

Tracking basic Ainu vocabulary: Updates and changes of geographical distributions

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Abstract: This paper provides the geographical distributions and updates of Hattori and Chiri (1960), as well as the preliminary data. The basic vocabulary of the Ainu dialects collected by Hattori and Chiri (1960) is the most significant vis-à-vis Ainu dialectology. The National Ainu Museum houses the preliminary vocabulary list of Hattori and Chiri (1960). In this study, we investigated the differentiation between the published version of Hattori and Chiri (1960) and the preliminary data. The results of this study show that the dialects on dialectal boundaries often vary between the two sets of data. This not only suggests that elicitation in linguistic fieldwork has occurred but also argues that it is necessary to reconsider the use and treatment of existing materials, such as the data of Hattori and Chiri (1960).

Keywords: Basic vocabulary, Ainu, Elicitation, Dialectal boundary

1. Introduction

This study aims to track the Ainu 200-basic word list in Hattori and Chiri (1960), the most significant work on the Ainu dialects. Before our discussion, we will outline the Ainu language and dialects and their study.

1.1. Ainu language and dialects

The Ainu language is a language isolate and is typologically different from Japanese and other Northeast Asian languages (Bugueva 2022). The major subgrouping of the Ainu language into the three groups of the Sakhalin, Hokkaido, and northern Kuril dialects is generally accepted in previous studies (Hattori and Chiri 1960, Asai 1974, Tamura 2000, Nakagawa and Fukazawa 2022). The Hokkaido dialect can be grouped into eastern and western dialects. The southern Kuril dialect can be involved in the eastern Hokkaido dialect (Hayashi 1973 [1940]). The dialects in and around Saru and

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Chitose in the western Hokkaido area often show special patterns in vocabulary, including functional words, which may be similar to those of the Sakhalin dialect. In this study, we refer to them as the dialects of Central Hokkaido. In addition to this, Hattori and Chiri (1960) and Asai (1974) suggested the minor subgrouping of the northernmost (southernmost) dialect of Sōya (Samani) in Hokkaido.

1.2. The study of the Ainu dialects

Hattori, Chiri, and their collaborators conducted crucial research on the Ainu dialects from 1955 to 1956. In the introduction of Hattori and Chiri (1960: 307), Hattori reported that some informants were the last (native) speakers of the Ainu dialect. The speakers were very old. Some could speak the Ainu language fluently, whereas others knew only a few words. Hattori and Chiri investigated the Ainu dialects of Hokkaido and Sakhalin, all in Hokkaido. Because the Soviet Union occupied the southern Sakhalin region at that time, the informants of the Sakhalin dialects lived in Hokkaido as “repatriates.” Hattori and Chiri’s (1960) study provided the data of the 200-basic word list, and Hattori (1964) edited a dictionary of the Ainu dialects.

Following Hattori and Chiri’s (1960) works, Asai (1974) attempted to perform a cluster analysis of the Ainu dialects. To the data of Hattori and Chiri’s list, Asai (1974) added the Chitose (Hokkaido) dialect through his fieldwork and the Kuril dialects from written materials (Torii 1903, Murayama 1971, Pinart 1872). He also modified Hattori and Chiri’s (1960) data on the Asahikawa, Obihiro, and Kushiro (Hokkaido) dialects. Asai (1974) proposed the “major division” between Hokkaido, Sakhalin, and the Kuril Islands in the cluster analysis and scientifically established the dialectal groups of Ainu. A recent study by Ono and Fukazawa (2022) partly revealed how Asai (1974) treated the data of Hattori and Chiri (1960), although this was not included in his paper.

2. Materials and Methods

In this section, we will overview the materials and methods of this study.

2.1. Materials: The Ainu dialect dataset (Hattori and Chiri 1960)

The data of the Ainu dialects in Hattori and Chiri (1960) consist of the following investigations: In April 1955, Hattori and Chiri investigated the Ainu dialects, and in the summer of 1955, Hattori gathered data on one Hokkaido and three Sakhalin dialects, while his collaborators researched some Hokkaido dialects. In addition, Hattori and his collaborators surveyed the dialects again in the summer of 1956 for a dictionary of the Ainu dialects. In September 1956, Hattori added the investigation of a Sakhalin dialect.

Figure 1 shows the geographical points of the 19 Ainu dialects in Hattori and Chiri's (1960) dataset: 13 dialects in Hokkaido and 6 from Sakhalin. Table 1 presents the information on the investigators.



Figure 1: Geographical points of the Ainu dialects in Hattori and Chiri (1960)

Table 1: Investigators of the Ainu dialect and geographical points (Hattori and Chiri 1960)

Point	Dialect	April 1955	Summer 1955	Summer 1956	September 1956
1	Yakumo	Hattori and Chiri (Date: 30)	Kitamura	Kitamura ¹	
2	Oshamambe	Hattori and Chiri (Date: 30)			
3	Horobetsu	Hattori and Chiri ² (Date: 29)			
4	Biratori, Fukumitsu	Hattori and Chiri (Date: 28)	Fukuda	Fukuda	
5	Nukibetsu		Hattori		
6	Niikappu (Ukegoi)	Hattori and Chiri (Date: 28)			
7	Samani	Hattori and Chiri (Date: 26, 27)			
8	Obihiro	Hattori and Chiri (Date: 24)		Fukuda	
9	Kushiro	Hattori and Chiri (Date: 23)			

¹ Kitamura investigated again the Yakumo dialect in February and March 1957 (Hattori and Chiri 1960).

² Later, Chiri investigated the Horobetsu dialect again (Hattori and Chiri 1960).

10	Bihoro	Hattori and Chiri (Date: 22)	Kitamura ³		
11	Asahikawa	Hattori and Chiri (Date: 19, 20)		Yamamoto	
12	Nayoro	Hattori and Chiri (Date: 19)		Kimura	
13	Sōya	Hattori and Chiri (Date: 13, 14)	Hattori	Mineya	
14	Ochiho	Hattori and Chiri (Date: 16)			
15-1	Tarantomari	Hattori and Chiri (Date: 15-18)			
15-2	Tarantomari	Hattori and Chiri (Date: 15-18)			
16	Maoka		Hattori		
17	Shiraura				Hattori
18	Raichishika		Hattori	Hattori	
19	Nairo		Hattori		
		Preliminary data			

The National Ainu Museum housed the carbon-copied material of the Ainu dialects, same as those used in the investigation of April 1955. Presumably, Chiri wrote and owned this carbon-copied version, and he gave the original one to Hattori. The number of dialects in the carbon-copied material is less than that in Hattori and Chiri (1960), while the two speakers' vocabularies of the Tarantomari dialect are recorded separately: Mr. Nishizaki's vocabulary is 15-1, and Mr. Kawamura's vocabulary is 15-2 as in Table 1. Hattori and Chiri's (1960) paper indicates the data of each speaker together as one Tarantomari dialect. In this study, the carbon-copied material of the National Ainu Museum is referred to as the preliminary material or preliminary data.

Hattori and Chiri (1960) and the preliminary data arranged a list of 200 basic word items from Swadesh word lists. The first 100 items are the same as in Swadesh's later 100-word list, although the second half includes several different words from the remaining 107 words in Swadesh's original 200-word list (Fukazawa 2017, 2018, Nakagawa and Fukazawa 2022). Thereafter, Hattori (1964) edited a dictionary of the Ainu dialects, the data of which were based on the field investigations of 1955–1956 by Hattori, Chiri, and some collaborators, as mentioned above.

2.2. Methods: USED or/and UNDERSTOOD word forms

In the next section (Section 3), we will map each vocabulary item listed in Hattori and Chiri (1960) and the preliminary material and compare their geographic distribution.

³ Later, Tamura investigated the Bihoro dialect in the winter of 1956–1957 (Hattori and Chiri 1960).

Here, we would like to introduce the distinction between USED and UNDERSTOOD word forms (Tokugawa 1966, Shibata 1969).

- USED word forms: The word forms “USED” for the speaker to express the meaning of the item.
- UNDERSTOOD word forms: The word forms, which are “UNDERSTOOD” but (may) not be used for the speaker to express the meaning of the item.

Shibata (1969) suggests that in practice, investigators cannot obtain UNDERSTOOD word forms in only the first survey because they cannot ask about the same survey item from the perspectives of both the USED and UNDERSTOOD word forms. If they know the likely UNDERSTOOD word form in advance, they will ask for it separately from the USED word form. However, in principle, the first survey should be conducted to determine the geographical distribution of the word form. The second survey should include the UNDERSTOOD word form as an entry of the survey form (Shibata 1969: 42).

According to Tokugawa (1966), the USED and UNDERSTOOD word forms are distinctive as answers to the type of questions. On the one hand, USED word forms appear in response to the WH question: “What is this item called?” — “The word form *X-1*.” On the other hand, UNDERSTOOD word forms appear in answer to the Yes-No question: “Is the word form *X-2* called for this item?” — “Yes.” Although USED word forms are theoretically part of UNDERSTOOD word forms, let us differentiate them for simplicity. Here, *X-1* is a USED word form and *X-2* is an UNDERSTOOD word form.

Thus, we will suggest that preliminary data of Hattori and Chiri’s first survey can identify the USED word forms. We will also interpret the added word forms in Hattori and Chiri (1960) as the UNDERSTOOD word forms against the USED word forms. This article will unify the word phonological notations and accent markers in these materials with phonemic forms between slashes //.

3. Geographical distributions

In this section, we compare the geographical distribution of the word forms found in the preliminary data and the Hattori and Chiri’s (1960) data. In the following subsections, we will show the differences between the two sources at the well-known boundaries of the Ainu dialects since the UNDERSTOOD word forms in one dialect group are often pervasive to/from another.

3.1. Boundary between Hokkaido and Sakhalin dialects

Here, we will observe the northern Hokkaido dialects of Nayoro and Sōya at the boundary between Hokkaido and Sakhalin.

3.1.1. Sakhalin > Hokkaido and Sakhalin

The older form for ‘tongue’ is considered to be the same form /aw/ as the Sakhalin form (Fukazawa 2017). Figure 2 shows the maps for ‘tongue.’ In the preliminary data, the Nayoro dialect has the same form as the Sakhalin dialects, /aw/, but in Hattori and Chiri (1960), the other Hokkaido form, /parunpe/, was also collected. Table 2 shows the other items in the same Sakhalin > Hokkaido and Sakhalin type as the item of ‘tongue.’

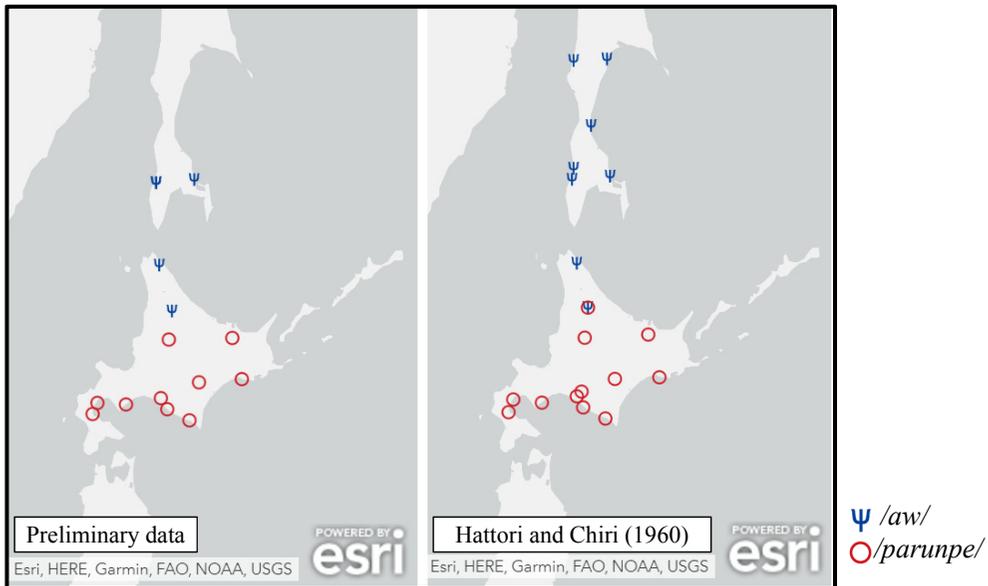


Figure 2: Maps for ‘tongue’

Table 2: Sakhalin > Hokkaido and Sakhalin

Word item	Dialect	Preliminary data	Hattori and Chiri (1960)
what (No. 7)	Sōya	<i>hemáta /hemata/</i>	<i>hemáta /hemata/ nép /nep/</i>
tongue (No. 44)	Nayoro	<i>'aw /aw/</i>	<i>'áv /aw/ parúnpe /parunpe/</i>
smoke (No. 81)	Sōya	<i>pa /pa/</i>	<i>pa /pa/ sipúya /sipuya/</i>
ice (No. 148)	Nayoro	<i>rup /rup/</i>	<i>rúp /rup/ kónru /konru/</i>
pull (No. 174)	Nayoro	<i>'ehékem /ehkem/</i>	<i>'etáye /etaye/ 'ehékem /ehkem/</i>
push (No. 175)	Sōya	<i>'opítuye /opituye/</i>	<i>'opítuye /opituye/ 'e'áciw /eaciw/</i>

3.1.2. Hokkaido > Hokkaido and Sakhalin

The geographical distributions of ‘fire’ is shown in Figure 3. The Sōya dialect has the same form as the other Hokkaido dialects, /ape/, in the preliminary data, but the Sakhalin form, /unci/, was also collected in Hattori and Chiri (1960). Table 3 shows the other items in the same Hokkaido > Hokkaido and Sakhalin type as the item of ‘fire.’

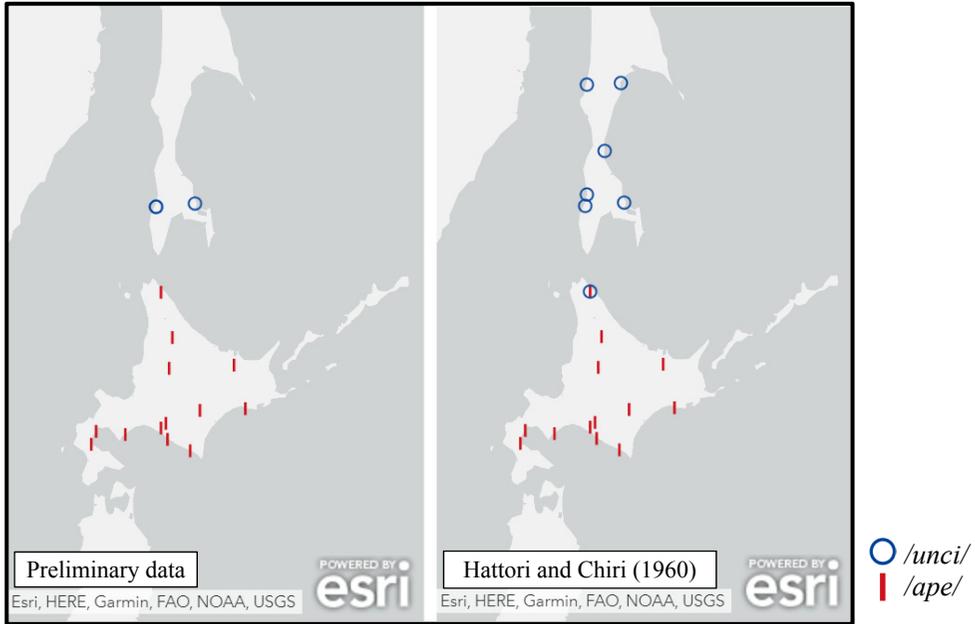


Figure 3: Maps for ‘fire’

Table 3: Hokkaido > Hokkaido and Sakhalin

Word item	Dialect	Preliminary data	Hattori and Chiri (1960)
root (No. 26)	Sōya	<i>sinrit /sinrit/</i>	<i>sinrit /sinrit/ cinkew /cinkew/</i>
fire (No. 82)	Sōya	<i>'apé /ape/</i>	<i>'apé /ape/ 'unci /unci/</i>
lip (No. 130)	Nayoro	<i>páttoy /patoy/</i>	<i>pápus /papus/ cápus /capus/ páttoy /patoy/</i>

3.1.3. Sakhalin > (Central) Hokkaido

In the preliminary data of the item of ‘head,’ the Sōya dialect has the same form as the Sakhalin dialects, /sapa/, but in Hattori and Chiri (1960), the (Central) Hokkaido form, /pake/, was only recorded, as shown in Figure 4. In the subsequent dictionary, Hattori (1964) recorded both forms; therefore, Hattori and Chiri (1960) would miss the form of /sapa/. The item of ‘bone’ and ‘river’ in Table 4 shows the same Sakhalin > (Central) Hokkaido type. However, because the later dictionary of Hattori (1964) also collected

only the (Central) Hokkaido form, the Sakhalin form of ‘bone’ and ‘river’ in the preliminary data may only be mistaken in the recording (See also Section 4.1).

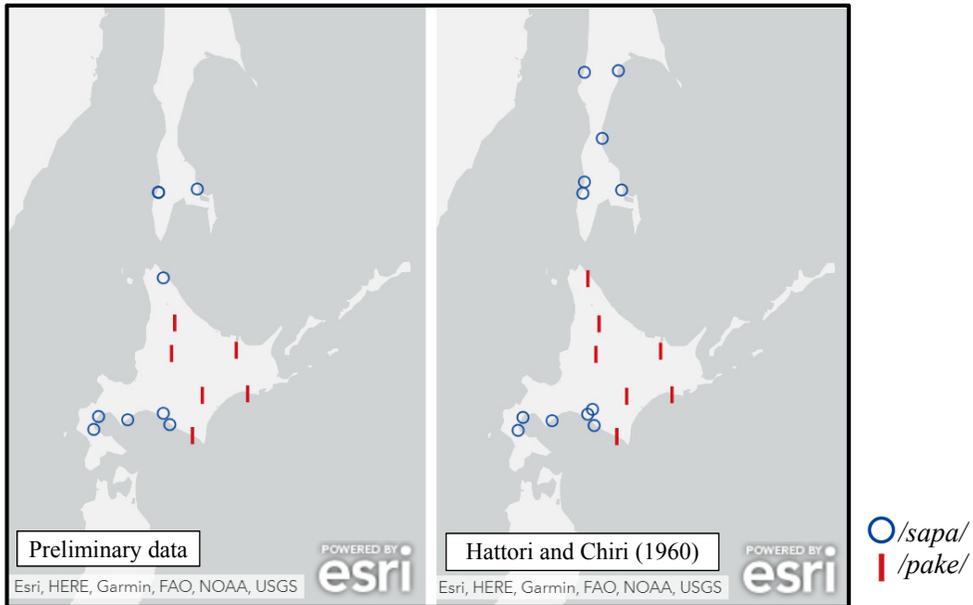


Figure 4: Maps for ‘head’

Table 4: Sakhalin > (Central) Hokkaido

Word item	Dialect	Preliminary data	Hattori and Chiri (1960)
bone (No. 31)	Sōya	<i>poni /poni/</i>	<i>poné /pone/</i>
head (No. 38)	Sōya	<i>sapá /sapa/</i>	<i>paké /pake/</i>
river (No. 121)	Sōya	<i>nay /nay/</i>	<i>pét /pet/</i>

3.2. Boundary between the Southwestern and Central dialects of Hokkaido

Here, we will observe the southwestern Hokkaido dialects of Yakumo, Oshamambe, and Horobetsu at the boundary between the southwestern and central dialects of Hokkaido.

3.2.1. Central Hokkaido > Central and Southwestern Hokkaido

In the preliminary data of the item of ‘fish,’ the Horobetsu dialect has the same form as the Central Hokkaido dialects, /cep/. In Hattori and Chiri (1960), the southwestern Hokkaido forms of Yakumo and Oshamambe, /ciep⁴, was also collected in Horobetsu, as shown in Figure 5. The item of ‘all’ in Table 5 shows the same type as the item of ‘fish.’

⁴ The form of /ciep/ and /cep/ for ‘fish’ can be analyzed as *c(i)-e-p* 1PL.A-eat-thing ‘Lit. the thing which we eat.’

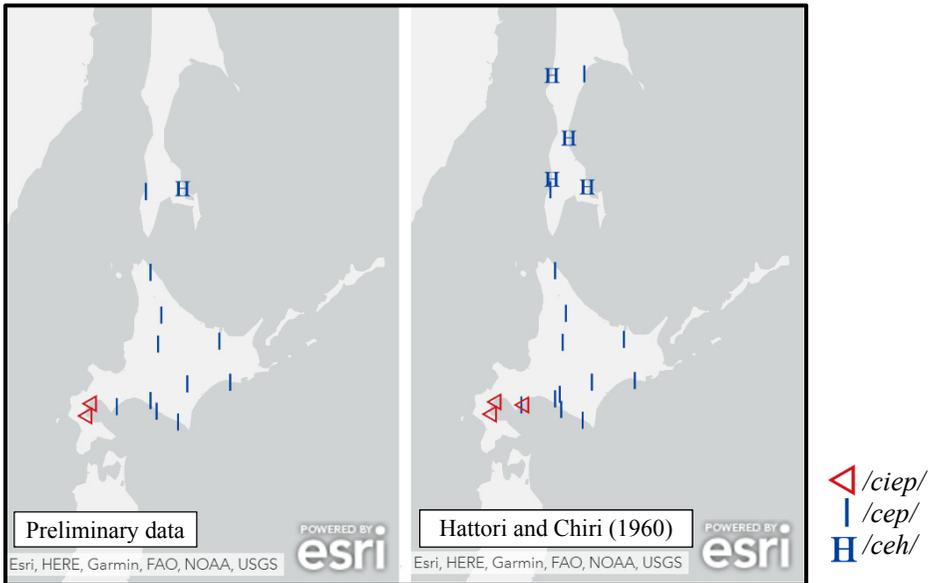


Figure 5: Maps for ‘fish’

Table 5: Central Hokkaido > Central and Southwestern Hokkaido

Word item	Dialect	Preliminary data	Hattori and Chiri (1960)
all (No. 9)	Yakumo	<i>'opitta /opitta/</i>	<i>'opitta /opitta/ 'epitta /epitta/</i>
fish (No. 19)	Horobetsu	<i>cep /cep/</i>	<i>cép /cep/ ci'ép /ciep/</i>

3.2.2. Southwestern Hokkaido > Central Hokkaido

In the preliminary data, the Yakumo and Oshamambe dialects have the original form for ‘three,’ */reppis/*, as a form of southwestern dialects. However, in Hattori and Chiri (1960), the same form as the other Hokkaido form, */rep/*, was also collected in these dialects, as shown in Figure 6. This type does not exist for the other items, as shown in Table 6.

Table 6: Western Hokkaido > Central Hokkaido

Word item	Dialect	Preliminary data	Hattori and Chiri (1960)
three (No. 110)	Yakumo, Oshamanbe	<i>réppis /reppis/</i>	<i>rép /rep/</i>

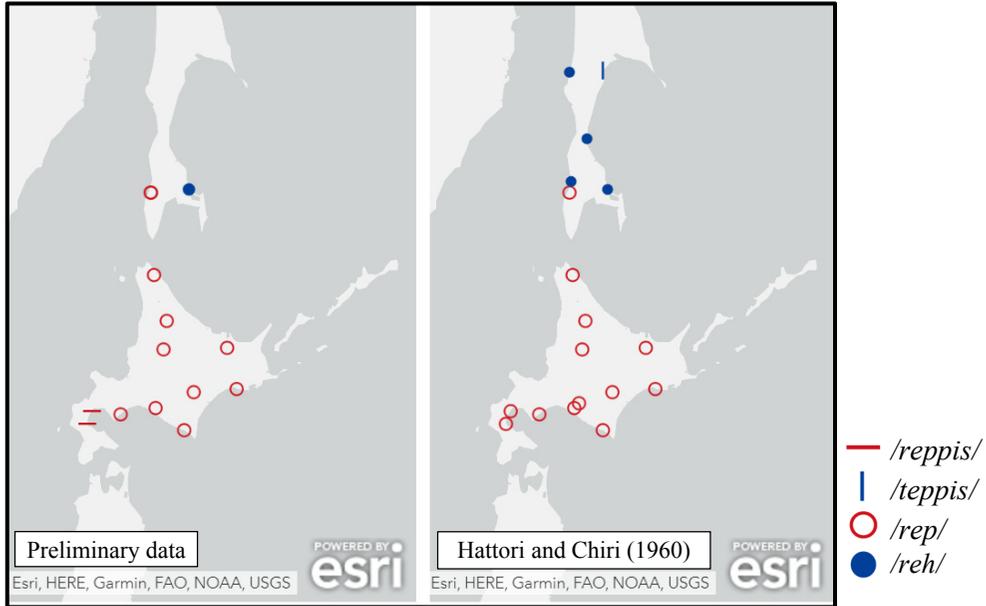


Figure 6: Maps for ‘three’

3.3. Contact pattern: Tarantomari < Tarantomari and Maoka

Here, we will observe another contact pattern of geographical distributions between the Tarantomari and Maoka dialects. The preliminary data show the word form for ‘freeze’ /*rupkoro*/ in Tarantomari, while Hattori and Chiri (1960) also show the form /*rupus*/, which is the same as the Maoka dialect (see Figure 7 and Table 7). Table 7 shows other similar patterns as the item of ‘freeze.’ Note that the preliminary data have separate lists for the two Tarantomari speakers.

Table 7: Tarantomari < Tarantomari and Maoka

Word item	Dialect ⁵	Preliminary data	Hattori and Chiri (1960)
all (No. 9)	Tarantomari (N)	<i>'anpáhno</i> /anpahno/	<i>'anpahno</i> /anpahno/
	Tarantomari (K)	<i>'ánpahno</i> /anpahno/	<i>'imiki</i> /imiki/
many (No. 10)	Tarantomari (N)	<i>'okáyno</i> /okayno/	<i>'okayno</i> /okayno/
	Tarantomari (K)	<i>'okáy</i> /okay/	<i>renkayne</i> /renkayne/ <i>poronno</i> /poronno/
freeze (No. 150)	Tarantomari (N)	<i>rúpkoró</i> /rupkoro/	<i>rupkoro</i> /rupkoro/
	Tarantomari (K)	<i>rúpkoró</i> /rupkoro/	<i>rupus</i> /rupus/

⁵ The speaker of Tarantomari (N) is Mr. Nishizaki and Tarantomari (K) is Mr. Kawamura.

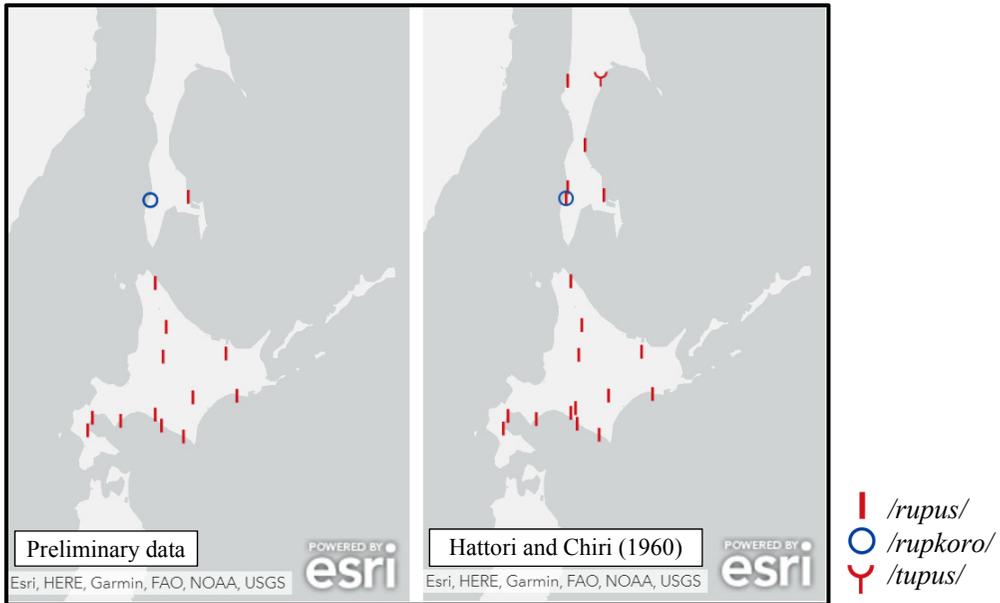


Figure 7: Maps for ‘freeze’

4. Discussion

This section will examine the patterns of differences between the preliminary data and Hattori and Chiri (1960), in addition to how these data can contribute to the historical interpretations of the geographical distribution.

4.1. Updates and changes from the preliminary data

The updated and changed patterns from the preliminary data to Hattori and Chiri (1960) are as follows:

- a) Improvement from confusion between transitive and intransitive verbs: ‘say (No. 71)’ and ‘fear (No. 191)’
- b) Improvement from affixation form: ‘hear (No. 58)’ and ‘all (No. 9)’
- c) Removal of unnecessary verbs: ‘down (No. 194)’
- d) Unification of linguistic plurality: ‘fly (No. 64)’
- e) Corrections of phonological notations: ‘dirty (No. 164)’
- f) Other

However, this situation is more complicated for items such as body parts. For example, in the vocabulary item of ‘foot (No. 46),’ each dialect refers to different parts

of feet and legs, and Hattori and Chiri (1960) also could not correct this confusion until an Ainu dialect dictionary was supplied in Hattori (1964). In addition, when the word forms of the preliminary data were lost and changed in Hattori and Chiri (1960), as shown in Table 8, Hattori (1964) may later have provided the key to treating them. If Hattori’s (1964) data match the preliminary data, Hattori and Chiri (1960) would forget to collect the word form in the preliminary data. If Hattori’s (1964) data match Hattori and Chiri’s (1960) data, we would consider the preliminary data to be mistaken, or Hattori (1964) and Hattori and Chiri (1960) forgot to collect the word form in the preliminary data.

Table 8: The word form /sapa/ lost in Hattori and Chiri (1960)

Word item	Dialect	Preliminary data	Hattori and Chiri (1960)	Hattori (1964)
head (No. 38)	Sōya	<i>sapá /sapa/</i>	<i>paké /pake/</i>	<i>sapá /sapa/ paké /pake/</i>

4.2. Analysis of elicitation in fieldwork

In this section, we will consider the issue of elicitation in fieldwork as an answer to the Yes-No question. The preliminary material tends to record USED word data, while Hattori and Chiri (1960) tend to record UNDERSTOOD word data. According to Tokugawa (1966), UNDERSTOOD words may be newer or older than USED words. If an UNDERSTOOD word is in a cultural center, it may be about to expand into a new region.

Hattori (1964) wrote “*parúnpe; 'awéhe*⁶” for the item of ‘tongue’ in the Soya dialect. The description indicates that *'parúnpe /parunpe/* is the UNDERSTOOD word in Nayoro (see also Figure 8). Soya and Nayoro, the boundary dialects between Hokkaido and Sakhalin, have been recognized as part of the Hokkaido dialect. However, when these dialects selected the same word form as the Sakhalin dialect in the first survey of the preliminary data, it suggested that the dialect had more Sakhalin-like dialectal features than recognized in current Ainu dialectal studies. In addition, Hattori (1964) collects */rehpis/* in the Raichishika dialect, which is of the same type as */reppis/* and */teppis/* in the preliminary data and Hattori and Chiri (1960). This */reppis/* type may be older than */rep/* and */reh/* because it is distributed in the peripheral area (See Figures 9 and 10). Figure 10 shows a superimposed map of Figure 9 for ‘three.’

⁶ The form of *awéhe* is a possessive form of *áw*.

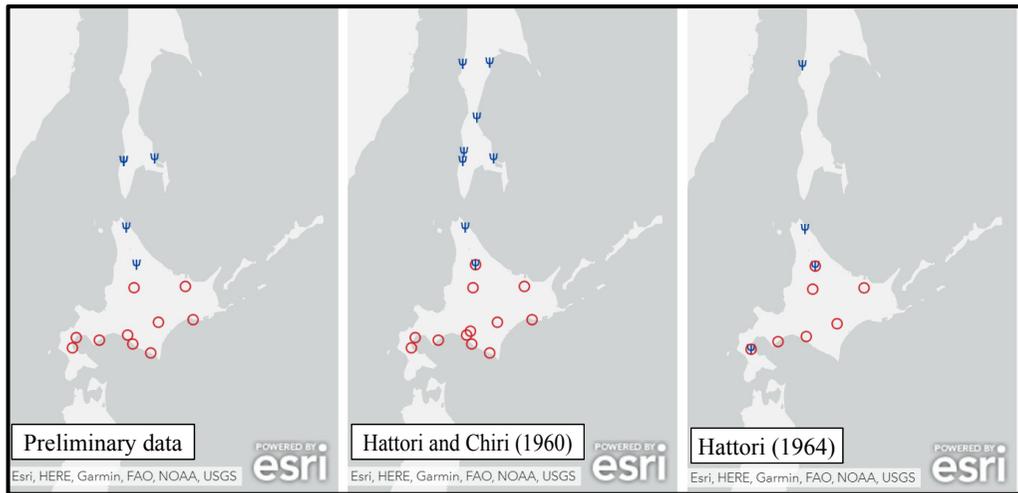


Figure 8: Maps for 'tongue'

Ψ /aw/ ○ /parunpe/

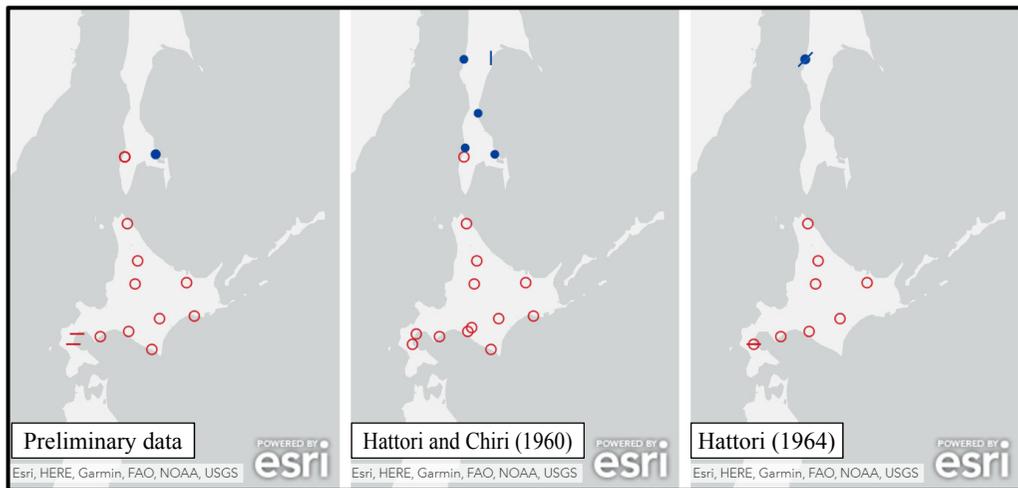


Figure 9: Maps for 'three'

— /reppis/ / /rehpis/ | /teppis/
○ /rep/ ● /reh/

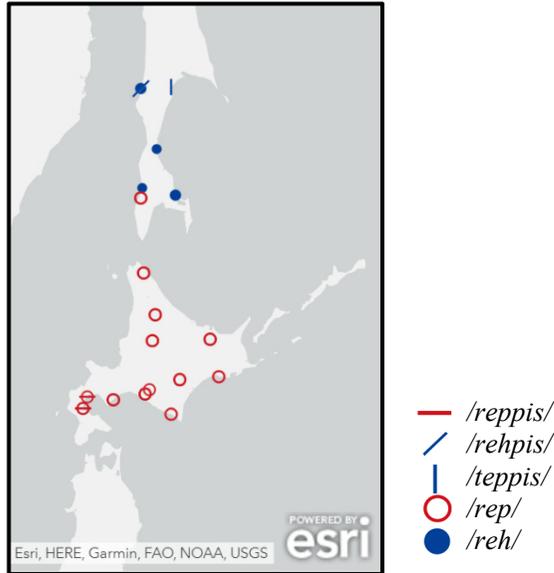


Figure 10: Superimposed map of Figure 9 for ‘three’

5. Concluding remarks

This study suggests that the elicitation data from the second survey should be considered as UNDERSTOOD word forms and distinguished from the USED word forms in the first survey. The USED and UNDERSTOOD word forms can create a historical layer in the vocabulary data of every survey. We can then further dynamically analyze the geographical distribution of each item using historical layers. This idea can be adopted not only for the Ainu language but also for other languages. A historical discussion of individual vocabulary items will be left for future research.

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