, in that the past scene continues to be involved in the present. In previous studies, *a* and *aan* have not been discussed in relation to each other, but Yoshikawa (2021) considered *a* and *aan* in relation to each other, and concluded that *a* and *aan* form the opposition "perfective / perfect" in aspectual meaning and "direct evidential / indirect evidential" in evidential meaning.

According to De Haan (2005), the opposition between direct and indirect evidential past elements is found in many languages. ²¹ For example, in the following Turkish example, the past tense affix -di indicates that the speaker witnessed the event, while the past tense affix -miş indicates that the speaker did not witness the event.

Ahmet gel-di. a. Ahmet come-PST.DIR.EVD 'Ahmet came.' (witnessed by the speaker)

Ahmet gel-mis b. Ahmet come-PST.INDIR.EVD 'Ahmet came.' (unwitnessed by the speaker) (De Haan 2005, WALS Online, chapter 77, Glosses are as in the source.)

Hosoe (1973 [1932]) found the classical Japanese past auxiliary verbs ki and keri to be in the same relation as the opposition between these Turkish past tense affixes and identified ki as mokuto kaisō 'witnessing reminiscence' and keri as denshō kaisō 'transmitted reminiscence'. Hosoe (1973 [1932]) said that ki as the 'witnessing reminiscence' was used to speak of matters that the speaker had intimately experienced and keri as the 'transmitted reminiscence' was used when reporting matters heard from others (Hosoe (1973 [1932]: 119-120). Katō (1998) basically continues Hosoe's analysis and writes the following concerning the basic differences between ki and keri.

As a general rule, when expressing an event that the subject at the time of speech is aware of as having occurred in the past:

Ki is used to describe an event that at the time of utterance the speaker is aware of as having occurred in the past, and that the speaker has a visual or sensory memory of having directly witnessed or been clearly aware of the occurrence of the event.

Keri is used to describe something that does not involve such a memory. It is an event that the speaker has become aware of indirectly in some way, such as through subsequent circumstances, through assumption, or through hearsay from others. (Katō 1998: 207-208)

The opposition between a and aan that I argue for in this chapter is also roughly this kind of opposition. If *keri* has the structure [*ki* (past auxiliary verb) + *ari* (existential verb), it is identical to the structure of Ainu aan [auxiliary verb a + existential verban], and the semantic and morphological parallelism is also noteworthy.²²

²¹ See WALS ONLINE, Chapter 77.

²² Regarding the semantic functions of ki and keri, Suzuki (1992, 2009), Katō (1998), Ijima (2011), and others have categorized and described various theories. Since there are differences between Japanese classical literature and Ainu oral literature in terms of the presence or absence of tense and narrative form (narrator's point of view, etc.), I am not claiming that the semantic functions of ki and keri can be directly applied to a and aan, but I am presenting this as an aid to finding crosslinguistic similarities.

Finally, I would like to talk about the morphological differences in dialects. Aan varies in form depending on the dialect and speaker. In the narratives of Nabe Shirasawa, a speaker of the Chitose dialect, the form aan is rare, and the form anan is used almost exclusively (Nakagawa 1995: 12). Haw'an is used in the Shizunai dialect, awan in the Tokachi dialect, and awokay and awan in the Horobetsu dialect. Which one is closer to the original etymology cannot be determined from the literature or geographical distribution. Therefore, it cannot be said that aan auxiliary verbs can be analyzed as [verb a + verb an] in all dialects. In other words, it would be possible to point out that if we look at the form anan, we can analyze it as [verb an + verb an], and if we look at haw'an or awan, we can analyze it as [haw (noun 'voice') + verb an].

However, since there are forms such as rok-oka (Saru, Chitose) and rok-okay (Chitose, Horobetsu) that reflect the plural rok of the verb a and the plural oka(y) of the verb an, respectively, I believe that anan, awan, and haw'an are phonetic variations of *aan*, all of which have the construction [verb a + verb an].

5 Conclusion

In Ainu, the opposition between perfective and imperfective aspects is unclear, and furthermore, it is difficult to establish a clear boundary for kor an, wa an, kane an, and hine an as to whether they are so-called aspect or whether they represent incidental situations. What have been treated as aspectual forms in Ainu so far, both grammatically and semantically, only allow for aspectual interpretation in some cases. It should be noted that what I have called existential aspectual forms are all forms that may express aspectual meanings but are not grammatical aspectual forms.

On the whole, the continuity expressed by the existential verb *an* functions as an element that expresses aspectual meaning. In other words, when Ainu verbs are accompanied by kor an, wa an, kane an, or hine an, continuity based on the time of utterance is basically manifested, and this expanded time is expressed by the existence verb an. The auxiliary verb aan, which contains an, expresses perfect, which indicates the expansion of time spanning the past and the present. The correspondence between a and aan, perfective / perfect, is parallel to the correspondence between unmarked verbs and [verb + wa an], perfective / continuation of the result of change (state perfect).

In this chapter, I also mentioned evidentiality. The auxiliary verb a and the auxiliary verb aan are complex forms that display tense, aspect, and evidential properties, and I believe that the meanings they express vary from time to time. In terms of tense, a and aan basically express the past. In terms of aspect, a is perfective and aan is perfect. In terms of evidentiality, a indicates direct evidence and aan is used for indirect evidence. As an extension of these meanings, a denotes certainty or recall of a past situation, and aan denotes mirativity.

However, Yoshikawa (2021) and the contents described in this chapter are limited to usage trends. Since the material used for analysis is fourth-person narrative material from stories and there are few examples with third-person subjects, it cannot be denied that there are some limitations in terms of aspectual and evidential research. In addition, since this research is based on data from the Saru and Chitose dialects, it cannot be directly applied to aspect in other dialects. Although there are many inadequacies in this study, I hope that it will provide some suggestions for future research on aspect in Ainu.

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Part III: Appendices: Sample texts

Anna Bugaeva

20 An *uwepeker* "Retar Katak, Kunne Katak" and *kamuy yukar* "Amamecikappo" narrated in the Hokkaido Ainu dialect of Chitose by Ito Oda

1 Introduction

This chapter presents two Ainu folktales narrated by Ms. Ito Oda (1908–2000), who was one of the last speakers of the Chitose dialect, which belongs to a Southern subgroup of the Southwestern Hokkaido Ainu group. The folktales represent different genres: retak katak, kunne katak 'white clue and black clue' is an uwepeker 'prosaic folktale', while amamecikappo 'sparrow' is a kamuy yukar 'divine epic' containing melody, meter, and sakehe 'refrain'; for more on genres see Endō (Chapter 10, this volume). Both folktales were recorded in the autumn of 1998 by the compiler when she was a postgraduate student at Hokkaido University. In 2004, they were first published as part of Grammar and folklore texts of the Chitose dialect of Ainu (Idiolect of Ito Oda), which is a revision of Bugaeva's PhD thesis and, in 2021, they were included in an online Glossed Audio Corpus of Ainu Folklore (Nakagawa et al.) along with their newly added Japanese translations and glosses. This is a third revision of these two folktales, which is done for the sake of consistency with the volume. The audio of the folktales is available in Bugaeva (2004) and at the digital online corpus (Nakagawa et al. 2016–2021).

Ito Oda was born in 1908 in the in the village of Maoi (馬追) near the town of Naganuma (長沼町) in the lowest reaches of the Chitose River, but at the age of three or four, when her father died, her mother and she as well as her elder and younger brothers moved to Kamaka of Chitose (千歲市, 釜加) where their relatives had lived. Ito Oda was brought up by her mother and grandmother who taught her Ainu and whom she could hear speak to each other in Ainu. She hardly ever went to school. However, according to Ito Oda herself, Ainu was not a language of communication in her daily life, it rather remained as a language of Ainu culture and folktales, which used to be narrated in evenings after work in the Ainu community.

When interviewed in 1990 and 1991 by a group of researchers (see Hokkaido Kyōikuchō Shakai Kyōikubu Bunkaka (eds.) 1990, 1991), Ito Oda did not reveal her ability to narrate folktales and speak Ainu. She was probably overwhelmed by the presence of a very famous fluent speaker from the upper reaches of the Chitose River, Nabe Shirasawa (1905–1993), who was interviewed at the same time and whose idiolect became the basis of the Chitose Ainu dictionary (Nakagawa 1995) and grammar (Satō 2008).

I first met Ito Oda in July 1998, being introduced to her by my former supervisor, Professor Tomomi Satō. Ito Oda had moved to Katsuragi of Chitose town (千歲市, 桂木) after getting married to an Ainu man Kiyosaku Oda, and was living there in her later years together with the family of her younger son Hisao Oda (1952–2021), who was very hospitable during my interviews in 1998–2000.

In spite of the fact that Ito Oda had not spoken Ainu for so many years, the language started coming back immediately as soon as we established a trustful relationship. Importantly, despite of her advanced age and poor health, Ito Oda felt very happy about sharing with me her knowledge of Ainu. Even when most of my later interviews took place in hospital, I could feel that my visits brought Ito Oda real joy because she wanted to leave her knowledge for posterity. I recorded from Ito Oda 15 folklore texts with a total recording time of 2 hours and 17 minutes, one personal narrative, answers to numerous questionnaires for eliciting reciprocals, applicatives, and other grammatical phenomena, and the lexicon concerning parts of the body and bodily functions. All texts were transcribed and translated during the lifetime of Ito Oda and in consultation with her.

And finally, a few words about the personality of the late Ito Oda. She was a really kind person and all of her children (Hisao, Seiko, and Tomoko) were very kind to me, too. According to Tomomi Satō, "while she had a vast amount of knowledge about the Ainu culture, in particular about religious beliefs, she was a very modest person and was never proud of it before others (for her deep knowledge in these areas, see Matsui 1993). She was a very kind, amiable old lady, and at the same time seemed to have some mysterious power that made everyone around her feel peaceful and happy." (Bugaeva 2004) I was blessed to work with Ito Oda and I will never forget those delightful moments.

2 Transliteration conventions and list of symbols

I use the Latin alphabet for transcribing Ainu: the five characters /a/, /e/, /i/, /o/ and /u/ represent vowels, and the 11 characters /p/, /t/, /k/, /m/, /m/, /s/, /c/, /h/, /r/, /y/ and /w/ represent consonants. Of these characters, /c/ expresses [tf]. A glottal stop symbol /'/, whose phonological status is unclear in Chitose, can also be used to transcribe one of consonants, but I use it here only when it influences resyllabification. My transcription is phonological but in the case of morphophonological alternations, see Shiraishi (Chapter 13, this volume), I transcribe a word in its underlying form indicating phonological alternations with an underbar "_" entered directly after the change, e.g. $hine \rightarrow h_ine$ [ine].

Parentheses "(. . .)" are used in the Ainu texts to mark the utterances that are considered as redundant or inexplicable or to mark explanatory parts in translations or morphemic glosses in the notes.

Square brackets "[...]" are used to mark essential additions in the Ainu text and translation.

Curly brackets "{...}" in the divine epics indicate the first mention of the refrain (sakehe) which usually provides rhythm and does not necessarily have a meaning; the symbol V indicates these refrains in the following lines.

A comma is used to indicate a pause and a full stop is only used at the end of narration. Longer pauses or hesitations are marked with "..." in the Ainu text. Those hesitations and unanalyzable utterances are marked with "—" in the gloss line.

The hyphen (-) is used as a general-purpose morpheme boundary. I divide words into morphemes where possible but avoid segmenting when it is not helpful or might obscure the meaning. For instance, ekimne i. 'to go to the mountains to hunt' (vi); ii. 'to the mountains to hunt' (adv) may be divided into morphemes as *e-kim-ne* (head. POSS.PF-mountains-COP), but I do not segment it for the sake of convenience.

Just as in the rest of the volume, I generally follow the glossing conventions of Nakagawa et al. (2016–2021) but prioritize Mouton glossing conventions when they are not the same; the list of glosses is not repeated here.

3 Outline of the *uwepeker*

The story is told by an elder brother, who lived together with his mother and younger brother. Once, when the boys' mother was leaving the house, she told them that they had an uncle, who was likely to call on them while she was out and bring some food which they should not eat. When the boys were at home alone, their uncle really came holding in his hands a deer foreleg. The uncle offered the meat to the boys. Saying that the boys were already old enough to work, the uncle suggested that on the next day the older of the two brothers should go to work with him. When the boys' mother came back and heard about the uncle's visit, she got very angry, because once the uncle had said the same thing to the boys' father, who was his younger brother, and had taken him away to work. The boys' father never came back. Although the uncle had promised to come and meet the elder brother "tomorrow", which the boy took to mean "when it gets light", he actually came when it was still dark. The elder brother was getting ready to leave when his mother gave him two magic clews, a white one and a black one, to protect him. She said that if there was anything scary the boy should throw the black clew there, and he should throw the white clew behind him, so it could show him the way back. The elder brother took the clews and put them in his bosom. They got into his uncle's boat and went to work. It took a long time and the day had already broken. Only then did the uncle moor the boat to the shore. Both jumped ashore and the uncle pointed to his usual place of work. The elder brother looked around: scary things were moving all around them in profusion. He threw the black clew at them, and he threw the white clew behind himself. Then he turned and ran back following the white clew that was rolling away. There was no one coming after him. Finally, he found himself in front of his house. His mother let him in. But the family felt relieved only when they realized that there were no voices or sounds of anyone coming after the elder son. The boys grew up and went together to the mountains to hunt deer and hares, and even big bears, providing well for their mother and themselves. Then their mother grew old and died. Although both brothers got married, they always kept doing everything together.

4 The text

- (1) *a- unu-hu an*, *a- ak-ihi an wa*4.A- mother-POSS exist.SG 4.A- younger.brother-POSS exist.SG and
 There was my mother and my younger brother,
- (2) re-n a- ne wa oka¹ -an pe ne hike,² three-person.CLF 4.A- COP and exist.PL -4.S thing/person COP but [and] the three of us lived [together].
- (3) *a- unu-hu soy-ne kor,* 4.A- mother-POSS outside-COP and [Once] when our mother was going out,
- (4) "eci- aca-ha an ruwe ne na, 2PL.A- uncle-POSS exist.SG INFR.EVID COP SFP [she said]: "I must tell you about your uncle.
- (5) nep ka a-e-p kor wa ek, nankor na, what even 4.A-eat-thing have and come.SG probably SFP He may bring some food.
- (6) asinuma isam³ rapok, 4SG not.exist while [But] while I am away

¹ Here is the only occurrence of oka (existential verb) in Ito Oda's data; she uses okay elsewhere.

² Sometimes, especially in the introductory parts of narrations, *hike* (normally 'but; a one of some kind; as regards to sth') is used as a synonym of the conjunction *wa*. In such cases the difference between *wa* and *hike* is not clear; they may be interchangeable.

³ *isam* (vi) is a so-called lexical negative verb, i.e. the concept of negation is included in the meaning itself. Note that here the verb takes no personal affixes, which is against our expectations.

- (7) iteki e yan" sekor haw-e-an kor patek
 PROH eat IMP.POL QUOT voice-POSS-exist.SG and only
 soy-ne,
 outside-COP
 don't eat it!" After saying so she went out.
- (8) kor okay -an akusu, when/if exist.PL -4.S then We stayed [at home] and,
- (9) sonno poka, poro aynu ek wa, truly only be.big/old human come.SG and Indeed an old man came.
- (10) *yuk tapkir-i* sine-p an-i kane⁴ wa, deer animal.foreleg-POSS one-thing.CLF hold-TR.SG while and Holding a single deer foreleg in his hands,
- (11) ek wa, "e yan, haa, eci- poro ruwe come.SG and eat IMP.POL oh 2PL.S- be.big/old INFR.EVID an, exist.SG he came in. "Please eat it! Oh, you have grown [so] big indeed!
- (12) tane (nepki), ... nepki e-askay⁵ pak, eci- poro already work work about.APPL-be.able till 2PL.S- be.big/old ruwe an,
 INFR.EVID exist.SG
 You are so big, you can already work!

⁴ The meaning of *kane*, which is probably the most tricky syntactic word in Ainu appearing as an auxiliary verb, conjunction, and adverbial particle (Satō 2002), needs further consideration. See Yoshikawa (Chapter 19, this volume).

⁵ In a verb-verb construction, personal affixes attach to only one of the verbs, mainly to the notional verb coming first, so the second verb functions as an auxiliary. However, in some cases, the second verb is marked for person and the first verb is left unmarked, functioning as an argument of the second verb (no formal nominalization is required). There is no way we can say for sure, which of the two strategies has been selected in the phrase in question, because in Ainu the 3rd person SG/PL is zero-marked for subject and object.

- (13) *nisat-ta nepki-e-paye* -an kus ne na, tomorrow work-for.APPL-go.PL -4.S for COP SFP Let's go to work tomorrow!
- (14) eci- ekanok kus ne na", sekor 1SG.A+2PL.O- meet/greet intention COP SFP QUOT haw-e-an kor, voice-POSS-exist.SG and I'll come and meet you." Saying so,
- (15) hosipi wa isam, a- unu-hu ek wa return.SG and not.exist 4.A- mother-POSS come.SG and [the uncle] went away. Our mother came and
- (16) *a- ye akusu*, "*isenram*" *sekor*,
 4.A- say/tell then again QUOT
 I told her about it. "[He is at it] again!" [She said].
- (17) *"eci- ona-ha ka, ene haw-e-an kor,* 2PL.A- father-POSS even like.this voice-POSS-exist.SG and "Saying the same things [the uncle] also
- (18) tura wa arpa wa, go.together.with and go.SG and took your father away with him and left.
- (19) eci- ona-ha ka hosipi ka somo ki ruwe
 2PL.A- father-POSS even return.SG even NEG do INFR.EVID
 ne na,
 COP SFP
 It is a fact that your father never came back.
- (20) akusu, suy ene haw-e-an hi", then again like.this voice-POSS-exist.SG thing/place/time And again [the uncle] said that!"
- (21) sekor haw-e-an kor QUOT voice-POSS-exist.SG and While saying so,

- (22) *a-* unu-hu i-ruska kor an a
 4.A- mother-POSS ANTIP-be.angry.with.sth and exist.SG PRF.SG p ne,
 but COP
 our mother got angry.
- (23) "nisat-ta" sekor haw-'as yakka, tomorrow QUOT voice-stand.SG although Although he said "tomorrow",
- (24) sir-peker wa haw-'as, nisatta ne appearance-be.bright and voice-stand.SG tomorrow COP kunak a- ramu akusu, going/should/surely.COMP 4.A- think then I thought tomorrow meant when it gets light outside.
- (25) naa nisat ka ek ka somo ki, sir-kunne still/yet dawn even come.SG even NEG do appearance-black hi ta, thing/place/time LOC

 When the day still didn't break yet [and] it was still dark, [the uncle came:]
- (26) "haa, eci- ekanok kusu ek -an oh 1SG.A+2SG.O- meet/greet for come.SG -4.S ruwe ne",
 INFR.EVID COP
 "Hi! I came to meet you."
- (27) sekor haw-e-an wa, kusu, QUOT voice-POSS-exist.SG and because As he said that.
- (28) sipine -an kor an -an akusu, dress.SG -4.S and exist.SG -4.S then I got dressed. Then
- (29) aunu-hu retar ka-tak sine-p, kunne 4.A- mother-POSS be.white yarn-lump one-thing.CLF be.black ka-tak ikor-e sine-p wa ek wa, yarn-lump one-thing.CLF 4.0- have-CAUS and come.SG and my mother gave me one white clew and one black clew.

- (30) "nep ka e- sitoma [p] an yakun what even 2SG.A- be.afraid.of NMLZ exist.SG if "If you get scared of anything,
- (31) *or-o un kunne katak e- osur-a*, place-POSS ALL be.black yarn-lump 2SG.A- throw.away-TR.SG you should throw the black clew to that place,
- (32) retar ka-tak anak si-y-oka un e- osur-a be.white yarn-lump TOP REFL-EP-behind ALL 2SG.A- throw.away-TR.SG yak, pirka na", if be.good SFP and you should throw the white clew behind you."
- (33) sekor haw-e-an kor, QUOT voice-POSS-exist.SG and Saying so,
- (34) *ka-tak tu-p i- kor-e wa kusu*, yarn-lump two-thing.CLF 4.O- have-CAUS and because [my mother] gave me the two clews, so
- (35) *a- upsor-o a- oma-re wa, arpa -an*4.A- bosom-POSS 4.A- enter-CAUS and go.SG -4.S
 I put them in my bosom and went.
- (36) *ne* a- aca-ha kor cip a- i- y-o-re wa, this/that 4.A- uncle-POSS have boat 4.A- 4.O- EP-enter/ride-CAUS and I was taken on board my uncle's boat.
- (37) *arpa -an ayne*, *sir-peker wa*, go.SG -4.S finally appearance-be.bright and I went and finally the day broke.
- (38) inkar -an akusu, haa, a- sitoma no okay pe look -4.S then oh 4.A- be.afraid.of and exist.PL thing/person I looked around and, Oh, there were scary things (the things that people in general are (usually) afraid of)
- (39) *poro-n-no okay*, "te ta nepki -an usi ne", be.big-EP-ADV exist.PL here LOC work -4.S place/time COP in great numbers. "Here is the usual place we work at."

- (40) sekor, haw-e-an kor, cip-e-ya-otke wa kusu,
 QUOT voice-POSS-exist.SG and boat-by.APPL-land-prick and because
 Saying so, [my uncle] moored the boat to the shore, so
- (41) *cip or wa he-ya-as-i terke -an wa*, boat place ABL head.PF-shore-stand-TR.SG jump -4.S and *inkar -an akusu*, look -4.S then we jumped ashore from the boat. We looked around.
- (42) haa, a- sitoma no okay pe poro-n-no oh 4.A- be.afraid.of and exist.PL thing/person be.big-EP-ADV Oh, there were lots of scary things (the things that people in general are (usually) afraid of)
- (43) *uko-moy-oy-ke kor okay*, SOC-move-P.RED-INTR and exist.PL moving here and there.
- (44) *akusu*, *kunne ka-tak eun a- osur-a wa*, then be.black yarn-lump ALL 4.A- throw.away-TR.SG and I threw the black clew there and,
- (45) retar katak si-y-oka un a- osura wa, be.white yarn-lump REFL-EP-behind ALL 4.A- throw.away-TR.SG and I threw the white clew behind myself.
- (46) or-o-wa, hoyupu -an w_a si-y-oka un hosipi -an, place-POSS-ABL run.SG -4.S and REFL-EP-behind ALL return.SG -4.S After that I turned back and ran away.
- (47) retar ka-tak kar-kar-se hi neno, retar ka-tak be.white yarn-lump roll-roll-INTR NMLZ as be.white yarn-lump kes-e a- an-pa⁶ wa, edge-POSS 4.A- hold-TR.PL and I followed the white clew as it rolled away.

⁶ *kes anpa* 'to follow/chase sth/sb' (here: lit. 'I held the end of the white clew') is a phrasal verb consisting of the locative noun *kes* 'end, edge' which takes personal markers of the object, and of the transitive verb *anpa* 'to hold sth/sb (PL)' (the single form *ani* 'to hold sth/sb (SG)' never occurs as part of the phrasal verb); for the detailed description of phrasal verbs, see Satō (2001).

- (48) hoyupu -an wa hosipi -an korka, i- y-os nep ka run.SG -4.S and return.SG -4.S but 4.O- EP-back what even I ran all the way home.
- (49) *ek hum-i ka, ek haw-e ka isam no,* come.SG sound-POSS even come.SG voice-POSS even not.exist and There were no sounds or voices of anything coming after me.
- (50) hoyupu -an wa, retar katak kes-e a- an-pa run.SG -4.S and be.white yarn-lump edge-POSS 4.A- hold-TR.PL wa, arpa -an ayne, and go.SG -4.S finally
 I kept running after the white clew and finally
- (51) *a- uni-hi soy-ke ta arpa -an ruwe ne wa*, 4.A- home-POSS outside-place LOC go.SG -4.S INFR.EVID COP and *kusu (a)*, *(au)* ... because — ... I was in front of my house.
- (52) "a- unu-hu, hosipi -an na" sekor haw-e-an
 4.A- mother-POSS return.SG -4.S SFP QUOT voice-POSS-exist.SG
 -an akusu
 -4.S then
 I said: "Mother, I am back!"
- (53) "haa, neun ne korka" sekor haw-e-an kor, oh how COP but QUOT voice-POSS-exist.SG and "Oh, that's good!" Saying so,
- (54) apa cak-a wa i- kor-e wa, ahu-p door open-TR.SG and 4.O- have-CAUS and inside.house-INTR.PL -an korka,
 -4.S but [my mother] opened the door for us and we went in.

⁷ The corresponding Japanese translation 「ああ、よかったよかった」 'Oh, that's good, that's good!' was suggested by Ito Oda.

- (55) nep ka i- y-os ek haw-e ka isam what even 4.0- EP-back come.SG voice-POSS even not.exist pe ne kusu,

 NMLZ COP because
 As there were no voices of anyone coming after me,
- (56) *a- e-ramusinne wa okay -an, or-o-wa-no,*4.A- about.APPL-be.relieved and exist.PL -4.S place-POSS-ABL-ADV we felt relieved. Then
- (57) tane poro -an pe ne kusu, already be.big/old -4.S NMLZ COP because as we have already grown up,
- (58) *a- ak-ihi tura-no ekimne arpa*4.A- younger.brother-POSS COM-ADV to.the.mountains go.SG
 -*an wa*,
 -4.S and
 I went to the mountains to hunt together with my younger brother.
- (59) yuk ne yakka, isepo ne yak-ka a- ray-ke wa deer COP although hare COP although 4.A- die-CAUS and ek -an wa, come.SG -4.S and We killed deer and hares.
- (60) *a- unu-hu a- e-re kor okay -an* 4.A- mother-POSS 4.A- eat-CAUS and exist.PL -4.S We were feeding our mother.
- (61) *a- unu-hu pirka-reska -an kor okay -an ayne*, 4.A- mother-POSS be.good-provide.for -4.S and exist.PL -4.S finally We provided for our mother well and finally (lit. 'as to our mother, there was good providing and [so] we lived, finally')
- (62) tane poro -an pe ne kusu, already be.big/old -4.S NMLZ COP because we have become adults so

- (63) poro kamuy ka a- osikoni ka ki p ne be.big/old bear even 4.A- catch.up.with even do NMLZ COP kusu, because we even hunted down big bears and so
- (64) *a- unu-hu pirka a- reska ki*, 4.A- mother-POSS be.good 4.A- provide.for do we fed our mother well.
- (65) *pirka a-e-p a- e-re kor okay -an ayne*, be.good 4.A-eat-thing 4.A- eat-CAUS and exist.PL -4.S finally We were feeding good food to [our mother]. Finally,
- (66) *a- unu-hu ka onne wa isam korka*, 4.A- mother-POSS even be.old and not.exist but our mother grew old and died. However,
- (67) *a- ak-ihi tura-no ekimne*4.A- younger.brother-POSS COM-ADV go.to.the.mountains.to.hunt *ne yakka*, *nep a- ki yakka*COP although what 4.A- do although
 when going to the mountains to hunt or doing other things, I did everything together with my younger brother.
- (68) *a- ak-ihi tura-no patek an nankor*4.A- younger.brother-POSS COM-ADV only exist.SG probably
 I was always together with my younger brother (lit. 'he was always together with my younger brother').
- (69) asinuma ka tane poro -an pe ne kusu, 4SG even already be.big/old -4.S thing/person COP because As I already became an adult,
- (70) *pirka menoko a- etun wa a- kor wa*, be.good woman 4.A- receive.a.bride and 4.A- have and I took a beautiful woman as a bride and married her.
- (71) *a- ak-ihi ka*4.A- younger.brother-POSS even
 As for my brother,

- (72) *pirka menoko a- etun wa a- kor-e wa*, be.good woman 4.A- receive.a.bride and 4.A- have-CAUS and I found him a beautiful woman for a bride, too.
- (73) aak-ihi tura-no. nev ki 4.Avounger.brother-POSS COM-ADV what do vakka, kar kor aokav -an ruwe ne sekor. although 4.Ado and exist.PL -4.S INFR.EVID COP OUOT Whatever we did, we used to do [it] together with my younger brother.

5 Outline of the kamuy yukar

The tale is narrated by *amamecikappo kamuy* – the Sparrow God who pecked at a grain of rice and ground it into powder in order to make rice-wine. The Sparrow God invited to the feast all the gods, including the Jay Man and the Crow Man.

After two or three days, the rice-wine was ready, and the guests rejoiced together drinking it. Everyone kept drinking. At the end of the drinking party, the Jay Man danced out of the room. He stayed outside for a short while and returned holding a single acorn in his beak. All the gods thought it was funny and laughed. Then the Crow Man, who saw that, went outside and came back holding a huge chunk of dung in his beak. All the gods got really angry. They beat the Crow Man, killed him and threw his carcass away. Saying that from now on no one should imitate people in such a dirty manner, all the gods returned home.

6 The text

- (1) {hankirikiri}⁸ sine amam num V ci- tokpa-tokpa, RFN one cereal/rice grain RFN 1PL.EXCL.A-peck-peck I pecked and pecked at a grain of rice, [grinding it into powder].
- (2) *V* sake-he ci- kar RFN liquor-POSS 1PL.EXCL.A-make I was making rice-wine of that.

⁸ hankirikiri is a refrain imitating the chirping of a sparrow.

- (3) *V* kamuy opitta *V* c-9 e-tak-kar¹⁰ na, RFN god all RFN 1PL.EXCL.A-to.APPL-invite-TR SFP I invited all of the gods to [the party].
- (4) *V eyami okkayo ka V c- e-tak-kar na*RFN jay man even RFN 1PL.EXCL.A-to.APPL-invite-TR SFP
 I invited the Jay Man to [the party],
- (5) *V paskur okkayo ka V c- e-tak-kar na*RFN crow man even RFN 1PL.EXCL.A-to.APPL-invite-TR SFP
 I invited the Crow Man to [the party].
- (6) V tutko rerko ne wa
 RFN two.days three.days COP and
 Two or three days later (lit. 'it was two [or] three days and'),
- (7) *V* "sake (p) ... ka pirka" sekor haw-as wa, RFN liquor even be.good QUOT voice-stand.SG and it was said that the rice-wine was ready.
- (8) V i-ku -an ki na RFN ANTIP-drink -4.S do SFP We drank,
- (9) V kamuy opitta V e-uko-yay-kopuntek RFN god all RFN at.APPL-SOC-REFL-rejoice.about all the gods rejoiced at that together.
- (10) *V i-ku* -an *ki* na

 RFN ANTIP-drink -4.S do SFP

 We [kept] drinking [and]

⁹ c(i)- is the 1st person plural exclusive marker for transitive verbs (cf. -as, the 1st person plural exclusive marker for intransitive verbs) which is also used in the meaning of the 1st person singular, when a god is speaking for himself in *kamuy yukar* 'epics of gods'. The vowel /i/ drops out when the personal prefix is attached to stems with an initial vowel.

¹⁰ The derivation of e-tak-kar is not quite clear. The underlying transitive verb tak 'to invite sb' is used with the suffix -kar which originates from the transitive verb 'do/make sth'. It is unclear what particular nuance of meaning this suffix brings into the verb and whether it affects its valence here. The suggested meaning of the applicative prefix e- is based on the context only, without consulting the informant.

- (11) *V i-ku kes an kor* RFN ANTIP-drink end exist.SG and at the end of the drinking party
- (12) *V eyami okkayo* RFN jay man the Jay Man
- (13) *V* tapkar-tapkar *V* e-soy-ne

 RFN dance-dance RFN head.PF.POSS-outside-COP

 e-soy-ne¹¹
 head.PF.POSS-outside-COP
 danced out of the room.
- (14) *V* iruka an kor RFN for.a.short.time exist.SG and He was [outside] for a short while and
- (15) *V* sine-n ne hosipi wa ek na RFN one-person.CLF COP return.SG and come.SG SFP returned alone.
- (16) *V* sine nisew num *V* e-kupa kane
 RFN one acorn grain RFN head.PF.POSS-bite while
 Holding a single acorn by its top (lit. 'by its head') in his mouth,
- (17) V hosipi wa ek na RFN return.SG and come.SG SFP [the Jay Man] returned.
- (18) *V kamuy opitta V e-mina-re*RFN god all RFN about.APPL-laugh-CAUS
 He made all the gods laugh at that.
- (19) *V* ki akusu *V* paskur okkayo *V* inkar-inkar RFN do then RFN crow man RFN look-look Then the Crow Man watched [this] attentively,

¹¹ In a later interview Ito Oda preferred to use instead of the neutral *esoyne esoyne* 'to go outside', a stylistically high *soynasamma osiraypa* (same translation): *soy-na-san-wa o-si-ray-pa* (outside-in.the. direction-descend-and to.APPL-REFL-push-PL).

- (20) V ci-soyna-ray-e RFN RES-outside-move-TR.SG went outside [and]
- (21) *V nani hosipi wa ek na*RFN immediately return.SG and come.SG SFP came back soon.
- (22) V inkar -an awa RFN look -4.S while When I looked around
- (23) *V poro si tak-tak V e-kupa kane* RFN be.big/old dung lump-lump RFN head.PF.POSS-bite while [the Crow Man], holding a huge chunk of dung in his mouth,
- (24) *V* (*ek*) ... hosipi wa ek na, RFN come.SG return.SG and come.SG SFP came back.
- (25) *V kamuy opitta V i-ruska ki wa*RFN god all RFN ANTIP-be.angry.with.sth do and All the gods got angry and
- (26) *V paskur okkayo V a- uko-kik-kik na* RFN crow man RFN 4.A- SOC-hit-hit SFP the Crow Man was beaten by everyone,
- (27) *V a- ray-ke wa isam*RFN 4.A- die-CAUS and not.exist killed and
- (28) *V* e-soy-ne a- osur-a wa an na RFN head.PF.POSS-outside-COP 4.A- throw.away-TR.SG and exist.SG SFP thrown away outside.
- (29) kamuy opitta i-ruska wa te wa-no anak god all ANTIP-be.angry.with.sth and now ABL-ADV TOP All the gods got angry: "From now on

- (30) ene icakkere i-ko-isanpa an anak somo ANTIP-to.APPL-copy like.this exist.SG dirty TOP NEG an nankor na exist.SG probably SFP there should be no such dirty imitating of people."
- (31) sekor (haw-e-an kor) ... haw-e-oka kor QUOT voice-POSS-exist.SG and — voice-POSS-exist.PL and Saying [so],
- (32) hosip-pa ruwe ne na return-PL INFR.EVID COP SFP the gods went home.
- (33) *V* sekor amamecikappo isoytak ruwe ne.
 RFN QUOT sparrow tell.stories INFR.EVID COP
 That is the story told by the Sparrow.

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21 "Meko Oyasi" a Sakhalin Ainu *ucaskuma* narrated by Haru Fujiyama

1 Introduction

In total, Murasaki (1976) contains five conversations and eleven folktales and comprises a reference glossary listing the vocabulary that appears therein. All texts are transcribed from audio (with a total recording time of approximately 2 hours and 46 minutes) and transliterated using the Latin alphabet. An interlinear word-by-word translation in Japanese is also provided. The version of the folktale I present in this chapter is a re-working of the text in Murasaki (1976). A full collection of Murasaki's (1976) re-edited texts have recently appeared in Dal Corso (2021). To compile this revised version, the text has been re-transcribed on the basis of the original audio and transliterated in the Latin alphabet. A morphemic analysis has been substituted for the word-by-word translation in Japanese and, for the first time since its first publication, the texts appear in English translation.

Haru Fujiyama, whose Ainu name was 'Esohrankemah and who was also known as Husko, is depicted as a most skilled and fluent speaker of the Rayciska dialect (Rayciska, now Krasnogorsk). Born on April 20, 1900 by the river Masaramanma in the vicinity of 'Esituri on the Sakhalin West coast, Haru Fujiyama moved to Huro'oci when she was 11–12 years old and married Manjirō Yamada (Nootoma'aynu) at the age of 18. After the death of her husband, she remarried with Hakutarō Fujiyama (Hakuwahte) from Maoka (Kholmsk) and lived in Tarantomari, near Maoka, until she was forced to move to Hokkaidō after World War II in 1948. First she lived in Hakodate and some

other places, but in 1954 she moved to Tokoro, Hokkaidō, where her older daughter lived. Haru Fujiyama passed away in March 1974. Haru Fujiyama was a speaker of the Rayciska dialect, which is reported to show a high degree of intercomprehension with the neighboring Maoka dialect, spoken by Yuk Ōta, Murasaki's other main language informant (Murasaki 1979: 18).

The folktale *Meko Oyasi* belongs to the subgenre of the Ainu oral tradition known as *ucaskuma* or *upaskuma* 'ancestor tales'. The *ucaskuma* is included among the non-rhythmic genres (also referred to as "prose") of the Ainu tradition and, like the '*enciwtuytah* 'tales of human beings', is characterized by a third-person narration and recounts the vicissitudes of humans (Kubodera 1977: 8).

2 Transliteration conventions and list of symbols

With the intention of allowing the reader to appreciate as much as possible the nuances and peculiarities of Haru Fujiyama's Ainu as they emerge in the audio recording, which I could not include with the text on this occasion, the following transcription conventions have been employed in the text:

- Adhering to Murasaki (1976) a "" is used to signal a glottal stop.
- A comma "," is used to signal a prosodic pause. It is not to be understood as marking boundaries between syntactic constituents.
- Round brackets contain segments of texts omitted from the analysis (repetitions, half-pronounced words, . . .).
- Curly brackets contain inaudible segments reconstructed on the basis of Murasaki's (1976) transcription.
- Square brackets indicate elision or truncation (phonological process)
- An underbar following a letter indicates assimilation or dissimilation (phonological process) of the relevant sound.

In transliteration I use a phonological transcription. In the case of phonological processes (e.g., assimilation), the underlying form appears in the transcription and the alternation is overtly signaled by the underbar (see the list above). A full stop is only used at the end of narration. A full list of symbols is given at the end of the paper.

Following Dal Corso (2021), I employ a number of linguistic glosses which are absent in Nakagawa et al. (2016–2021). Explanation of these glosses is given below.

- CONCL: for the construction wa isam following a notional verb, which encodes conclusive aspect.
- IPFV: for an following a notional verb, which expresses imperfective aspect.
- ITERA: for the verbal suffix -pa, which encodes iterative aspect in Sakhalin Ainu.
- PERF: for teh an following a notional verb, which expresses perfective aspect.
- PROG: for the construction kusu an/kusu okay that encodes progressive aspect.

3 Outline of the ucaskuma

The ucaskuma takes place in the village of Riyonay and recounts a time when the informant's mother and father as well as other of her old relatives encountered some cat-like spirits while collecting wild vegetables. One day at the beginning of summer they set off by boat to a place not far away from their village where they would collect wild garlic. Once there, before going uphill to start their harvesting, they get more comfortable by taking off part of their clothing and some ropes they had with them, which they put on a piece of driftwood that was on the beach. Once they venture into the vegetation of the nearby promontory, they start collecting vegetables making noise and, at some point, one person of the party finds some kind of spotted animal at the foot of a huge alder that stares at her with glaring eyes. The woman, who first sees the animal, guesses it must be some kind of spirit of the kind she used to hear about in the old tales. She immediately tells her companions about this encounter, and they decide to flee the place. In their haste they escape as they are, leaving behind their clothes and ropes on the tree. Promptly jumping into their boats, they manage to escape the animal that is chasing them. Safe in the boats they see that animal decreasing in size and then multiplying into many other identical animals that end up filling up the shore while raising a loud cry in their direction. The party returns to the village and immediately tell everyone what happened. That night an Orok shaman that lives in one of the characters' houses performs a ritual, calling to the protective god of the Ainu and asking him to guard them the following day, as they would return back there. When they do go back the following morning, the traces of those animals all over the shore are the only thing to be seen. They also find their clothes and ropes, which they had left behind the day before, torn to pieces, supposedly by those very animals that have now disappeared.

The text

(1) 'An-'unu -hu -ha Yanagawa, 'an-'aca tani naa, na 4.Amother -poss too 4.Auncle -poss too now Yanagawa -hu hoskiram jiji 'ona -ha kutaa, unu mother -poss older.brother old.man father -poss that 1sg.A--uhu, ta -p_ naa that -thing too -POSS Both my mother and my uncle, the father of the present *Old Yanagawa*, [who was] my mother's older brother, those people

¹ The characters of this tale are Haru Fujiyama's mother, her uncle and aunt, and a Gilyak woman. Despite what it is said in this introduction, the Gilyak woman does not participate in the trip to collect wild garlic, as will become clear later.

- (2) 'orowa suv 'isam kuunarap[e] -he then again not.exist 1sg.Aaunt -POSS kuun[u] -hu mahsa -ha naa, suv, 1sg.a- mother -poss older.sister -poss too again and my late aunt. [who was] my mother's older sister.
- (3) hemata kiriyaku hee, merekopo naa, tura -hci what Gilyak² FOC young.woman too go.together.with -PL teh, kito- ta³ -hci kusu 'ariki -hci manuu and wild.garlic collect -PL because come.PL -PL REP.EVID together also with a girl [who was] a Gilyak, I believe, went [out] to collect wild garlic.
- (4) (ta) ta Riyonay -ta 'okay -hci te[h] Riyonay, -a that Rivonay -Loc exist.PL -EP -PL and Rivonav na[h]kotan -'or -ta 'okav -hci teh -a COMP say/tell village -place -Loc exist.PL -EP -PL and 'orowa Rivonay hanke - ike then Riyonay be.next.to -part They lived in the village called Riyonay⁴ and then . . . close to Riyonay,
- (5) Tooro ikuske -[i]k[e] -he, 'Ika'enrum nah Tooro be.across -part -POSS 'Ika'enrum COMP 'an ve 'enrum 'n -i ike 4.Asay/tell promontory exist.sg -EP and opposite to Tooro,⁵ there was a promontory called 'Ika'enrum⁶ and
- (6) ta 'Ika'enrum teewa'an hanke -ike -he. that 'Ika'enrum this.side.exist.sg be.next.to -part -poss Hetoonaypo nah 'an_- ye pon nav Hetoonaypo COMP 4.Asav/tell be.small river exist.sg on this side of that 'Ika'enrum, close to it, there was a small river known as Hetoonaypo.7

² Other ethnonym of Nivkhs.

³ Allium Victorialis (Jap.: アイヌねぎ).

⁴ Jap.: 千緒 Chio, old village around 5 kilometers south of today's Tel'novskoye.

⁵ Jap.: 塔路 Tooro, old village located further south from Riyonay.

⁶ Jap.: 伊加(山) *Ika*, mountain just SE of Riyonay at the longitude of the homonymous village.

⁷ Jap.: 江戸内 Etonai, old village located north of Kusunnay.

- masara -kaske -ta (7) ike 'ampene kenas koro masara wa and -top -Loc really bank vegetation have and bank -kaske -[h]e pon kenas koro wa sa -n. -top -Poss be.small vegetation have and front.place -INTR.SG High on the bank it had thriving vegetation [that from] the top of it thinned out going seawards.
- (8) (san) teh. 'orowa, taa -ta nean, paykara- herohki8 then there -Loc that springherring 'evnun hemaka -hci te[h], tani finish -PL and now dry And then . . . they were through drying the spring herrings at that time and now,
- (9)'ee -rusuy -a -hci kusu pon kito 'ee -rusuy eat -DESI because be.small wild.garlic eat -DESI -EP -PL -hci kusu taa -ta nean, kitota -hci kusu -EP -PL because there -Loc that wild.garlic- collect -PL because 'ariki -hc[i] -hi nee manuu, come.PL -PL -NMLZ COP REP.EVID because they wanted to eat wild garlic, small wild garlic, they went out to collect it.
- ku-(10)'unu -hu naa, kuacapo -ho (ku . . .) 1sg.auncle 1sg.amother -poss too -POSS naa ku-'unarape -he sukup naa suy, merekopo too 1sg.aaunt -POSS too again be.young young.woman - utah naa ne nanko 'ariki -hci, 'or -ta 'nn, -PL still COP probably come.PL -PL place -Loc exist.sg wepekere ne manuu. tale COP REP.EVID [This] is a story [about] the time when my mother and my uncle . . . and my aunt too, [who were] probably still young women, went [there].
- (11)kito--hci kusu sine too reekoh sirita wild.garlic- collect -PL because one day really appearance-'ani, ne[v]a pirika teh cip be.good and boat INS this One day the weather was perfect to collect wild garlic and by boat

⁸ *Culpea Pallasii* (Jap.: = > >; Eng.: Pacific herring). Synonymous to *hemoy*.

- (12) Hetoonaypo -'or_ -ne kito- ta -hci kusu
 Hetoonaypo -place -ALL wild.garlic- collect -PL because
 'ariki -hci -[h]i, 'ariki -hci teh tani,
 come.PL -PL -NMLZ come.PL -PL and now
 they went to Hetoonaypo to collect wild garlic. [So] they came and at that time
- (13)siripirika kusu sak -ii -ta neampe, appearance- be good because summer -place -LOC TOP -ta Hetoonavpo -'or -hci -ta 'ariki that beach -top -Loc Hetoonaypo -place -Loc come.PL -PL taa -ta -a -hci ya -p there -LOC land -INTR.PL -EP -PL [it was] summer, given the good weather, and they came aground on the shores of Hetoonaypo.
- (14)teh, husko 'avnu neyke kiro patek 'us, (...) kiro -ho and be old person TOP kiro iust wear boot -poss -hcin naa 'asi -n -ke -hci manu ike, -PL too go.out -INTR.SG -CAUS -PL REP.EVID and People [in] the old times simply wore boots, [so] they took off their boots and
- (15) 'ota -ka -ta poro yaani ('anam...'ama)
 beach -top -Loc be.big driftwood
 kaske -ta 'ama -hci -hi, taṇi
 over -Loc put -PL -NMLZ now
 put them on a big piece of driftwood [that was] on the beach.
- tan_ Yanagawa, 'anko'eyuh,9 'an- 'acapo -ho (16)tani 'an now exist.sg this Yanagawa ? 4.A- uncle -POSS kaa, kaske -wa mii 'imiy -ehe naa 'asi -n even over -ABL put clothes -Poss too go.out -INTR.SG -ke ike, manu -CAUS REP.EVID and Now this [did] also this Yanagawa, my uncle – he took off the clothes he was wearing and

⁹ Possible alternative form of *an-ye* (4.A-say).

- (17)'imiv -ehe vaani -kaske -ta 'ama suv clothes -poss driftwood -top -Loc put again (taracu...) tarat -[u]hu -hcin [h]e hemata -hcin na back.rope -poss -PL FOC what -PL too -ke 'asi -n -hci manu ike go.out -INTR.SG -CAUS -PL REP.EVID and hung his clothes on the driftwood, [and] also he took off his ropes, or whatever [he had with him] and
- (18)vaani -kaske -ta ama -hci teh, 'orowa nean and then driftwood -top -Loc put -PL that kitota -hci kusu maka -p -a -hci manu, wild.garlic- collect -PL because inland -INTR.PL -EP -PL REP.EVID put them too on the driftwood and then they went uphill to look for wild garlic.
- (19)ne[y]a kenas -tum -ke -ta maka -hci -p -a this vegetation -center -PTV -Loc inland -INTR.PL -PL -EP te[h] 'unci- 'aa -re -hci te[h] tani kitota and fire sit.sg -caus -PL and now wild.garliccollect -hci 'ewhawoore -hci -PL.NMLZ make.fuss.about -PL They went uphill in the deep of the vegetation, they lit a fire and eventually [started to] collect wild garlic with much noise.
- (20) yayne kito--hci yayne ta tani, 'an-'unu -hu then wild.garlic- collect -PL finally now 4.Amother -poss 'inkara -ha neampe, sine wen_- poro, kenemoto¹⁰ 'an look -NMLZ verybe.big alder TOP one exist.sg ike. manu REP.EVID and While they were collecting wild garlic, at some point my mother looked around and [saw] there was one huge alder¹⁰ and

- (21)'o- usike -ta hemata ka he kamuv he teh 'n PF- place -LOC what even FOC god exist.sg and FOC 'ampene 'oro -wa 'annukareraye¹¹ kusu'an manu place -ABL 4.A- glare.at PROG REP.EVID [that] at its foot there was some kind of creature [by which] she was being stared at with glaring eyes.
- (22)nukara -ha neampe, seta nee kanne poroo kamuv. be.big god see -NMLZ TOP dog cop ADV (taytay) huure tavtav na tetara tavtav na, kii, be.red patch too be.white patch too do When she observed it, [she noticed it was] a creature the size of a dog, with red and white spots,
- (23)'ampene ka sik -[i]hi ka 'uwa -'uwa teh'an really even eye -poss even sparkle -RED PERF kamuy, 'n teh god exist.sg and a creature with intensely sparkling eyes, and
- (24)'orowa 'an- nukareraye kusu 'an, 'an- 'un[u] -hu naa then 4.A- glare.at PROG 4.A- mother -poss too reeko[h] ci-caskuma -hci kusu ทนน -no 1PL.A-old.tale hear -well -PL because she was being stared at by its piercing look. My mother too [had] of course listened over and over to the old tales,
- (25)[y]ahka, -ike neera 'n pe ne cinke - utara which exist.sg thing cop although ancestor -PL -part -hcin -'oro -he -wa nuu -hci teh'an -i -hi -POSS -PL -place -ABL hear -PL PERF -NMLZ -EP nee nanko. tani nean pe nukara kusu COP probably now that thing see because she must have heard any kind of things from the ancestors [and so], because that time she saw that thing [with her own eyes],

¹¹ Murasaki (1976: 38) corrects this form putting a fourth person object prefix 'i- in brackets as to indicate that the first person should have been object and not subject. The same form with a fourth person subject prefix is repeated a little later in the text. I analyze this as an impersonal construction, where the agent is marked via the prefix 'an- and co-referential with the implied referent of *orowa* (i.e., *kamuy*).

- (26)'nhopempa kusu tani nean hoskiram -[u]hu naa older.brother at.APPLbe.stunned because now that -POSS too nuu -ree. nean mahsa -ha na ρkohear -caus that older.sister -poss too about.APPL- to.APPLike tani. 'asuran-i rumor- hold-TR.SG and now she was stunned, so she immediately told her older brother and her older sister, [to whom] she [also] reported the fact and right there
- (27) -hci te[h] piinunupohka tani (kira), nuu -re and secretly hear -caus -PL now kira. 'n-_ukoray -pa ki -hci escape.NMLZ at.APPL- combine -ITR do -PL she let them know about that. At that point they indeed prepared themselves to sneak away.
- (28)teh orowa, nean 'or un ре -h[e] -hcin and then that place live.at thing -poss -PL kitota -hci 'an kito kayki 'are'anno, wild.garlic- collect -PL IPFV wild.garlic even as.it.is hohpa -hci teh orowa, kira -hci manu ike, -PL and then escape -PL REP.EVID and And so they left [all] the things they had there as they were, even the wild garlic they had been collecting, and then ran away.
- (29)reekoh kira -hci wa -hci sa -p -a and front.place -INTR.PL really escape -PL -EP -PL manu ike ota -ka -ta -hci sa -p -a and beach -top -Loc front.place -INTR.PL -EP -PL They quickly ran away downhill, to the shore they went.
- (30)nean nii -kaske -ta 'ama -hci 'an -eh[e] -hcin ka 'imiy that tree -top -Loc put -PL IPFV clothes -POSS -PL even 'uk 'isam 'are'anno, hohpa -hci ike ka even not.exist as.it.is take.sg.nmlz leave -PL and There wasn't even [the time] for them to take their clothes, which they had put on that tree. They fled as they were and

- (31)kiro -ho -hcin na tarat -[u]hu -hcin na hohpa -hci boot -poss -PL too back.rope -poss -PL too leave -PL te[h], (cih'ohta sapa...), ¹² cip -'or -ta sa -p and boat -place -Loc front.place -INTR.PL -a -hci teh. -EP -PL and leaving both their boots and their ropes, they went down to the boat.
- (32)ne[v]a, mahteku[r] -'uta 'ohkayo nevke, ta'an 'acapo this -PL that uncle girl voung.man TOP ta pate[h] 'ohkayo -ne tura -hci емрн just young.man -as go.together.with -PL.NMLZ [v]ah te[h] orowa (nean), nean ne ve. COP COMP say/tell and then that The young women . . . as for men, they say that that uncle was the only man with them. And then
- (33)'an- 'unu -hu na taa -ta sukup -hci, na suku[h] -a 4.A- mother -Poss too there -Loc be.young -EP -PL still be.young mahtekur nee -hci kanne nee [y]ah 'an_- ye kusu, girl COP -PL ADV COP COMP 4.Asav/tell because my mother [and her older sister], because at the time they were still young . . . it's said that they were [both] still young women,
- (34) reeko[h] cip_ -'or_ -ne 'uko- tuuruhse -hci repa
 really boat -place -ALL SOC- stretch -PL go.out.to.sea
 -hci, te[h] 'orowa
 -PL and then
 they promptly took a leap into the boat together [and] got [safely] at sea, and then
- (35)'an- aac[a] -ha nean 'iray -[e]he 'ani cip -'uskuy -[e]he, 4.A- father -Poss that oar -poss INS boat -stern -POSS 'okasura, 'atuy -ka ike 'or -ta rep-un -ne push sea -top -Loc open.sea-be.at and place -ALL ne[y]a, 'iray -[e]he 'nni this oar -POSS INS my father pushed the stern of the boat with his oar, the boat got off from the shore and with the oar,

¹² Murasaki asks Haru Fujiyama to talk more slowly.

- kuwa -ne koro teh cip -'or -ne tuhse teh rep-un -as have and boat -place -ALL jump and rod open.sea-be.at ne[v]a cip reekoh, wahka -ka -ta cararahke kanne this boat really water -top -Loc slide ADV rep-un turaki open.sea-be.at as.soon.as using it as a pole, he jumped into it. The boat went out to the sea, sliding swiftly on the water. As soon as [it did].
- inkara -hci kohki, neva hemata kamuv he reeko[h] (37)look -PL when this what animal Foc really ota -ka -ta 'oro -wa 'an- nospa -hci wa beach -top -LOC place -ABL 4.A- chase -PL and once they looked [back, they noticed that] they were chased by that animal, or whatever [it was], on the beach.
- (38)'ururu -ka -wa 'ota -ka -ta tuhse teh shore -top -ABL beach -top -Loc jump and ra -n manu, (ran, ran) nean tani cip low.place -INTR.SG REP.EVID that now boat te[h] tani 'atuv -ka -ta rep -ta rep-un now sea -top -Loc open.sea -Loc open.sea-be.at and It came down jumping to the beach from the embankment. Now the boat went on the water [further] out to sea and
- (39)'ampene 'eykoanna 'atuy -ka -ene cip--hci really straight sea -top -ALL boat- enter.PL -PL they sailed straight [away].
- (40) ne[y]a kamuy 'ota -ka -ta teh (ki) sa -n this god beach -top -Loc front.place -INTR.SG and teh, taa 'Ika'enrum hekota peecah -ta sa -n bank -LOC front.place -INTR.SG and that 'Ika'enrum towards cas -cas kanne run -RED ADV The creature came down to the beach, to the shore, and running quickly towards that 'Ika'enrum

- (41)'oro cas wa 'oman kanna cas hosipi, Tooro -wa wa place -ABL again and return Tooro run and go.sg run hekota cas kanne 'ek teh. towards run ADV come.sg and from there it went [on] running, it returned [inland] running again [and] came [back] dashing, in the direction of Tooro.
- (42)niisap -tehte cah neeno -no cira -p_ be.quick -ADV -suddenly ? look.like RESlower.part -INTR.PL ('an, neeno) 'an -i -hi neampe, 'ampene exist.sg -EP -NMLZ TOP really As it looked like [that creature] got all of a sudden smaller and smaller, ¹³[there one could see itl:
- (43)neva 'ota an pak -no neva hemata kamuv -ehe this beach exist.sg till-ADV this what god 'ampene pon (neko) neko *hee*. (tani 'an neko neko). really be.small cat FOC {'erameskari},14 hacikoo- pon meko kukamuv cat 1SG.Anot.know be.small- be.small god kanne¹⁵ an 'ampene 'ota sih-te ('an teh) manuu, really beach be.full-caus adv exist.sg REP.EVID all over the beach some kind of creatures, really small cats or cats, I don't know, tiny small animals completely filled up the beach and
- (44)'oro -wa nean 'atuy -or 'ampene reeko[h] -ne, place -ABL that sea -place -ALL really really nah (hawehc...) iki -hci manu haw-e ike, do -PL REP.EVID so voice-poss ANTIPand (mas...) herohkiko'aamas haw neeno reekoh kusu'an black-tailed.gull voice as for.real PROG from there they cried out to the sea very loudly like so and [it was] exactly like the cry of the black-tailed gull:¹⁶

¹³ Cirahtehte lit.: 'decrease by oneself/automatically' = 'become small'.

¹⁴ From the audio, *kueramusci* can be heard. The reconstruction is on the basis of transcription in Murasaki (1976: 39).

¹⁵ Prosodic pause after #sih.

¹⁶ Larus Crassirostris (Jap.: ウミネコ).

- (45)waa waa waa waa waa waa,¹⁷ mew mew mew mew mew mew mew "mew mew mew mew mew mew mew".
- (46)'atuv -ka -ene 'inkara te[h] na 'inkara -hci ranke, 'ampene and again look -PL ITERA really sea -top -ALL look 'atuv -or nah ki -hci kusu'okay -a -hci manu -ne do -PL PROG -place -ALL so -EP -PL REP.EVID They look at the sea again and again, they kept (looking) closely.
- neero[h] kamuy -uta, 'ampene sih-te (47)kanne, si-pirasa those god -PL really be.full-caus ADV REFL-spread hemaka manu, nukara -hci te[h] пеатре kusu ta -p finish REP.EVID that.thing because that -thing see -PL and Those creatures ended up spreading [until] the beach was completely full. Because of that sight
- (48)orowa 'eykonno 'atuy -ka -ene repa -hci, wa then straight sea -top -ALL go.out.to.sea -PL and 'omantene, 'oro -wa tani 'aynukotan -'or and eventually place -ABL now person- village -place -ALL pave -hci, ne[y]a Riyonay -ta pave -hci te[h] go.PL -PL this Riyonay -Loc go.PL -PL and they went straight at sea and sailed away and away, and eventually from there they finally returned to the Ainu village, to Riyonay.
- (49)taa -ta -hci (vapahci) teh va -p -a there -LOC land -INTR.PL -EP -PL and tani weepeker -a -hci taa -or -ta. -EP -PL there -place -LOC There they came aground and immediately reported [on what happened]. Right there,
- (50)'an- cise -'or -he -ta. 'an- 'unu -hu 4.A- house -poss -place -Loc 4.A- mother -Poss cise -he -hcin 'anoka ka naa sikak -an kun even still be.born -4.s COMP house -poss -pl 4PL

¹⁷ Haru Fujiyama adds 小さい、ここ猫の声、みたいな声 (...) 鳴いてんだと 'they cried [with] a voice like that of a small cat'.

poro -ne 'etoko -ta, 'an- 'unu -h[u] be.big -as front -LOC 4.A- mother -POSS -PL sukun -a -hci, or -ta an 'ampe ne. be.voung -EP -PL place -Loc exist.sg fact COP in my house, my mother's house . . . these are facts that happened long before even I was born, when my parents were young . . .

- (51)cise -ta. (payea...) ya -hci -'or -a house -place -Loc land -INTR.PL -EP -PL teh, tani 'an- cise -he -or -ta (ne) and now 4.A- house -poss -place -Loc 'unu -hu cise -he -hcin -'or -ta house -poss 4.A- mother -poss -PL -place -Loc They went back by sea to the house and at the time there, in my parents' house,
- (52)tusuu 'orohko 'ahci sine -p_ an be.shaman Orok old.woman one -thing.CLF exist.sg manuu, 'ampene hekay 'ahci reeko[h] REP.EVID really be.elderly old.woman really nupuru 'ahci ('orohko 'ahci) sine -p be.powerful old.woman one -thing.CLF 'nνor -ta 'an-cise -he -ta an place -Loc 4.A- house -Poss -Loc exist.sg lived an Orok shaman woman, one really old woman, an incredibly powerful woman. She lived at our place, in our house.
- (53)manu taa ree -he neampe Koskos nah (a) that name -poss Koskos COMP REP.EVID TOP 'an - ye kuru nupuru nee manu. te[h] say/tell be.powerful person COP REP.EVID As for her name, she was called Koskos. She was a shaman.
- (54)neeteh (ote) 'onuuman 'oman, teh tani neya, tusuu, and.so and now this be.shaman evening go.SG 'orohko 'ahci tani 'inaw kara -hci manu Orok old.woman now praying.stick make -PL REP.EVID ike inaw naa and praying stick too And so, early at night, at last the Orok shaman woman made *inaws*. [Those] inaws

- (55) ke -hci _ike kor_ -te -hci carve -PL and have -CAUS -PL she carved for [my mother and her friends].
- (56)te[h] orowa ne[y]a 'ahci tani tusu old.woman now perform.rite and then this manu. (tusu maik . . . tusu manu) _ike 'ene an REP.EVID and like.this exist.sg 'ihuspa¹⁸ kii manu. revelation do REP.EVID Then she performed a shaman ritual, and she made such revelation.
- (57) nean 'ikaamesu kamuv ruv kusu. ʻanihi kamuv that thing's.top- peel.away god be.strong because 3sg god naa, ne 'ika'ovnkara¹⁹ -hci, 'i--utar -ik[e] -he kaa-mesu -PL -part -poss too ? protect -PL ANTIP- top-peel.away kamuv 'avnukamuv ruv kusu. nean, keravkusu god person- god be.strong because that thanks.to "Because the protecting god is strong, [so much that] he looks over the [other] gods too, because the protecting god, the god of the Ainu, is mighty, and thanks to that
- (58)utar yaykaamesu teh tani hosipi -hci 'npeople APPLone's.top- peel.away and now return -PL (siri . . .), 'atuy sirikusu simma pirika kusu because tomorrow sea appearance- be.good because he saves people and [this is why] eventually [these people have managed to] return. So, because in fact tomorrow the weather at sea [will] be good,
- (59) nevke simma 'an[i]hi naa nean cip_ -'or -ta TOP tomorrow 3sg too that boat -place -Loc 'nteh, 'oman kusu tura neyke nean, 4.0- go.together.with and go.sg because TOP that [and] because tomorrow [the god] himself [will] accompany us during our sailing,

¹⁸ Possible nominalization of the verb '*ihuspa* < '*i-*√*huspa* (ANTIP-evoke?).

¹⁹ '*Ika*'oynkara < ?'i-ka-'o-inkara (ANTIP-top-at.APPL-look).

- (60) paye -'an-a-hci wa nean, 'oyasi²⁰ -'utar ru-w and that spirit go.PL -4.S.PL-EP-PL -PL trace-EP -POSS -hcin 'an - wooneka²¹ -hci nah $(v \ldots),$ -PL 4.A- check.situation -4.S.PL.HON COMP vee manu nean 'ene that like.this say/tell REP.EVID let us go and look for the traces of those spirits!" she said.
- (61)nean 'ene 'ihuspa neete[h] orowa, an kii manu, like.this exist.sg revelation do REP.EVID and.so that then ne[y]a 'an- 'aca -ha na 'imiv -ehe ka hohpa 4.A- uncle -poss too clothes -poss even leave Such revelation she made. And then, [given that] my uncle [had] left behind even his clothes
- (62)'an-'unarap[e] -he kiro -ho hohpa na 4.A- aunt -POSS boot -poss too leave tarat -hci[n] na hohpa -hci, -u back.rope -poss -PL too leave -PL.NMLZ neampe sinke -_ik[e] -he 'ohamanka 'utar pate[h] TOP following.day -part be.brave people only -POSS [and] also my aunt [had] left her boots and her rope too, the following day with brave people only
- 'an- 'ac[a] -ha (63)'nutura, naa RECPgo.together.with 4.A- uncle -Poss with.APPLtoo 'an- 'un[u] -hu naa, 'oro--wa kanna 4.A- mother -Poss too place -ABL again nean, kito--hci 'usik[e] -he ta wild.garlic- collect -PL.NMLZ place that -POSS wooneka -hci kusu 'ariki -hc[i] -hi neampe, check.situation -PL because come.PL -PL -NMLZ TOP they got together. My uncle and my mother, when they went back to check the situation of that place where they collected wild garlic,

²⁰ Prosodic pause after 'oyasi.

²¹ *Wooneka* $< u_- \lor oneka$ (RECP-?), cf. Majewicz and Majewicz (1986) on(n)eka and won(n)eka 'visit', transitive use in Piłsudski (1912) and Batchelor (1889: 356) 'visit, know, see'.

- (64)'ampene 'ota -ka -ta neva hemata kamuv -ehe -hcin, really beach -top -Loc this god what -PL -POSS 'okore nak -ene ka pave -hci wa isam -a -hci all where -ALL even go.PL -PL and not.exist -EP -PL [they could see that] clearly that kind of creatures all went away somewhere.
- (65) neva (k...) 'oha -ehe -hcin, 'ota -ka -ta ru-w this be.empty trace-EP -POSS -PL beach -top -LOC -ehe -hcin maake tehan teh 'isam 'ampene ru-w really trace-EP -POSS -PL leave PERF and not.exist -hci, (neya or . . .), -a -EP They had left traces over the beach, nothing but their traces, and disappeared.
- (66)ne[v]a ota -ka -ta an_ poro vaanii -kaske -ta this beach -top -Loc exist.sg be.big driftwood -top -LOC 'ama -hci 'an 'imi ka 'ampene haciko -'0 -PL IPFV²² put clothes even really be.small -EMPH ras -[u]hu ka haaciri ka isam. scrap -poss even fall.NMLZ even not.exist Even [of] the clothes they had hung on the big piece of driftwood that was on the beach nothing else than small rips had remained at all.
- ne[y]a kiro kayki ne[y]a haciko (67) -'0 munras -[u]hu this boot even this be.small -EMPH waste- scrap -Poss wen haaciri ka 'isam. ne[y]a tarat kayki 'ampene be.bad fall.nmlz even not.exist this back.rope even really haciko rukum -[i]hi haaciri -'0 ka ka 'isam. be.small -EMPH bit -POSS even fall.NMLZ even not.exist Even those boots [had] bad scratches [and] nothing but [bits had] remained. The rope too – nothing else than small bits [had] remained.
- (68)'emuvke 'e -hci taka temana ki -hci waisam, all eat -PL how do -PL CONCL They [had] eaten them all or did something else and disappeared.

²² See Dal Corso (In press) about imperfective and perfective aspect in Sakhalin Ainu.

(69) 'annuu (nah 'an,) 'an--hu, 'unu sukup -a -hci 'or place 4.Ahear 4.Amother -POSS be.young -EP -PL -ta nah 'an 'oyasi ka 'ekaari -hci manu. -LOC SO exist.sg spirit even meet -PL REP.EVID [This] I heard. When my mother [and her friends] were young they met even such a spirit.

Symbols

- , prosodic pause
- comes from, is analyzed as
- V alleged root or stem
- # word segment
- lexical root, root/stem without phonological processes
- (...) omitted segment
- {...} reconstructed segment

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Subject Index

```
accent 8, 9, 85-88, 112, 148, 161, 164-165,
                                                  basic vocabulary 7-8, 253-254, 257, 259-261,
    169-173, 193, 196, 218, 230, 262-264,
                                                       264, 273, 275-276, 295, 305, 309, 312,
    266, 311, 330, 332, 393, 395-399,
                                                       316, 318, 333, 424
    400-402, 431, 447, 453-454, 459-462,
                                                  borrowing see loan(word)
    553-555, 618
- foot 178, 397, 553-555
- iambic 85, 170, 178, 459-462, 554
                                                  - borderline case-marking 4, 26, 31, 51
- pitch 148, 164-165, 169-173, 179, 193,
                                                  - case particle 276-277, 282, 301, 338, 340-342,
     262-264, 332, 459, 466, 553-554
                                                       344, 346-347, 349, 388, 473, 490, 495
adjective 10, 119, 473-476, 478-479, 511, 630,
                                                  - compounded locative case particle 341-342,
    641
                                                       344, 347
affiliative (=possessive) form see noun
                                                  - locative case (particle) 187, 338, 340-342,
Ainu language class 405-414, 431
                                                       344, 346-347, 349, 388, 490
Ainu language revival 9, 405, 411, 413-414,
                                                  causative 11, 39, 41, 157, 197, 199, 332, 476,
    417, 421-422, 424-426, 428, 432-434,
                                                       515-516, 520-524, 526-527, 530-532,
    436, 438-439
                                                       534, 537-538, 542-544, 580, 585, 591,
Ainu people 9-10, 16, 58, 60, 66, 79, 106, 115,
                                                       596-598, 607
    258, 261, 329, 363, 376-377, 405-409,
                                                  Chitose 1, 3, 7, 12-14, 25, 120, 153, 257, 260,
    412-413, 415-419, 422-423, 425, 427,
                                                       263, 272-282, 284, 287-290, 293, 296,
    432, 436, 438-439
                                                       305, 307, 309, 312, 363, 365-366, 370,
Ainu policy 421, 423
                                                       375, 379, 381, 385, 398, 401, 412, 414, 424,
alignment 3, 23, 27-29
                                                       474-475, 477-478, 484-486, 491, 493,
alliteration 394-395, 402
                                                       502-503, 506, 509-510, 555, 584, 590,
allomorph(y) 449-450, 520
                                                       596, 600-602, 605, 610, 614, 618, 622,
antipassive 11, 41, 46, 515, 522, 528-530,
                                                       629, 635, 638, 650, 653-654, 659, 660
    543-544, 586
                                                  clitic 12, 24, 42, 119, 179, 481, 573, 590-591,
applicative 2, 4, 11, 35-37, 39-41, 51,
                                                       596, 601-603, 605, 610
    170, 385, 388, 476, 482, 510, 515,
                                                  conceptual form see noun
    518-520, 523-524, 528-530,
                                                  conjunctional particle see aspect
                                                  corpus 14, 37, 300, 530-531, 534, 659, 677
    533-534, 543-544, 550, 588-589,
    640, 660, 672
aspect 3, 12-13, 28, 573, 576, 613-617,
                                                  devoicing 447
                                                  dialectology 196, 445
    619-622, 625, 629-634, 636-638,
    640-642, 644-645, 648-649, 651,
                                                  diglossia 220, 235
    653–654, 678, 693
                                                  dissimilation 156, 175, 458, 462-463, 678
- conjunctional particle 276, 279
                                                  documentation 1-2, 6, 102, 149, 175, 293, 296,
- existential verb see verb
                                                       300-301, 303-305, 307-313, 316-319,
- lexical aspect 573, 680
                                                       321, 323-325
- progressive 13, 28, 280, 613, 616, 619, 621,
    629, 634, 678
                                                  endangered language 1-2, 16, 363, 434
- resultative 13, 613, 616, 640, 642
                                                  ethnicity 5, 57-58, 61-64, 67-68, 71-73, 214
asymmetric negation 13, 620, 625
                                                  evidentiality 12-13, 613, 615, 617-619,
                                                       621-623, 625, 630, 647-648, 650, 653
auxiliary 10, 13, 42, 279, 352, 394, 461,
    473-474, 481, 520, 579, 590, 600,
                                                  - constraint 622
    603-606, 614, 616, 629-630, 638, 643,
                                                  - hearsay (evidential) 13, 50, 615, 617, 650, 652
                                                  - inferential (evidential) 13, 50, 615
    647, 650, 652–653, 663
```

non-visual sensory (evidential) 13, 50, 615
visual (evidential) 13, 50, 615, 617–618, 622, 625, 652

final consonant 8, 150, 196, 230, 271, 329, 335, 336, 352, 450, 454
final particle 276, 281, 289, 360, 394, 473, 580, 618, 644
focus (particle) 186, 192, 197, 289, 529
folklore 6, 9, 14, 66, 99, 116, 120, 122–124, 295, 383, 659–660, 677
formant 446

gene flow 68, 72 genre of oral literature

- epic poetry 384, 393, 396-397, 401
- kamuy yukar (divine epics) 8, 14, 378, 396, 398, 406, 659, 671–672
- narrative 369, 375-376, 380-381, 383, 385, 496, 652, 654, 660
- ucaskuma (ancestor tales) 14, 383, 677-679
- uwepeker (prosaic folktale) 8, 14, 409, 452-453, 659, 661
- *yukar* (heroic epics) 8, 99, 380, 383–386, 407, 409, 415

G(h)ilyak (=Nivkh) see Nivkh grammaticalization 13, 32, 174-176, 481, 623, 625, 645

head-marking 3-4, 8, 23-26, 28-31, 33-35, 37, 43, 49, 50-52, 487 hiatus 445, 448, 452 historical linguistics 6

inalienability see noun

incorporation 2-4, 11-12, 23-25, 37-40, 42-44, 51, 337, 515, 520, 525, 530, 535, 543, 549-559, 561-567, 570, 589, 598

- intransitive possessor requiring subject noun incorporation 560–562, 567, 569
- intransitive subject noun incorporation 550-551, 565, 566
- object noun incorporation 37, 550, 569
- quasi-incorporation 550-551, 567, 570
- rescue principle 564-566, 568-569
- restrictions (on noun incorporation) 549, 561-564, 566, 568-569
- transitive subject noun incorporation 11-12, 550-551, 559, 564, 566-567, 569

indigenous people 57, 72, 211, 419–420, 434, 439
intermarriage 215, 219, 225, 234
internal reconstruction 6, 69, 86, 147–148, 151, 178, 330
interpreter 83, 110, 216–217, 219–220, 235
interrogative 7, 120, 287–290, 293, 360, 366, 473
intonation 10, 49, 85, 289, 445, 465–466
isochrony 402

Japonic

- classical Japanese 652
- Japanese 1-2, 4-7, 13, 23, 49, 52, 57-72, 80-86, 89-90, 99-105, 107-111, 114-122, 124-127, 147-149, 155-156, 161, 163, 168-169, 171-173, 175-176, 185-186, 189-190, 192, 194-205, 209, 211-215, 217, 219-220, 222-223, 225-226, 228-229, 234-235, 242, 244-245, 271, 312, 323-325, 329, 357, 363, 367, 370, 377, 383-384, 394, 399, 402, 405-407, 409-411, 415-416, 418-421, 426-427, 429-431, 433-438, 446-449, 453, 459, 464, 466, 474-476, 482, 484, 524, 532, 533, 538-539, 581, 616, 618, 626, 629-632, 635-636, 638-639, 644, 652, 659, 668, 677
- Middle Japanese 163
- Old Japanese 65, 86, 149, 176, 185–186, 189,192, 198–199, 202, 205
- Ryūkyūan 62, 68, 121, 185, 196, 201, 204, 620, 636

Jōmon(ic) 4, 63, 63-72, 204

Kamchatka(n) 4, 23, 35, 51–52, 58–59, 61–63, 65, 102, 107–109, 113–114, 162

Karafuto (=Sakhalin) see Sakhalin

Kuril(ic) 1, 4, 23, 58–65, 67–68, 71, 73, 107–109, 111–116, 125, 147, 157–158, 162, 165, 168, 185, 244, 253–254, 257–258, 277, 282–284, 291, 293, 323–325, 329, 405, 414–415, 424

language contact 7, 147, 173, 209–210, 213, 219, 221, 233–235, 459 language isolate 1, 147, 209 language shift 71–72, 211, 220 lingua franca 209, 212, 220–221, 235

linguistic contact see language contact linguistic expansion 63 linguistic geography 253, 282, 286, 384 loan(word) (=borrowing) 6-7, 65, 86, 120, 149, 156, 159, 166, 171–173, 185–186, 200–201, 209–211, 220–229, 231–236, 238–239, 243, 446

location see noun

melody 14, 364, 366–367, 370, 373–374, 379–380, 389, 393, 659
meter 9, 14, 393–395, 397–402, 659
minority language 415, 420
modal(ity) 605, 633, 636, 644–645, 648–649
multilingualism 7, 209, 211–212, 219–220, 235, 418

Nivkh (=G(h)ilyak) 4, 6, 7, 23, 51–52, 59–61, 63, 65–66, 147, 156–157, 159, 166, 209–212, 214–245, 459, 509, 679–680

nominalization 359, 618, 625, 663, 691

- nominalizer 13, 275, 359, 449-450, 466, 615, 618, 622, 625
- nominalizing (affix) 340, 358-361, 480-481, 493-496, 498, 502, 504, 511, 535, 589
- affiliative (=possessive) (form) 8, 10, 24, 38, 44–51, 60, 147, 149–151, 160–161, 179, 187, 202, 275, 330–332, 334–337, 340–345, 347–349, 352, 354, 361, 452, 455–456, 479–489, 491, 495, 535, 568, 618
- alienability 23, 484
- conceptual (form) 10-11, 45, 334-337, 340-345, 347-349, 455-456, 479-484, 486-489, 491, 493, 501, 510-511, 530, 618
- direction 178, 277, 503-507, 511
- inalienability 484
- location 11, 31, 33-34, 51, 338-339, 344, 388, 473, 480, 482-483, 490-493, 501-502, 508-511
- locative noun 3, 10-11, 23, 33-34, 334-335, 338-341, 344, 346-347, 349, 361, 473, 479-483, 487, 490-498, 500-506, 510-511, 525, 528, 530, 536, 544, 550, 567
- non-possessible noun 47
- noun incorporation see incorporation

- noun phrase 11, 24-25, 33, 44, 278, 479-480, 482-483, 485-486, 490, 492, 494, 496, 501-502, 504, 508-511, 515-517, 535, 549-550, 563, 577, 588-589, 618
- noun phrase argument 509
- (noun-)complement 13, 50, 52, 615, 623
- obligatorily possessed noun 44-46, 51, 530, 544
- ordinary noun 10-11, 23, 33, 335, 337-338, 340-342, 346-347, 349, 473, 479-484, 486-488, 490-493, 496, 498, 501-503, 505, 510-511, 618
- possessive class 3-4, 25, 44, 51
- possessive (form) see noun: affiliative (form) number
- achievement/accomplishment verb 591
- distributive number 593, 595, 609
- event number 12, 577-579, 586, 588, 603-604, 607
- participant number 12, 577–578, 580–581, 595, 603, 607, 610
- plural marking 275, 585
- plurality 8, 12, 350, 352, 358, 361, 573, 577-582, 584-585, 588, 592-595, 597-601, 605, 608-610
- suppletion 12, 25, 29, 574, 577, 610
- verbal number 3-4, 12, 23, 25, 29-30, 51,275, 573, 575-577, 580, 594, 610

old documents

- Ezo kotoba (The words of Ezo) 5, 80, 82, 84-85, 87-88
- Ezogoshū (Collection of Ainu words) 84-85
- Matsumae no kotoba (The words of Matsumae) 5, 80–81, 84, 88, 171
- Moshiogusa (Seaweeds for making salt) 5,
 79-80, 83-85, 89, 110, 171
 oral tradition 116, 122, 295, 363-364, 439, 678
 Orok (=Uilta) see Uilta

Pacific Rim 4, 23–25, 65, 70 palaeoanthropology 63, 71 person

- person affix 259, 273–274, 296, 335, 349–350, 355–356, 358, 361, 479–480, 487, 490, 494–496, 502, 508–509, 516–517, 579, 613, 616–617
- agreement 24-26, 51, 175, 579-580, 588, 590
- indexing 4, 26, 43, 51, 529

person marking 26, 29, 44, 47, 272–275, 293, 296, 475
restriction 619–620, 632
phonology 2–3, 6, 10, 118, 148–149, 153, 161, 172, 260, 293, 296, 361, 425, 429, 445–446, 453, 455, 463, 551, 602
phonotactic(s) 445, 451
polysynthesis 4, 24–25, 40, 43, 51
possessive class see noun
possessive (=affiliative) form see noun
predicate calculus-based approach see valency
proto-Ainu 6, 64, 66, 68–71, 85–87, 147–149, 155, 160–163, 165–167, 171, 173–174, 176, 178–179

Rayciska 3, 8, 14, 329, 601, 677–678
reciprocal 11, 41, 67, 452, 454, 515, 522–526, 528, 530, 533–534, 543–544, 586–587, 660–66
reflexive 11, 41, 452, 476, 515, 522, 525–528, 530, 538, 542, 543, 561–562, 565–568, 586
refrain 6, 14, 203, 365, 367, 368–369, 378–379, 381, 396, 399, 659, 661, 671
regional differences 60, 260–261, 364, 380, 383–384, 427
resyllabification 445, 451, 454, 553–554, 660
rhetorical technique 385–386, 445
rhythm 9, 204, 365, 370, 380, 386, 393–394, 397, 399, 401, 451, 459, 661, 678

Sakhalin (=Karafuto) 1, 3, 4, 7–8, 12, 14, 23, 58–68, 70, 73, 86–87, 107–108, 111–113, 116–117, 121–126, 147, 156–157, 167–171, 173, 175, 179, 185, 188, 197, 209–235, 237–238, 243, 245, 253–254, 258, 329–330, 332–333, 335–336, 340–342, 346, 350, 355–356, 358–359, 405, 414, 424, 601, 605, 677 sandhi 168, 449–450, 462–465 sociative 11, 532–534, 543–544

sound

- change 157, 162, 221, 229, 446

- correspondence 7, 151–152, 154–157, 159–164, 166–168, 221, 283, 292

 pseudo sound correspondence 7, 262, 266, 283, 292

Sprachbund 175, 210

stage/individual-level distinction 13, 621–622, 625 suppletion see number syllable 8–10, 85–89, 149, 156, 164–165, 169–173, 193, 196–197, 199, 224, 230, 233, 263–264, 266, 269, 271, 311, 329–332, 335, 358, 379, 385–387, 393–397, 399–402, 429–430, 445, 447–451, 453–454, 459–463, 489, 494, 504, 553–554, 575–576

trade 59, 211–212, 218–219, 222, 228, 234 typology 2, 61, 63–65, 113, 117, 126, 148, 161, 173–174, 213–214, 227, 393, 401, 445, 474, 526, 613, 617, 620–622, 625

Uilta (=Orok) 7, 59, 209–211, 214–215, 217–222, 224–228, 230–231, 233–245, 679, 690

valency see also antipassive, applicative, causative, incorporation, reciprocal, reflexive, sociative

- coded alternation 536,543
- predicate calculus-based approach 11, 515, 536, 544
- uncoded alternation 536
 verb see also aspect, evidentiality, number, person
- 0-argument verb 473, 479, 515-517, 521
- 1-argument verb 11, 359, 473-475, 479, 515-518, 520-521, 528, 530-531, 533, 536-538, 542-544
- 2-argument verb 11, 473, 479, 515-518, 521, 523, 528-531, 533, 535-540, 542-544
- 3-argument verb 11, 473, 479, 509, 515-518, 520, 523-524, 529, 536, 538-539, 542
- 0-valence verb see 0-argument verb
- 1-valence verb see 1-argument verb
- 2-valence verb see 2-argument verb
- 3-valence verb see 3-argument verb
- achievement/accomplishment verb see number
- existential verb 13, 275, 477, 629-630, 632, 638, 641, 652-653, 662
- intransitive verb 10–12, 30, 38, 43, 274, 350, 355, 359, 455, 474, 478, 538, 563, 575, 577–580, 582, 585–586, 588, 590–593, 595–596, 598–599, 603, 605–610, 630, 640, 672

- locative object verb 473, 479, 482, 490, 509-510, 536
- transitive verb 7, 10–12, 30, 32, 34, 38–39, 41, 43, 151, 223, 273–274, 338, 343, 350, 355, 359, 455, 457, 474, 478–480, 490, 495, 530, 538–539, 543–544, 563–563, 575, 577–582, 586–596, 598–599, 603, 605–610, 630, 640, 667, 672
- verb phrase 26, 31, 49, 279, 358-359, 474, 479-482, 493, 550, 616, 633, 638
 verse 9, 375, 378-379, 381, 384-386, 393-395, 494, 504, 510, 582
 voicing 449

voicing

- long vowel 8, 84-87, 156, 169-171, 173, 263-264, 330, 332, 335
- tongue-root harmony 3, 445, 459
- vowel co-occurrence restriction 3, 445, 458-459

- vowel devoicing 447
- vowel harmony 149, 445, 455, 457-459

Western records

- Angelis, Girolamo de 81-82, 102, 104, 106-107, 109, 163
- Batchelor, John 1, 5, 99, 104-105, 109-110, 115-118, 122-123, 125-126, 225, 406, 449, 450
- Dettmer, Hans Adalbert 99-101, 104, 106, 108, 115, 118-119, 122, 126
- Dobrotvorskiy, Mikahail
 Mikhaylovich 103-105, 110-113, 117, 122,
 125-126, 157-158
- Pfizmaier, August 104-105, 109-112, 121-122
- Piłsudski, Bronisław 6, 103–105, 116–118,123–126, 157–158, 215, 329
- Radliński, Ignacy 103, 113-115