

Visualizing the Indigenous Rights of the Ainu People: Establishment of Online Database of the Ainu Placenames

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Abstract— This paper presents the progress of an ongoing project to create a map that integrates and plots the ecological values reflected in Ainu placenames, intending to enhance recognition of the Indigenous Ainu people's rights to their lands and natural resources. This online database visualizes Indigenous knowledge on a map, offering a perspective that reframes modern concepts of territory by highlighting the pre-colonial state of Hokkaido (Yaunmosir). Additionally, it is a powerful advocacy tool for acknowledging and promoting Indigenous rights. The project also provides valuable insights into the sustainable use of natural resources, fostering cooperation among people of different ethnicities on the islands for the future.

Keywords—Ainu language, database, Indigenous rights, placenames

I. INTRODUCTION

The Indigenous Ainu people have a rich tradition of naming places based on the natural resources in their territories, such as rivers, forests, and oceans. The Ainu placenames are one of the vital aspects of their cultural heritage. However, although many administrative names in northern Japan have Ainu origins, cultural and political assimilation has led to a widespread lack of understanding of their meanings.

This paper introduces a project aimed at creating a comprehensive database of Ainu place names, along with information about the natural resources they reference. This initiative is part of an urgent effort to recognize and uphold Indigenous rights. Beyond preserving the Ainu language and its place names, the project is essential for revitalizing and maintaining the practical significance of the Ainu territories.

II. THE CURRENT SITUATION OF THE INDIGENOUS RIGHTS OF THE AINU PEOPLE

In Japan, the Indigenous rights of the Ainu people have long been overlooked, despite the Japanese government officially recognizing them as Indigenous in 2008. One of their most essential rights, hunting, remains unrecognized mainly under current Japanese civil law. In 2019, an Ainu elder hunted salmon, or *kamuy-cep* [god-fish], in his local river, *Mo-pet* [quiet-river], for ritual purposes but was stopped by the police. Undeterred, he continued and caught around sixty salmon and other fish, which were subsequently seized and examined by the authorities [1].

Under the 2005 Inland Waters Fisheries Adjustment Regulations in Hokkaido, fishing is allowed only for traditional ceremonies and the preservation of fishing techniques. However, the government interpreted this regulation to mean that traditional daily fishing could be considered poaching if no formal application was made. In

response to the government's accusations, the police raided the elder's warehouse, suspecting a violation of these regulations, and confiscated his nets and cages.

Additionally, the Raporo Ainu Nation has been actively advocating for recognizing rivers and fish as part of their Indigenous rights and has collaborated with other Indigenous groups worldwide to promote this cause [2].

As seen above, although the recognition of Indigenous rights has only recently begun in Japan, the judiciary still needs to catch up in upholding these rights, particularly in cases involving using natural resources for cultural practices.

III. CURRENT SITUATION OF THE AINU LANGUAGE

In 2010, UNESCO listed the Ainu language, along with seven other Japanese languages, as endangered in its *Atlas of the World's Languages in Danger*. The number of native Ainu speakers is now nearly extinct. Despite this, no significant measures have been taken to revitalize the language, and only local language classes, typically run by non-linguists or those without formal training in language pedagogy, are available. Nonetheless, these community-driven efforts provide the opportunity, along with radio language courses offered by STV, a local commercial broadcaster, with course materials accessible online.

This situation highlights the urgent need for coordinated action to preserve the Ainu language. In 2013, the Hokkaido government launched the "*Irankarapte* Campaign," aimed at promoting Ainu culture, and in 2020, the National Ainu Museum was opened, with a deliberate effort to feature Ainu as the primary language for announcements and signage. Although opportunities to hear Ainu words have increased, there are still no official settings where the language is spoken exclusively. The campaign focuses primarily on cultural promotion, largely neglecting language policy. Even in cultural contexts, knowledge of the Ainu language is not encouraged, with Japanese remaining the dominant language of communication.

The status of the Ainu language as an indigenous and minority language is often underestimated, diminishing the value of Ainu placenames. Although most placenames in Hokkaido originate from the Ainu language, their meanings are known to few people in Japan. Instead, Ainu placenames are often used as trivial, hard-to-read kanji quiz material, with little interest in understanding their meanings. The stereotypical image of the Ainu people as "living in harmony with nature" is frequently romanticized and tied to the ancient past. As a result, the significance of these placenames is perceived as outdated, and their meanings have been forgotten mainly due to land development.

However, as all linguists agree that "no language is

primitive,” it is essential to recognize that the Ainu people’s lifestyle, language, and cultural practices have never been primitive. The tradition of naming places is not outdated; instead, it should be actively integrated into modern life. Ainu placenames deserve legitimate recognition, offering valuable insights for guiding the sustainable use of these places in the future.

IV. PREVIOUS STUDY ON THE AINU PLACE NAMES

The first attempt to collect placenames and plot them on the map was done by a Japanese explorer named Takeshiro Matsuura [3–5]. During his extensive fieldwork and documentation at the end of the Edo era and the beginning of the Meiji era, he was guided by local Ainu people and documented the placenames for the first time in history. Following him, many Japanese folklorists and historians collected romantic stories or legends about the places for their etymological clues. They were mainly interested in romantic legends rather than the actual use of the places.

Many studies have examined the names of places used to construct romantic images of people, and they have yet to be applied practically. The only exception was the work by Mashiho Chiri [6], the first linguist from Ainu. He documented the placenames’ meaning from a geographical and cultural perspective. Chiri wrote a dictionary, particularly for researchers of placenames, with details of the cultural features and use of the places. In the period when Chiri was active, the idea of Indigenous rights was not recognized in the world, but his work can be utilized to retrieve their rights.

Therefore, it is crucial to recognize Ainu placenames as valuable information about Indigenous resources. Additionally, it is important to emphasize that this approach helps us understand the actual existence of the people who are intended to be made unseen in modern Japanese society.

V. THE AINU PLACENAMES DATABASE PROJECT

The principle of the visualization project on Indigenous rights, which aims to display how people utilize their territories, is one such process. Of course, the correct interpretation should follow the grammatical pattern, which is different from the aim of this project. Instead, multiple interpretations should be included as they may indicate the multiple values of the place.

As a part of the visualization of the Indigenous rights to utilize natural resources, the ongoing project, the Map of the Ainu Placenames Signifying Information of Natural Resources in the Indigenous Territories (MAP-SINRIT)¹ is an online database under construction. Each row includes an administrative (official) Japanese name, an Ainu name with morphological articulation, morphological slots and semantic data, translation, category of referent, and positional information.

The analysis of the placename’s procedure is as follows:

1. Choose a placename in administrative notation.
2. The reference books contain morphological analyses and “interpretations” by folklorists, which can be

ambiguous or doubtful.

3. Consult the dictionary and correct the interpretation.
4. Input the item to fill in the morphological structure slot.
5. Translate the placenames into Japanese.
6. Categorize the placename by its referent.
7. Add positional information and plot it on the map.

The previous studies often have taken steps up to 5, but this project goes further to conduct 5 through 7. Each step is explained below:

(1) Data collection

In this project, the Ainu placename list made by Hidezo Yamada [7] is mainly used since it contains various interpretations and theories by previous scholars ([3–6, 8–10]) and added considerations and comments by himself. Thus, it is relatively reliable and a good resource. It is an excellent body of data with over 3,000 placenames, which helps get insight into general morphological and semantic patterns.

(2) Interpretations

Many folklorists have given their interpretations or guesses, and their interpretations are expected to contradict each other. Even in that situation, I leave both because seeking a correct interpretation is not the purpose, but picking up the ecological meaning is more important².

(3) Consultation

This process is essential since some words are made up to fit the pronunciation, sometimes called “ghost placenames.” To avoid misleading interpretations, Yamada gave a detailed explanation of each interpretation, which is a significant clue to conducting the morphological analysis of placenames.

(4) Linguistic analysis

The Ainu language is incorporated language, verbs (including adjectives), and objects are incorporated into the head noun. Most Ainu placenames also follow the head-dependent structure, and the head is usually a river (*nay* or *pet*). The nominalizing suffix *-i* frequently indicates “river.” Examples of the basic morphological structures are:

1. verb + river (the river that *is* or *does* something)
2. (personal suffix=) verb + river (the river where “we” do something)
3. object + (verb) + river (the river where the object, usually plants, animals, and fish, exists or does something).

In traditional analyses in the Ainu language, adjectives are categorized as verbs since they can be interpreted as transforming verbs: adjective *poro* ‘(being) big’ is also a verb ‘(becoming) big’. The standard word order is OSV, and nominalized objects are incorporated into the transitive verbs to make intransitive verbs. For example, in *wakka ku=ta* [water 1SG=draw], *ta* [draw] is a transitive verb, and in incorporated sentence *ku=wakka-ta* [1SG=water-draw], *wakkata* [water-draw] is an intransitive verb. Unlike Japanese, the Ainu language distinguishes between intransitive and transitive verbs, so they should be carefully distinguished in the Japanese translation. Fig. 1 is the figure

² Note that multiple names can be attached to a single place as their tradition for practical reasons. The naming is not for administration or registration but for daily use. Since the Japanese recorded for control and registration, only one name for each place was chosen to be on a map. Getting information about multiple placenames is rare, so that would be the next subject we should discuss.

¹ The database is available for viewing:

<https://docs.google.com/spreadsheets/d/1K7fuE4fFxADV38Slc4r7uz6aQVtBqtnyjWCRqKJrJBLw/edit?usp=sharing>

of the screenshot of the construction of the database using a Google Spreadsheet.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	日本語地名	アイヌ語地名	V(A)	o	AG	PER	OB	V(U)	us	V(plac)	N(plac)	Pos	日本語訳	種別	経緯	分類(参照)
109	ラチカナイ	o-chikap-un-nay			o	chikap	-	un	-		nay		河口・島・45°23'141"N	A (feature)		
110	近文	chikap-un-i				chikap	-	un	-		i		島居るところ	B (resource)		
111	近文	chikap-un-i				chikap	-	un	-		i		島居るところ	B (resource)		
112	近文	chikap-us-i (chikap-us-i?)				chikap	chikap		us				島・そこに43°47'142"N	B (resource)		
113	オチヌベ川	o-cin-un-pe				cin	-	un	-		pe		川尻・船りや・ある・も43°00'143"N	B (resource)		
114	船似駅付近	cip-turasi				cip	-	turas	-		i		船さかのぼる川	C (cultural)		
115	重蘭前 (船路前)	ciprankeusi				cip	ranke	us-			i		船をいとも下る所	C (cultural)		
116	チライカリベツ川	ciraykarpet				ciray	-	kar	-		pet		チライ・と43°06'144"N	B (resource)		
117	知床別川	ciray-pet				ciray	-				pet		イトワ・川45°22'142"N	B (resource)		
118	チヤンシマ川	cise-po-yan-tomari				cise-po		yan			tomari		家・小さな45°25'141"N	C (cultural)		
119	チュル川	cise-pitar-us-nay				cise	-	pitar	-		nay		波・激しい43°30'144"N	B (feature)		
120	グタクシユナイ川	cise-pitar-us-nay				cise	-	pitar	-		nay		波・川原・144°53'142"E	A (feature)		
121	忠類	cise-ruy-topuy				cise	-	ruy			topuy		流れ激しい東郷川	E (referent)		
122	築別	cuk-pet				cuk(cep)		(oma)	-		pet		秋 (鮭) 川	B (resource)		
123	ヌ別	ennum-nup-ka				ennum					nup	ka	峠・野・の上	D (location)		
124	佐田 (佐田町)	haptausi				hap		ta	us		i		クバコリの根をいづもと	C (cultural)		
125	香内	har-us-nay				har		us			nay		食料多し沢	C (cultural)		
126	香立 (静内町)	harutausay				haru		ta	us		nay		食料をいづもととる川	C (cultural)		
127	香立	haru-us-i				haru		us			i		食料がたたくあるとこ	C (cultural)		
128	芦別	has-pet				has					pet		渾木川	B (resource)		
129	厚別	has-pet				has					pet		渾木川	A (feature)		
130	厚別川	asi-usi-pet				hasi			us		pet		渾木・多く42°53'141"N	B (resource)		
131	伊奈	hat-sam				hat		sam			(oeti)		伊奈多し川	B (resource)		

Fig. 1. Screenshot of the database.

Following is the appendix for each slot.

Table 1. Appendix of the morphological slots of the database

Column Name	Description
A. Japanese name	Administrative (official) placenames
B. Ainu name	Morphological description
C. si-/po-	Prefixes that indicate the main stem or tributary of a river (si- [main-] / po- [child-])
D. o-/e-/ko-/u-	applicative prefixes
E. AGT to obj.	Agent of the action against the object
F. AGT(PER=) to obj.	Personal pronoun who does the action (a=/ci= 'we')
G. PAT (obj.)	Entity at the place or the point where river movement takes place
H. V(AGT/PER)	Verb that the agent (entity or people) does in the place
I. us	Verb that indicates multiple entities or habitual actions added to the main verb
J. V(place)	Fictive motion by the place (mainly rivers) or attributive adjectives to the place
K. N(place)	Head noun that donates the kind of place
L. Pos. N	Possessive case noun indicating the belonging relations to the place and other known places

The first slot for noun phrases is filled with prefixes to indicate that the river is the mainstream or the branch. The second prefix denotes a locational object: *o-* 'bottom, river mouth', *e-* 'head, headwaters', *ko-* 'there, at the place', and *u-* 'each other'. The third slot is for the agent, such as *cip* 'boat' in *cip-turas-i* [boat-go-up-thing(river)] 'the river where boats go up'. The fourth slot is for pronoun prefixes, the subject of the verb: inclusive form *a=/an=* 'we (including hearers)' and exclusive form *ci=* 'we (speakers only)' forms are used. The fifth is the patient of the action by both the agent and the place itself: *heroki* 'herring' in *heroki-kar-us-i* [herring-catch-often do-place] 'the seaside where (we) catch herring' is the patient of the transitive verb to catch. Also, *ican* 'spawning ground of fish' in *ican-kor-pet* [spawning ground-have-river] 'the river which has the spawning ground' is the patient of the transitive verb 'to have'. The sixth slot is for verbs of the agent, sometimes together with particle *us* in the seventh slot, as in *wakka-ta-us-i* 'the river where we often draw water.' The eighth slot holds verbs of the place as the agent, such as *kor* 'have' in *ican-kor-pet*. Also, it includes adjectives of the place, such as *moyre* 'slow' in *moyre-nay* [slow-river] 'the river that flows slowly'. The ninth slot contains the head noun, which denotes the type of place (river, field, mountain, and so on).

Occasionally, the nominalizing affix *-i* is entered. In the last slot, a noun that expresses a relative location goes in, such as *put(u)* 'mouth (of)' in *pet-putu* [river-mouth], *kes* 'edge' in *pira-kes* [cliff-edge].

(5) Retranslation

Translation into Japanese (shown in column M) or other languages should have been more consistent between previous studies, especially regarding a mixture of old and new wordings. The database does not necessarily stick to conventional translations but prioritizes clarity and consistency. In particular, transitive and intransitive verbs should be clearly distinguished.

(6) Categorization

Shown in column P, categories are based on what value is used to indicate the placename, based on the categories provided by Inoue [11], which classifies the Ainu placenames into five categories according to their referent as A) Appearance, B) Resources C) Cultural, D) Location and E) Referential.

Each category is explained with some examples below.

A) Appearance: This category refers to a place's physical appearance and various factors such as size, color, smell, and natural features. For example, *hure-nay* [red-river] could refer to a river with a red appearance.

B) Resources: The presence of animals and plants can be used to describe a place. For example, *cep-us-i* [fish-inhabit-place] refers to a place with many fish, indicating the presence of fish and eventually the "fish-ability" there.

C) Cultural: Placenames can be named after cultural elements, such as dipping tree bark in water, places with artifacts such as clotheslines, and places based on folklore. For example, *ci=oro-pet* [1PL=barkdip-river] could refer to a river where they dip the bark of lobed elm. This category can be analyzed by looking at how habitual behavior and experience describe the place.

D) Location: A place is described using locative nouns attached. For example, *taor-kes* [riverbank-edge] indicates the edge of the riverbank.

E) Referential: A place can be named by referring another placename. For example, *pon-Satporopet* [small-Sapporo River] could refer to a smaller branch of the Sapporo River.

(7) Plotting

Finally, by adding latitude and longitude information in columns N and O, the data can be loaded directly into My Maps provided by Google (see Fig. 2), which will plot them on the map in a geocentric manner. In this way, the location indicated by the placenames and their ecological values can be visualized.

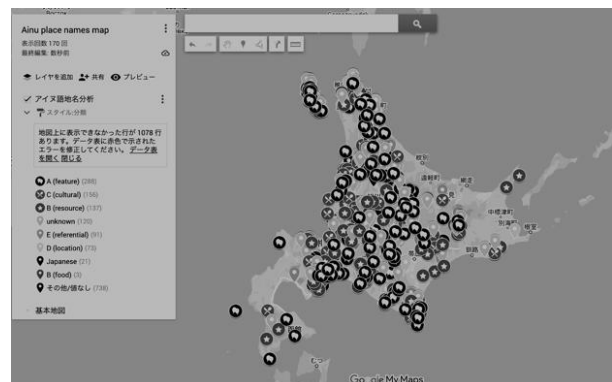


Fig. 2. Plotted place names with definite information.

VI. DISCUSSION

With the database format, the missing slot is evident, and the possible items such as personal prefix, agent, and object. When in doubt about interpreting a placename, it is easier to choose the morphologically correct one. Also, a noticeable pattern of placenames indicates natural resources on the map. In particular, Category B is subcategorized into plants (trees, herbs, ...) and hunting animals (deer, bear, fish, ...), so biologists might notice the distribution of animals and the naming pattern of the places.

Additionally, Inoue [11] analyzes the Ainu placenames within semantic framework from the ecological perspective, namely Ecological Semantics [12]. According to the analysis, adjectives reveal “frames of action” within which the denoted object is situated. In regard of Category A, for instance, adjective such as *hure* ‘red’ in *hure-nay* [red-stream] does not just refer to the redness but highlights specific frames of action, such as “un-drink-ability” or “pass-through-ability,” which are ecological implications, such as the water being unsuitable for drinking due to high mineral content or being characteristic of wetlands. In this way, the Ainu placenames highlight ecological information.

Plotting this ecologically important information of actionability may be useful in identifying unseen areas of life, or *iwor*, because for a local Ainu group, performing daily activities was strictly limited to *iwor*, because no deviations from it were performed. Thus, the plotting may be essential when discussing the legal existence of indigenous groups.

VII. CONCLUSION

This ongoing project provides insight into both politically and ecologically sustainable living practices on the northern islands of Japan. The ecological perspective also supports the claim that descriptions of places hold valid ecological value for local groups of each region, providing evidence of Indigenous activities. This project will also expand to include placenames on Sakhalin Island in different indigenous languages (Sakhalin Ainu, Nivkh, and Uilta) to reflect diverse land usage and cultural ways of life to support advocating their indigenous rights.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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REFERENCES

- [1] Asia Pacific Foundation of Canada. (September 2019). Indigenous people of Japan fought for rights in the salmon case. [Online]. Available: <https://www.asiapacific.ca/asia-watch/indigenous-people-japan-fight-rights-salmon-case>
- [2] M. Sashima. (March 2022). Raporo Ainu Nation’s lawsuit over Indigenous fishing rights. [Online]. Available: <http://shimingaikou.org/?latest=raporo-ainu-nations-lawsuit-over-indigenous-fishing-rights-statement-of-opinion-of-mr-masaki-sashima-revised-on-16-march-2022>
- [3] T. Matsuura, S. Takakura (ed.). *A Diary of Takeshiro’s Voyage* [Japanese]. Sapporo: Hokkaido Shuppan Kikaku Center, 1856/1978.
- [4] T. Matsuura, S. Takakura (ed.). *A Diary of Geographical Explorations in Eastern and Western Ezo in the Year of Fire-Younger Brother-Snake* [in Japanese], Sapporo: Hokkaido Shuppan Kikaku Center, 1857/1982.
- [5] T. Matsuura, S. Takakura (ed.). *A Diary of Geographical Explorations in Eastern and Western Ezo in the Year of Earth-Elder Brother-Horse* [in Japanese], Sapporo: Hokkaido Shuppan Kikaku Center.
- [6] M. Chiri, *An Introduction to the Ainu Language: Especially for the Researchers on Place-Names* [in Japanese], Sapporo: Hokkaido Shuppan Kikaku Center, 1956/1985.
- [7] H. Yamada, *Studies on Ainu Placenames: Collected Works of Shuzo Yamada, Additional Volume* [in Japanese], Tokyo: Sofukan. 1994/2000.
- [8] Japan National Railways Sapporo Regional Office (ed.). *Origins of Hokkaido Station Names* [in Japanese], Japan National Railways Sapporo Regional Office, 1951.
- [9] H. Nagata, *The Ainu Geographical Dictionary* [in Japanese], Tokyo: Kokusho Kankokai, 1901.
- [10] G. Sarashina. *The Ainu Geographical Dictionary: The Origin of Hokkaido Placenames* [in Japanese], Sapporo: Kita Shobo, 1966.
- [11] T. Inoue, “An analysis of the Ainu placenames based on Ecological Semantics [in Japanese],” *Hokkaido Gengo Bunka Kenkyuu*, vol. 20, no. 2, pp. pp. 1–39.
- [12] T. Inoue, “Toward an ecological model of language: from cognitive linguistics to ecological semantics,” *Language Sciences*, vol. 100, pp. 1–17, Article 101582, 2023.

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