

# Toward New Horizons in Ainu Studies: Research Activities of the NINJAL-based Ainu Research Group

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**Abstract:** Ainu is the only non-Japonic language of Japan and it is truly on the verge of extinction. However, thanks to accumulated efforts of researchers in Japan, the language has been well documented and Ainu studies will continue. The tradition of studying Ainu has in many ways been the converse of what we have for a typical endangered indigenous language studies in the West: there is a vast stock of oral literature (including many sound recordings) and yet a lack of theoretical engagement with many problems of grammatical analysis. The aim of our NINJAL project (2013-2016) was to increase the rigor and clarity of our understanding of Ainu by setting it in the perspective of linguistic typology and to open up the great significance of Ainu to linguistics by laying out the many rare or unique features that its grammar exhibits.

## 1. Background: Who are the Ainu?

Ainu is the only non-Japonic language of Japan. 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 project was aimed at preserving invaluable knowledge about Ainu, 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 of being poorly analyzed in many respects, but richly documented in others. A detailed study of previous Ainu documentation is crucial for the production of a detailed description of this typologically unusual language and possibly for answering questions about human prehistory such as ‘Who are the Ainu and how are they related to other Asian people?’

The Ainu (literally ‘people’) whose society was traditionally based primarily on hunting and gathering are the indigenous people of the Island of Hokkaido in Northern Japan. They also formerly inhabited the northern part of Honshu, southern part of Sakhalin, the Kuril Islands and the southern part of Kamchatka. Their unusual physical appearance, which most Westerners associated with Caucasoids

instead of with Mongoloids, as well as the striking lip tattoos worn by women made Ainu appear different from other Asian populations. This has given rise to the so-called “Ainu enigma” which tantalized 19th century explorers of the origin of the human “race”.



**Photo 1. *Kimi Kimura's (1900-1988) uncle Arimakina and his wife Anmonas wearing traditional Ainu costumes.*** “Endangered Languages Archive” <https://elar.soas.ac.uk/Record/MPI572685>

Though the genetic affiliation of Ainu is still unknown and at present it is classified as a language isolate, it is presumably a remnant of some very old language family and very likely a legacy of pre-Japonic cultures in the Japanese archipelago. The study of Ainu is very important for understanding Japan’s linguistic past, its population history, and more broadly that of Northeast Asia.

Today scholars (geneticists, anthropologists, but to a lesser degree archeologists) almost unanimously believe the Ainu to be direct descendants of the Neolithic population of the Jōmon Culture which existed in Japan in 14,000-300 BCE. For instance, the latest genetic evidence suggests that “the

Ainu represent a deep branch of East Asian diversity more basal than all present-day East Asian farmers” and that they can be traced back to an early split from mainland Asian populations, jointly with one of the earliest American founder populations (Jeong et al. 2016: 261). By comparing genome-wide SNP data of the Ainu, Ryukyans and Mainland Japanese it was confirmed that (1) the Ainu are genetically different from Mainland Japanese living in Tohoku, the northern part of Honshu Island; (2) using Ainu as descendants of the Jōmon people and continental Asians (Han Chinese, Koreans) as descendants of Yayoi people, the proportion of Jōmon genetic component in Mainland Japanese was ~18% and ~28% in Ryukyans (Jinam et al. 2015: 565), which basically agrees with Hanihara’s (1991) ‘dual structure model’.

As we know, the Yayoi period, or the Iron Age, in mainland Japan (300 BC-300 AD) never extended to Hokkaido. A Neolithic Epi-Jomon period had persisted there until it was replaced by the Satsumon culture in Southwestern Hokkaido in 700 AD and by the Okhotsk culture in the Northeastern Hokkaido in 500-600 AD. The Satsumon people are believed to be the prehistoric Ainu; they had agricultural practices, built stockades (*chasi*) and exchanged goods with their neighbors. The Okhotsk people, primarily sea-mammal hunters, were of a different biological group which came from the lower Amur River through Sakhalin and the Sea of Okhotsk; they are probably related to the Nivkh of Sakhalin and Amur (Vovin 2016: 29). Eventually, around 1,000 AD, the Okhotsk people were defeated by the Satsumon people and absorbed into what we know as the Ainu ethnic group and culture which was further extended to Sakhalin in the 13th and to the Kurils in the 14-15th centuries (Kikuchi 1999: 50). Then the historic period of Ainu history started, characterized by trade disputes and military conflicts with the Japanese, the increasing subjugation of the Ainu and eventual dispossession of their land, language and culture.

## **2 . The sociolinguistic situation of Ainu and history of Ainu studies**

There are about 100,000 ethnic Ainu in present-day Japan, but all of them speak Japanese in everyday life. Because of severe ethnic repression from the state in the beginning of the 20th century, most Ainu tried to conceal their origins even from their children. The shift towards a greater confidence in acknowledging Ainu ancestry began in the 1970s under the influence of the Ainu rights movement and was reinforced after the adoption of the Ainu Culture Law (1997) and the recognition of the Ainu as the indigenous population of Hokkaido (2008).

Ainu was spoken in daily life until the 1950s but in the half century it has been confined to the memory of elders, mainly due to their knowledge of the Ainu oral literature, one of the most beautiful and sophisticated literatures of the hunting and fishing people of northeast Asia. There are two metrical

melodic genres, namely *yukar* ‘heroic epics’ and *kamuy yukar* ‘songs of gods’, and at least one prosaic genre *uwepeker* ‘folktales’. *Yukar* is the most elaborate and lengthy genre (up to 15,000 verses) which tells about a super hero *Pon-ya-un-pe* ‘a young man of the mainland’ and his people who fight against *rep-un-kur* ‘people of the sea’. This is commonly regarded as a reflection of battles between Satsumon and Okhotsk people leading to the defeat of the latter. Ainu oral literature reflects the social conditions and animistic worldview of the traditional Ainu society of the past.

Extensive documentation of Ainu and its linguistic research started a century ago (e.g. Y. Chiri 1978 [1923]; Kannari & Kindaichi 1993 [1956-75]; Kubodera 1977) and has produced a number of comprehensive dictionaries (e.g. Nakagawa 1995, Tamura 1996) and several grammars of the Sakhalin variety of Ainu (Murasaki 1979; Chiri 1973 [1942]) as well as the Hokkaido dialects of Saru (Kindaichi 1993 [1931]; Tamura 1988/2000), Saru and Horobetsu (Chiri 1974 [1936]), Ishikari (Asai 1969), Shizunai (Refsing 1986), and Chitose (Bugaeva 2004), (Satō 2008). Despite this proliferation of works, none of those grammars are comprehensive. By the high standards of modern linguistic work (as exemplified, for example, by recent grammars of many Australian languages), we are still at a rather early stage of Ainu research.

The situation is much more positive with regard to recorded materials. Due to the early development of high-tech recording/video equipment in Japan, the Ainu language has been documented extensively since the late 1950s (e.g. Tamura 1984-2000; Kayano 1998). Yet here, too, many of these recordings still remain untranscribed in university and private collections.

Since the late 1990s, I have personally undertaken extensive fieldwork with the last fluent speaker of Chitose, a Southern Hokkaido Ainu dialect, transcribed texts and wrote an outline grammar (Bugaeva 2004; reviewed in Majewicz 2004), which was published within an ELPR book series summarizing the results of a large-scale Japanese documentation project ‘Endangered Languages of the Pacific Rim’ (1999-2003; headed by Prof. Osahito Miyaoka).

Furthermore, I have made a number of contributions to the fields of Ainu language documentation, typologically-informed and typology-oriented description and language revitalization support. Generally, my research is rooted in the framework of functional linguistic typology (especially that of the St. Petersburg/Leningrad Typology Group). Most of my work has been carried out as part of collaborative typological projects based at Max Planck, Stanford University, NINJAL etc. I have documented a number of features of Ainu that are noteworthy from a typological standpoint; these include person marking and reported discourse (Bugaeva 2008), reciprocals (with Alpatov & Nedjalkov, 2007), applicatives (Bugaeva 2010), causatives (Bugaeva 2015a), valency classes (Bugaeva 2015b), impersonal passive (Bugaeva 2011a), ditransitive constructions (Bugaeva 2011b), evidentials (Bugaeva

2013), and recently nominalizations (Bugaeva 2016a), relative clauses (2016b; with Whitman, 2016), and problems of polysynthesis (to appear). I strive to increase the rigor and clarity with which Ainu syntax is analyzed by setting it in the broader perspective of linguistic typology.

### 3. Research activities of the NINJAL-based Ainu research group (2013-2016)

#### 3.1. *Handbook of the Ainu Language* (HJLL, De Gruyter Mouton)

The chief among my recent research activities was leading a collaborative Ainu project (April 2013 – March 2016) which was part of a large-scale project “Typological and historical/comparative research on the languages of the Japanese archipelago and their environs” headed by Prof. John Whitman (then NINJAL/Cornell). I gathered all active researchers of Ainu in Japan (about 10 people) 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 believe that I can say that the result is a true Renaissance in Ainu studies in Japan.

As a major output of this project I am currently editing the *Handbook of the Ainu Language* (ed. by A. Bugaeva; v.12, to appear in 2019) with contributions of the project members, which will be published in the series *Handbooks of Japanese Language and Linguistics* (12 volumes, De Gruyter Mouton) edited by Masayoshi Shibatani and Tarō Kageyama. This handbook represents a case of unprecedented cooperation among the leading experts on Ainu.

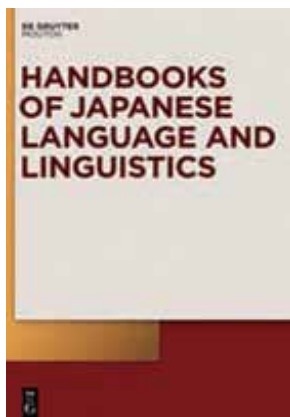


Photo 2. *Handbook of the Ainu Language* (HJLL v.12). Berlin, Boston: De Gruyter Mouton (to appear in 2019)  
<http://www.degruyter.com/view/product/458334>

The purpose of my edited handbook (16 chapters) is to summarize milestone achievements in the field of Ainu studies in Japan and sketch the future directions of Ainu research. It is based only on primary sources and aimed at presenting an updated quality description of Ainu. The typologically interesting features of Ainu include noun incorporation, a wealth of voices, vestiges of vowel harmony, a mixed system of expressing grammatical relations with the elements of tripartite alignment, nominal classification distinguishing common and locative nouns, a four-term evidential system, and verbal number. It will definitely help to increase the clarity of our understanding of Ainu, open the field of Ainu studies to the world and attract many new students to the field.

### 3.2 Other collaborative achievements

Working papers of the Ainu research group appeared as a book *Ainugo Kenkyū no Shomondai* [Some issues in Ainu studies] (Anna Bugaeva & Iku Nagasaki (eds.), Sapporo Kikaku Sentā, 2015).



The book consists of 7 chapters focusing on various aspects of Ainu phonology, morphology syntax, history of language and oral literature.

**Photo 3.** *Ainugo Kenkyū no Shomondai* [Some issues in Ainu studies] (2015)

*A Glossed Audio Corpus of Ainu folklore* (Hiroshi Nakagawa, Anna Bugaeva, and Miki Kobayashi eds.) is the first fully glossed and annotated digital collection of Ainu folktales with translations into Japanese and English. It was prepared in collaboration by several members of the Ainu research group and released online from the National Institute for Japanese Language and Linguistics on March 23, 2016, which has been highlighted in the NHK news.

Japanese version top page: <http://ainucorpus.ninjal.ac.jp/>

English version top page: <http://ainucorpus.ninjal.ac.jp/en/>

\* This corpus can be viewed with Firefox, Chrome, Safari or IE (Version 8 or higher).

The audio materials feature recordings of folktales told by Kimi Kimura (1900-1988), an outstanding storyteller in the Saru Dialect of Ainu. These recordings were made in the 1970s to 1980s by Hiroshi Nakagawa. They include stories (prosaic folktales and divine epics), with a total recording time of about three hours, and a total of about 20,000 Ainu words.



**Photo 4.** *Kimi Kimura (1900-1988), a talented Ainu storyteller*

The audio can be played sentence by sentence, and the entire folktale can be downloaded. The Ainu text transcribed in the Latin alphabet and katakana, the Japanese translations and English translations can be downloaded in PDF format. The entire text including the Ainu (Latin or katakana transcriptions), Japanese, English and English gloss can be searched.

Uepeker: Godly Elder Sister Gets Rid of Bad Bear Father

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<b>poro</b> poro be.big/old 大きい/古い	<b>poho</b> po-ho child-POSS 子ども-~の	<b>patek</b> patek only ばかり	<b>yayramekote</b> yayramekote marry 結婚する	<b>siri</b> siri seemingly.COMP ~の様子	<b>nukar</b> nukar see ~を見る	<b>kor</b> kor when/if すると	<b>a=</b> a= 4.(A)= 4.(他主)=
<b>saha</b> sa-ha older.sister-POSS 姉-~の	<b>ihoppa</b> i-hop-pa APASS-leave-TR.PL ひと-(~を)残(す)-他形成.複	<b>wa</b> wa and して	<b>isam.</b> isam not.exist ない	<b>ene</b> ene like.this このように	<b>hawean</b> haw-e-an voice-POSS-exist.SG 声-~の-ある.単	<b>h_i.</b> hi thing/place/time こと/ところ/とき	

she only saw the older son get married before she left this world. She left saying,  
上の息子が結婚したのだけを目にして、姉はこの世を去ってしまった。その時にこう言った。

Photo 5.A Glossed Audio Corpus of Ainu folklore (2016)

The corpus will be expanded in the future through the funding received from a new NINJAL project “*Endangered Languages and Dialects in Japan*” (April 2016 - ; headed Prof. Nobuko Kibe).

We are deeply grateful to the many people who cooperated in preparing this corpus and hope that it will allow a broader audience to reconnect with the Ainu language through a vast oral literature and unlock rich ethnographic material about the traditional Ainu way of life, their unique worldview with its embedded ecological knowledge and material about Ainu history.

The Ainu research group has also considerably contributed to revitalization support of the Ainu language by developing *A Topical Conversational Dictionary of Ainu*, (Anna Bugaeva & Shiho Endō eds.; online system: Shirō Akasegawa) which is an enriched and technically improved version of the first online Ainu-Japanese-English talking dictionary published on SOAS University of London HP (2010). The new digital product released from the National Institute for Japanese Language and Linguistics in 2015 is particularly important for ethnic identity purposes of the Ainu in the context of their recognition as the indigenous population of Hokkaido (2008) and attracting public attention to their linguistic and cultural aspirations within the Japanese society.

Japanese version top page: <http://ainutopic.ninjal.ac.jp/>

English version top page: <http://ainutopic.ninjal.ac.jp/en/>

The online dictionary is based on the original *Ainugo kaiwa jiten* (Ainu conversational dictionary) by Kitora Jinbo and Shōzaburō Kanazawa, first published in 1898 (reproduced in 1973, and republished in 1986 by Hokkaido Kikaku Sentā). In addition to the original notations, various information that can aid learning the Ainu language including the colloquial translation, modernized Roman character transcriptions and katakana transcriptions of the Ainu word, interpretation (glossary) and English translation, etc., are provided. With the help of Setsu Kurokawa (1926-2015), a native

speaker of the Saru Dialect of Ainu (Nukibetsu), we were able to upload audio of the Ainu language onto the web. The dictionary contains 3,467 headwords, which can be searched for by ‘Topic’ or ‘Full-text’ methods, audio files (3,467 items), videos (131 items), and photographs (86 items).

It is thanks to constant guidance from the project leader John Whitman and support of the Ainu group members that I was able to lead the research activities outlined here, extending international collaboration and bringing the project to fruition.



Photo 6.A *Topical Conversational Dictionary of Ainu*(2015)

#### 4. Typological characteristics of Ainu in the context of Northeast Asian languages

By investigating Ainu within the NINJAL project “Typological and historical/comparative research on the languages of the Japanese archipelago and their environs” (headed by Prof. John Whitman) we could reconfirm that Ainu is typologically very different from the neighboring languages of Northeast Asia.

According to Whitman (NINJAL project HP), “languages of Northeast Asia (henceforth NA) [the so-called Altaic languages (Mongolic, Tungusic, Turkic), Korean, Japanese, Nivkh, Yukaghir, and the Chukotko-Kamchatkan languages] show characteristics of a linguistic area or Sprachbund. Shared typological features include largely head final constituent order, a high degree of morphological agglutination, and retracted tongue root [RTR] harmony. In the diachronic realm, shared features include a notable tendency for nominalized clauses to be reanalyzed as main clauses. In the southeast are languages (Japanese, Korean) with no primary laryngeal consonantal contrast, lexical pitch accent, and almost complete dependent marking. On the northern and western peripheries languages are



predominantly dependent marking.” (<http://pj.ninjal.ac.jp/jparchipelago/en/index.html>)

And how many of “the shared typological features of NA languages” are observed in Ainu?

•Head final constituent order (SOV)	+
•A high degree of morphological agglutination	+
•Retracted tongue root [RTR] harmony (Ko et al. 2014)	+ (?)
•No primary laryngeal consonantal contrast	+
•Lexical pitch accent	+
•Reanalysis of nominalized clauses as main clauses (cf. Sakhalin Ainu (Bugueva 2016a))	- +)
•Dependent marking	-

Though overall the shared NA features prevail, most of them are too basic (e.g. SOV) to be regarded as distinctive. On the contrary, such key feature of Ainu as ‘head-marking’ is not shared with NE languages, most of them are dependant-marking. I suggest that the majority of features (see list below) that make Ainu so strikingly different from NA languages directly (features 1, 2, 4, 6, 7, 9) or indirectly (features 3, 5, 8, 10) stem from its head-marking character which is manifested in both verb and noun phrases. Here is a list of the features which are absent in most NA languages, except Ket and to a less degree Nivkh:

**Features attested in Ainu:**

**Cf. Attested elsewhere in NA:**

**I. Head-marking in the verb phrase**

1. Neutral alignment of case marking of full noun phrases	Ket, Nivkh
2. Head marking of clause arguments	Ket
3. Inclusive/exclusive distinction	Evenki, Nivkh
4. Verbal number (SG/PL) involving suppletion	Ket
5. The lack of non-finite subordinating morphology on verbs	---
6. Exclusively borderline case-marking	---
7. Noun-incorporation;	Ket, Chukchi
8. More prefixing than suffixing, though verb-final	Ket, ?Nivkh

**II. Head-marking in the noun phrase**

9. Head marking of possessive NP’s	Nivkh
10. Possessive classes	Nanai, Yukaghir (data: <a href="http://wals.info">http://wals.info</a> )

Thus Ainu is an atypical Northeast Asian language since

- none of the ten features are shared by Japanese, Korean, Mongolian or Turkic,
- 1 feature is shared by Yukaghir,
- 1 feature is shared by Chukchi,
- 2 features by Tungusic (Evenki and Nanai), and
- 5 features are shared by Nivkh.

Yet, as many as 8 features are shared by Ket (Yeniseian) spoken in Central Siberia for which

a genealogical link with the Na-Dene languages of northwestern North America has recently been proposed (Vajda 2010).

#### 4.1. Verbal plurality in Ainu

And finally, I would like to look at the verbal number feature (#4) in order to illustrate the NA atypicality of Ainu and its profound head-marking character.

For native speakers of Indo-European languages ‘number’ is a nominal category which affects primarily nouns and pronouns. Moreover, it is an obligatory category which leaves us no room for ambiguity. For instance, to translate into English the “Old Pond” *haiku* by Matsuo Bashō (1681) from Japanese, which has no grammatical category of number, one has to make a choice about the number of frog(s) (*kawazu*), cf. different interpretations by D. Keene and L. Hearn.

古池や蛙飛びこむ水の音

*furuikeya / kawazu tobikomū / mizu no oto* (Matsuo Bashō 1681)

- (1) The ancient pond  
A **frog** leaps in  
The sound of the water.  
(Translated by Donald Keene)
- (2) Old pond — frogs jumped in — sound of water.  
(Translated by Lafcadio Hearn)

Next, we will try to translate the “Old Pond” *haiku* into Ainu.

- |     |              |            |            |            |            |             |                  |
|-----|--------------|------------|------------|------------|------------|-------------|------------------|
| (3) | <i>Husko</i> | <i>to</i>  | <i>an</i>  | <i>wa/</i> | <i>oro</i> | <i>unno</i> | <i>terkeype/</i> |
|     | old          | pond       | exist.SG   | and        | there      | toward      | frog             |
| a.  | <i>ahu-n</i> | <i>tek</i> | <i>hum</i> | <i>as</i>  |            |             |                  |
|     | enter-SG     | momentary  | sound      | stand.SG   |            |             |                  |
| b.  | <i>ahu-p</i> | <i>tek</i> | <i>hum</i> | <i>as</i>  |            |             |                  |
|     | enter-PL     | momentary  | sound      | stand.SG   |            |             |                  |
- (Translated by Anna Bugaeva & Hiroshi Nakagawa)

As we see, the noun *terkeype* ‘frog’ is unmarked for number, but the verb ‘enter/jump in’ (as well as all other verbs in this poem) can appear either as singular *ahu-n* ‘(for one) to enter/jump in’ (3a) or as plural *ahu-p* ‘(for many) to enter/jump in’ (3b). Importantly, this is not just about marking number of participants on the verb instead of noun; verbal number is fundamentally different from nominal number.

In Ainu, in the case of intransitive verbs, the number distinction, which is encoded either by a verbal suffix alternation (4a) or suppletion (4b,c), refers to the number of the subject participants (‘(for

one/many) enter/jump in') .

- (4) a. *ahu-n* '(for one) to enter/jump in' – *ahu-p* '(for many) to enter/jump in';  
 b. *an* '(for one) to exist' – *oka* '(for many) to exist';  
 c. *as* '(for one) to stand' – *roski* '(for many) to stand'

However, in the case of transitive verbs, the number distinction, which is also encoded either by a verbal suffix alternation (5a) or suppletion (5b), can refer either to i. the number of the object participants ('to cut one/many (fish)') or ii. the number of events ('to cut (one/many times)').

- (5) a. *tuy-e* i. 'to cut one (fish)'; ii. 'to cut (one fish) one time' – *tuy-pa* i. 'to cut many (fish)'; ii. 'to cut (one fish/many fish) many times'  
 b. *rayke* 'to kill one (bear)' – *ronnu* 'to kill many (bears)'

Verbal number distinction is widely spread in North American languages (e.g. Uto-Aztecan, Pomoan, Hokan, and Athabaskan languages) and, as follows from Mithun's (1988: 214) description, it is not a mere mirror image of nominal number: "Walking alone is classified lexically as a different activity from walking in a group; speaking is different from conversing; murdering an individual is different from massacring a village. The pairs of verbs are related semantically, but not inflectionally."

##### 5. *Postscript: Towards interdisciplinary research on Ainu and beyond*

In fact, it is not just verbal plurality that is conspicuous in the Americas. Most other features mentioned in §4 are also conspicuous in all of the Americas, and at least half of them further in the Greater Pacific Rim (Bickel & Nichols, in preparation), many of those languages being head-making, which calls for an interdisciplinary explanation on early human expansion in Asia (recall §1).

Our NINJAL-based Ainu project (2013-2016) has not only significantly contributed to the fields of Ainu language documentation (*A Glossed Audio Corpus of Ainu folklore* 2016), typologically-informed and typology-oriented description (domestic volume *Ainugo Kenkyū no Shomondai* (2015), international volume *Handbook of the Ainu language*, in preparation) and language revitalization support (*A Topical Conversational Dictionary of Ainu* 2015) but it has also laid a foundation for a further interdisciplinary research.

To take the first step in this direction I have recently participated in a workshop "Frontiers of early human expansion in Asia: linguistic and genetic perspectives on Ainu, Japan and the North Pacific Rim" (U. of Zurich; March 13-14, 2016) organized by Balthasar Bickel (U. of Zurich) and Johanna Nichols (Berkeley) who have worked on the typology and prehistory of the Pacific Rim linguistic population. This workshop was aimed at cooperation between linguists and geneticists, namely Ken Shimizu and Hiromi Matsumae (U. of Zurich), and I have been invited there as a specialist on Ainu. A number of other linguists focusing on this region, viz. J. Janhunen ("Altaic" languages) and E. Gruzdeva

(Nivkh) from Helsinki University who are currently engaged in a big project *Helsinki Area and Language Studies* (HALS, 2013-2016) have also taken part in the workshop.

This is the forefront of linguistic research and the workshop is likely to be preceded by a large-scale international project focusing on Japan and Asia in an interdisciplinary perspective.

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