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**Materials and Methods  
of Analysis for the Study  
of the Ainu Language**  
Southern Hokkaidō and Sakhalin

Elia Dal Corso

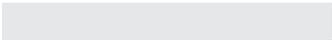


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# Materials and Methods of Analysis for the Study of the Ainu Language Southern Hokkaidō and Sakhalin Varieties

● Elia Dal Corso

student



Materials and Methods of Analysis for the Study of the Ainu Language. Southern Hokkaidō and Sakhalin Varieties  
Elia Dal Corso

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## **Explanatory Note**

This volume is intended to be a practical manual to learn the basics of the Ainu language, in its varieties of Southern Hokkaidō and Sakhalin. Thanks to its bottom-up approach and to the activities presented following a growing level of difficulty, this manual is suited for students even superficially trained in general linguistics as well as for the experienced linguist with no previous knowledge of the Ainu language. Through the selected language examples, the reader can also appreciate the regional differences of Ainu and have a glimpse into the Ainu folklore tradition.



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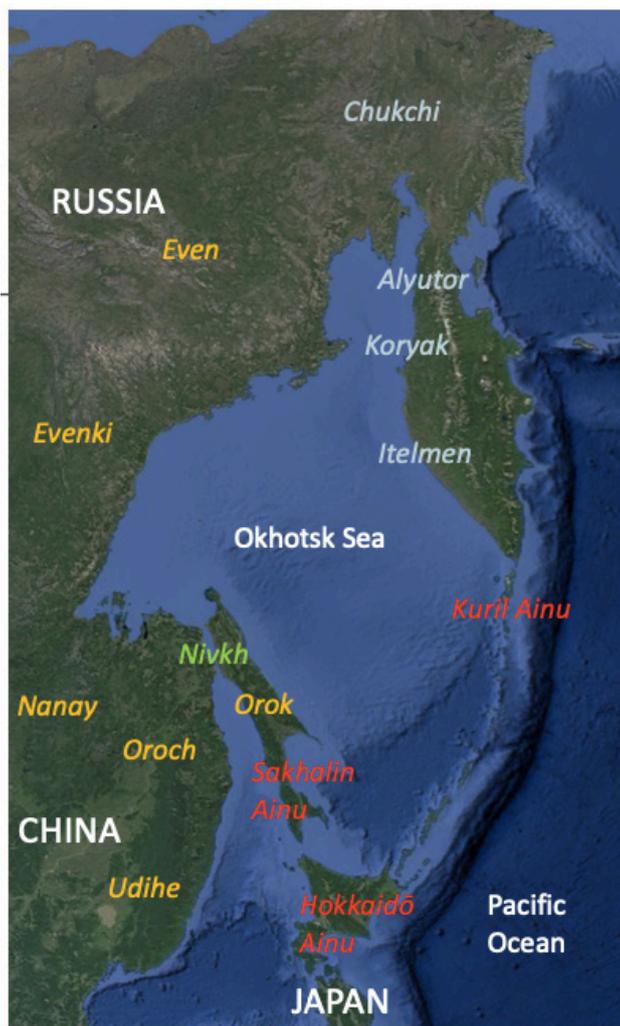


Figure 1  
Ainu and its neighbour languages

**Exercise 1**

Are the following statements prescriptive or descriptive?

(1) Some masculine nouns in Icelandic do not have the ending *-i* in the dative singular. \_\_\_\_\_

(2) The English sentence *I don't say nothing* is wrong. \_\_\_\_\_

(3) In written English one should avoid contracted verb forms such as *haven't* or *doesn't*. \_\_\_\_\_

In the English language used on social networks we see the  
(4) tendency to not use the apostrophe in contracted verb forms  
(e.g. *dont* for *don't*). \_\_\_\_\_

### 1.3 Linguistic Typology

Typology is a discipline of linguistics that studies the variation among languages, measuring its span, differences, and similarities. Typologists create 'groups' of linguistic features that bring languages together and that can be employed to make predictions about those languages.

There exist different types of typology, that refer to different areas of linguistics and are thus defined using different criteria. It follows that languages akin to each other with regards to one typology may differ with regards to another. There are two main typologies:

#### Morphological typology

- Synthesis index or "how many morphemes are there in one word?"

The answer to this question delineates a continuum at whose extremes we find isolating (or analytic) languages, with one or a few morphemes per word, and polysynthetic languages, with many morphemes per word.



Central Yup'ik (Eskimo-Aleut, USA) is an example of a polysynthetic language. The example below, which is translated into a full sentence in English, constitutes a single word in Central Yup'ik. In this word there are only two roots, one nominal (i.e. reindeer) and the other verbal (i.e. hunt), while all the other morphemes are inflectional morphemes conveying grammatical information.

*Tuntu-ssur-qatar-ni-ksaite-ngqiggte-uq.*  
reindeer-hunt-FUT-say-NEG-again-3SG.IND  
'He had not yet said again that he was going to hunt reindeer.'  
(Eliza Orr in Payne 2006, 190)

- Fusivity index or "how many functions/meanings are there *simultaneously* in one morpheme?"

The answer to this question delineates a continuum at whose extremes we find agglutinative languages, with one meaning per morpheme, and fusional languages, with many meanings per morpheme.



Japanese (Japonic, Japan) and Russian (Slavic, Russia) are examples of an agglutinative and a fusional language respectively. In Japanese, the morpheme *-saser* only conveys the grammatical information of 'causative'. In Russian, on the contrary, the single morpheme *-u* encodes three different pieces of grammatical information regarding case (accusative), gender (feminine), and number (singular).

*Mi-saser-u.*

see-CAUS-N.PST

'To make see.'

*Ja čita-ju knig-u.*

I read-1S.PRES book-ACC.F.S

'I read a book.'

## Syntactic typology

"What is the linear order of the verb and the direct object with respect to each other?"

The answer to this question distinguishes languages in two main groups: VO and OV. This syntactic order of constituents usually has systematic repercussions on the order of words within phrases and clauses within sentences.

VO languages usually have:

- prepositions
- auxiliary-verb
- main clause-relative clause
- verb-adverb
- ...

OV languages usually have:

- postpositions
- verb-auxiliary
- relative clause-main clause
- adverb-verb
- ...

### Exercise 2

#### Ainu (Ainuic/Isolate, Japan) (constructed examples)

Consider the following clauses and their translation. How much can you understand of the main characteristics of this language? What kind of observations concerning its typology can you make by looking at these examples?

<i>Seta apkas</i>	'A dog walks'	_____
<i>Seta kam e</i>	'A dog eats meat'	_____
<i>Kam k-e</i>	'I eat meat'	_____
<i>Seta ku-nukar</i>	'I see a dog'	_____
<i>Huci cise orun apkas</i>	'The old woman walks towards the house'	_____
<i>Cape ci-nukar</i>	'We see a cat'	_____
<i>Apkas-as</i>	'We walk'	_____
<i>Pon cape</i>	'The small cat'	_____
<i>Poro cise ku-nukar</i>	'I see a big house'	_____
<i>Seta pon</i>	'The dog is small'	_____
<i>Pon seta</i>	'The small dog'	_____

**Exercise 3****Nivkh (Amuric/Isolate, Russia) (constructed examples)**

Consider the following clauses and their translation. How much can you understand of the main characteristics of this language? What kind of observations concerning its typology can you make by looking at these examples?

Fill in the set with the missing translations. Then, on the basis of the morphosyntactic rules of the language you have deduced from these examples, form one grammatical and one ungrammatical sentence.

<i>nivxɣu p<sup>h</sup>rəc</i>	‘The men come’
<i>umguɣu itc</i>	‘The women speak’
<i>nivxɣu p<sup>h</sup>ref ŋəŋc</i>	‘The men look for their own house’
<i>c<sup>h</sup>aχ urɟ</i>	‘The water is good’
<i>umgu ptefin c<sup>h</sup>ai taɟ</i>	‘The woman drinks tea in my house’
<i>if pteftoχ p<sup>h</sup>rəɟ</i>	‘She comes towards my house’
<i>umgu liys ŋəŋɟ</i>	‘The woman looks for the wolf’
<i>atak q<sup>h</sup>otr k<sup>h</sup>uɟ</i>	‘Grandfather kills a bear’
<i>nivxɣu patak q<sup>h</sup>otr k<sup>h</sup>uɟəftoχ vic</i>	‘The men go to the place where my grandfather has just killed a bear’
<i>nivxɣu c<sup>h</sup>ai taɟətc</i>	‘The men drink all the tea’
<i>umgu p<sup>h</sup>reftoχ viɟ</i>	‘The bears look for water’

**Exercise 4****Yagua (Peba-Yaguan, Peru) (examples from Payne 2006, 204-5)**

On the basis of the following examples determine whether this language is of the VO or OV type and whether it is of the SV or VS type. Justify your answer. Then list your observations on the order of the other constituents – given your generalisations on syntactic typology, is this constituent order expected or not (or you can’t tell)? In the following exercise the asterisk marks ungrammatical examples.

- Sa-munaa-dee Alchíco. ‘Alchico’s placenta.’  
3SG-placenta-DIM Alchico
  - Alchíco munaadee. ‘Alchico’s placenta.’  
\*Munaadee Alchíco, \*Alchico samunaadee.
  - Samunaadee ‘His placenta.’
- Jirya munaadee. ‘This placenta.’  
\*Munaadee Jirya.
- Tinkii munaadee. ‘One placenta.’  
\*Munaadee tinkii.
- Samunaadee kúútya. ‘His placenta whispers.’
- Sakúútya Alchíco munaadee. ‘Alchico’s placenta whispers.’
- Jíryoonú súúy-anú sa-roori-myú Alchíco-níí.  
bushmaster bite-PAST 3SG-house-LOC Alchico-3SG  
‘A bushmaster (snake) bit him in Alchico’s house.’  
\*Jíryoonú sasúúyanuníí. (‘A bushmaster he bit him.’)
- Sa-súúy-anú jíryoonú Alchíco roori-myú-níí.  
3SG-bite-PAST bushmaster-3SG Alchico house-LOC-3SG  
‘A bushmaster (snake) bit him in Alchico’s house.’
- Sa-a ráá-kyu. ‘He will jump!’

3SG-FUT                      jump-POT

\*Ráákyu saꞤ, \*Saráákyu saꞤ, \*Saráákyu a.

9. Sa-niy                      suvú-tyaa                      jiñu                      munátya su-úmteꞤsá

3SG-MALF                      fear-INTS                      this                      ancestor 3SG-behind

munaa                      játiy                      sa-rꞤꞤ-ñíí.

placenta                      REL                      3SG-jump-3SG

‘This ancestor is really afraid behind the placenta that makes him jump.’

10. Ra-a                      jáꞤ-charatá                      jiyu-dáy                      koodí-vyiimú.

1SG-FUT                      fall-might                      here-DAY                      snake-inside

‘I might fall here inside a snake.’

02

# Phonemic Inventory: The Sounds of the Language

Notes

2.1 Background Information and Observation

2.2 Research

2.3 Analysis and Description

## 2.1 Background Information and Observation

Both Hokkaidō Ainu and Sakhalin Ainu (that will be abbreviated as HA and SA respectively from now on) have five vowels, represented in the latin script by *a, e, i, o, u*, and twelve consonants, represented in the latin script by *p, t, k, c, s, r, m, n, w, y, h, ʼ*. The apostrophe is used to signal the glottal stop /ʔ/, a plosive glottal voiceless consonant that consists in an obstruction of the airflow in the glottis and produces a sort of pause like when in English we exclaim *uh-oh*.

This orthography in the latin script represents the following phonemes. I refer the reader to this interactive IPA chart for sound (<http://www.ipachart.com/>) and to Ladefoged, Maddieson (1996) among others for further discussion:

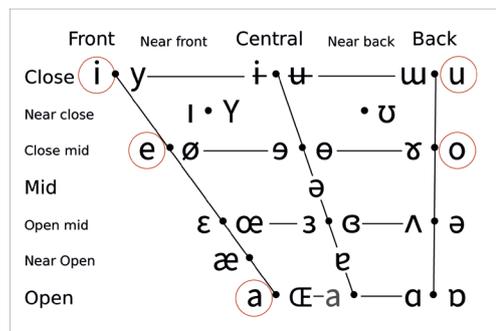
**Table 1** The Ainu orthography and phonemes

<i>a</i>	/a/	<i>p</i>	/p/
<i>e</i>	/e/	<i>t</i>	/t/
<i>i</i>	/i/	<i>k</i>	/k/
<i>o</i>	/o/	<i>c</i>	/t͡ɕ/
<i>u</i>	/u/	<i>s</i>	/s/
		<i>h</i>	/h/
		<i>r</i>	/r/
		<i>m</i>	/m/
		<i>n</i>	/n/
		<i>w</i>	/w/
		<i>y</i>	/j/
		<i>ʼ</i>	/ʔ/

The following tables show the place of Ainu vowels and consonants in the IPA charts.

**Table 2** The Ainu vowels

VOWELS



Vowels at right and left of bullets are rounded and unrounded.

CLASS TIME:  
CLASS ROOM:  
PHONE:  
EMAIL:



**Table 3** The Ainu consonants, labio-velar approximant /w/ and affricate /t͡ʃ/ not included

CONSONANTS (PULMONIC)

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill				r					ʀ		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		u		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

→ Consider this additional information...

1. Not all consonants of Ainu are allowed to occur at the end of a word. More precisely, the consonants not allowed word-finally are *c*, *h*, and the glottal stop in HA, and *p*, *t*, *k*, *c*, *r*, and the glottal stop in SA.
2. For plosive consonants there is no voiced-voiceless opposition, therefore *p*, *t*, *k* can sometimes be realised respectively as *b* [b], *d* [d], *g* [g] without compromising the comprehensibility of the word and without changing its meaning. The same happens for *c*, which may be realised as [d͡ʒ].
3. The syllable structure is identical in HA and SA. In open syllables (that is, of the V and CV types) the vowel may be lengthened and this happens especially in monosyllabic words. In orthography, lengthening is usually marked as a double vowel in SA sources but not as commonly in HA sources. For more discussion on the syllabic structure of Ainu see Shiraishi 2022.
4. Syllable-initially and especially between vowels, the glottal stop may or may not be present depending on the speaker's idiolect, or it may disappear in fast speech. For further discussion on the Ainu glottal stop see Shiraishi 1999; 2022.
5. Before /i/ the consonant *s* is realised as [ç] (e.g. *sisam* > [çi.sam]).

**Table 4** Syllable structure

HA	SA
CV	CV
CVC	CVC
V	V
VC	VC

→ Dataset 1 - Plosive consonants

Consider the following words containing the consonants *p*, *t*, and *k* (the words are within curly brackets and the consonants under scrutiny are in bold). What is the actual pronunciation of *p*, *t*, and *k* in these words? Is the pronunciation always the same or does it change? If it does change, what does the change depend on? What differences between varieties do you notice? What revisions can you make to the information you were previously given?

## Set 1.1 (Hokkaidō Ainu)

1. ...*tane tunasno a'uyna* {**kuni**} *hi neno an...*
2. ...{**tanto**} *hene ya nisatta hene ya...*
3. ...*heru* {**ipe**} *takup aki kor okaan...*
4. ...*kani suy iyosno* {**tapan**} *akor...*
5. ...*akotanu un* {**nispa**} *an kusu keraypo...*
6. ...*tanto kani* {**anak**} *tasum kur kusu...*
7. ...{**katu**} *renkayne...*
8. ...{**a'enkopisip**} *kuye rusuy korka tanto...*
9. ...*tono* {**puri**} *ne yakun neno...*
10. ...*ray wa isam* {**ponanpa**} *hi wano...*
11. ...*easir* {**yuptek**} *menoko ane kusu...*
12. ...{**ponkatkemat**} *a'eoripak wa kusu...*
13. ...{**eypakasnupa**} *kusu...*

## Set 1.2 (Sakhalin Ainu)

1. ...*'otakata* {**poro**} *yaani...*
2. ...{**siripirika**} *kusu sakiita neampe...*
3. ...*'anihi* {**kamuyutarikehe**} *naa...*
4. ...*'anunuhu* {**'inkaraha**} *neampe...*
5. ...*casca* *kanna orowa cas wa 'oman kanna cas wa* {**hosipi**}...
6. ...*ran nean tani* {**cip**} *tani 'atuykata rehta repun...*

7. ...'oman {**k**usu} neyke nean...
8. ...pateh {'ante**k**ihi} 'utah nimpa...
9. ...husko 'aynu neyke kiro {pate**k**} 'us...
10. ...cih'ohta {sapah**c**i} teh...
11. ...{mat**t**} naa korohci...
12. ...kito {ta**h**ci} 'usikehe woonekahci kusu arikihcihi...

→ Dataset 2 - The sibilant consonant s

Consider the following words containing the consonant s (the words are within curly brackets and the consonants under scrutiny are in bold). What is the actual pronunciation of s in these words? Is the pronunciation always the same or does it change? If it does change, what does the change depend on? What differences between varieties do you notice? What revisions can you make to the information you were previously given?

Set 2.1 (Hokkaidō Ainu)

1. ...tane {orus**s**e} ne yakka...
2. ...nep akor {rusu**y**} ka somo ki...
3. ...orowano {isac**i**se} orun suy karpa oasi {ku**s**}...
4. ...tanto kani anak {tasu**m**} kur kusu...
5. ...tanpe poka pirka {se**k**or} kuyaynu wa...
6. ...nen poka tono {nispa} ka {niwke**s**} pe...
7. ...hine {rew**s**i} okaan...
8. ...aonaha aunuhu cis rok {ci**s**} rok kor...
9. ...{tektak**s**a} poka e'ekar wa...
10. ...kuhenoye {siri} ne wa...
11. ...{a**s**e} aeyayetokoyki...

**Set 2.2** (Sakhalin Ainu)

1. ...*tah pahno* {**soyta**} 'an teh...
2. ...*nean* 'episkanpe ka {**'ahkas**} wa...
3. ...{**'arasuy**} *kayki nean* 'onnewrap 'uyna...
4. ...*kanna* {**niskuru**'onne} *rikinkehci kun pe he ka...*
5. ...'okayahci yayne {**sine**} *paa inuhci koh...*
6. ...{**cis**} *turano neya...*
7. ...'emuyke kehke wa cokoko wa {**'isam**}...
8. ...*neya* {**'aspe**} *koro kamuy...*
9. ...'ampene {**kesetuyram**} 'ankoro {**kesetuysiw**} 'ankoro kusu...
10. ...{**ruronsota**} 'oman manu ike...
11. ...*paye*'anihi teh {**'etaraan**}...

**2.2 Research**

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 3 - The consonants r and h*

Consider the following words containing *r* and *h* (the words are within curly brackets and the consonants under scrutiny are in bold). What is the actual pronunciation of *r* and *h* in these words? Is the pronunciation always the same or does it change? If it does change, what does the change depend on? What differences between varieties do you notice?

**Set 3.1** (Hokkaidō Ainu)

1. ...*nokanan* {**hine**} *anakne...*
2. ...{**sirkunne**} *akus ene...*
3. ...*kotan awente cis* {**tura**}...
4. ...{**uhuy**} *nicica* {**cihetarpare**} <*i*> *iyayko'okka...*

5. ...*siyamam ka* {**hetukpa**} *a* {**korka**}...
6. ...*e* {**easir**} *ukokusispa*...
7. ...*tapan pe* {**rekor**}...
8. ...{**unpirma**} *an kusu*...
9. ...*kamuy* {**renkayne**} {**ri**} *usketa okaan kusu*...
10. ...{**huci**} *utar upaskuma*...
11. ...*hemanta etoko* {**yaykar**} *kusu*...
12. ...*nis* {**kotor**} *epitta nociw kur ka*...
13. ...{**kuyaykorpore**} *hine*...
14. ...*amaketa* {**toho**} *anakne*...
15. ...*itak uturu ne wa siran* {**ruwe**} *un*...
16. ...{**sirukopukrototke**} {**siryasrototke**}...

### Set 3.2 (Sakhalin Ainu)

1. ...*siska tarayka* {**nah**} '*ayyee*...
2. ...*sine* '*orohko* {**rayki**} *teh*...
3. ...{**hekaci**} {**ihunkeh**} *nee manuu*...
4. ...*temana* '*an sampe koro* {**utar**} *ee*...
5. ...{**ahun**} *manu neya sahpemuy* '*ampa teh*...
6. ...*neya* {**supara**} {**haaciri**} *manu*...
7. ...{**husko**} '*ohta nah* '*an*...
8. ...{**tukusih**} *naa hemoy naa cuhceh naa*...

9. ...{**eoruspe**} *korohci*...
10. ...{**henke**} *tu 'Orohko rayki {teh}*...
11. ...*tu* {**mahtekur**} *teepis pateh 'an yahka*...
12. ...*'ohkayo nee* {**ruuhe'an**} *manuu*...
13. ...{**kirarehci**} *manu ike {neeroh} hekacita tani*...
14. ...{**reekoh**} *manka 'ohkayone 'okayahci*...
15. ...*ku'ani tani* {**toomuh**} *kanne ku'itah omantene tani 'uwasi*...
16. ...{**neeteh**} *'orowa cukiita {hosipihci} teh tani*...

### Examples from Other Languages

#### Italian (Romance, Italy)

What does the distribution of the sounds /p/ and /t/ in Italian tell us?

toro	/ˈtɔro/
poro	/ˈpɔro/
vista	/ˈvista/
vispa	/ˈvispa/
posto	/ˈpɔsto/
tosto	/ˈtɔsto/

In Italian, the distribution and overall the presence of the sounds /p/ and /t/ in a word cannot be **predicted** on the basis of the other sounds in that word – see the words ‘toro’ and ‘poro’ that have, besides /p/ and /t/, the same vowels and the same consonant (i.e. they are **minimal pairs**). The sounds /p/ and /t/ can appear in the same **phonetic environment**, in words with different meanings – they are therefore said to be in **contrastive distribution**. When two sounds are in contrastive distribution and their alternation causes a change in a word’s meaning then these sounds represent (**separate**) **phonemes** of that language.

#### Hupa (Athabaskan, USA) (examples from Genetti 2014, 59)

[t <sup>h</sup> a:q’]	‘three’
[tax <sup>w</sup> e:t]	‘how’
[nitaʔ]	‘your mouth’
[nit <sup>h</sup> aʔ]	‘your father’
[ʔitʃ’uw]	‘sand’
[t <sup>h</sup> a:ki’uw]	‘sweathouse’
[t <sup>h</sup> in]	‘trail’
[mimit’]	‘my belly’
[tʃ’it <sup>w</sup> uw]	‘he is crying’

As exemplified in this limited data set, in Hupa there are no minimal pairs that are differentiated by the vowels [ɪ] and [u]. If we look at the sounds occurring before *and* after [ɪ] and [u] we do not find any identical phonetic environment where they appear – they are not in contrastive distribution, but rather in **complementary distribution**. This means that in some phonetic environments we will find one sound and in others the other sound – the distribution of [ɪ] and [u] is **predictable**. From the examples above we see that [u] only occurs before a labial-velar sounds (either [ʍ] or [w]), while [ɪ] never appears in this environment. We can therefore say that [ɪ] and [u] are **allophones** (different phonetic realisations) of the same phoneme. One or the other realisation depends on the environment where the sound is found. Since [ɪ] appears in the **most varied environments** (i.e. in between all kinds of consonants) but [u] appears only before a labial-velar consonant, we can conclude that /ɪ/ is the **underlying phoneme** (i.e. the ‘original’ sound) and [u] is the realisation it takes when in presence of a labial-velar consonant.

Formally, we can write this rule we just discovered as:

$$\begin{aligned} \text{ɪ} > |\text{u}| / \_M; \_w \text{ OR } \text{ɪ} > |\text{u}| / \_C_{[\text{labial-velar}]} \\ \text{ɪ} > |\text{ɪ}| / [\text{elsewhere}] \end{aligned}$$

### Korean (Koreanic, Korea)

[hanguk]	‘Korea’
[ʃsip]	‘house’
[kiʃʰajʌk]	‘train station’

In Korean, stops at the end of a word (and generally in coda position within a syllable) are realised as unreleased. We signal the lack of audible sound with ‘̚’ in IPA.

### Tausug (Austronesian, Philippines) (examples from Soderberg, Ashley, Olson, 2012)

[sarsila]	‘genealogy’
[palman]	‘word’
[salɬaʔ]	‘simultaneously’
[parman]	‘word’
[sarɬaʔ]	‘simultaneously’
[salsila]	‘genealogy’

In Tausug, the phoneme /r/ can be realised either as [r] or as [l] in some words. These words do not change meaning when this change in pronunciation occurs. Preference for one or the other sound in this case depends on the speaker, and precisely on where the speaker lives – in the city or in a village. In this instance [r] and [l] are in **free variation**.

### Gujarati (Indo-Aryan, India) (examples from Esposito, Dowla Khan 2012)

[b̪ɑː]	‘outside’
[b̪ɑːn̪i]	‘excuse’
[d̪ɑː[ũ]	‘polluted’

In Gujarati, vowels can be pronounced with less strength, almost as breathing or whispering. This happens under the influence of particular syllable structure, tone, and other factors. A **breathy vowel** is signaled in IPA with ‘̤’.

### 2.3 Analysis and Description

Once you are finished with your analysis of the data, describe in no less than 300 words the phonetic changes that characterise *r* and *h* in Ainu citing the necessary examples from the analysed data (optionally also describe the phonetic changes occurring for the consonants taken into account in datasets 1 and 2). Try to comment on the following in your description.

- From what premises did your analysis start?
- What have the data you have analysed revealed?
- Try to transcribe into IPA the words you cite as examples.
- Making reference to examples from other languages, how can you technically define what happens in Ainu (and, optionally, how do you formalise these phenomena)?
- What aspects of the pronunciation of *r* and *h* remain dubious?
- In your opinion, what kind of examples could be useful to clarify these doubts?





Besides the fact that in western dialects there seems to be no formal difference between inclusive and exclusive first person plural, one more striking difference between HA and SA is that in this latter variety 'fourth person' markers are never used to cross-reference an honorific second person.

(5) *Ene an tok-hi 'an-kara-pe.*  
like.this 3S.S/exist.PC 3.PSR/mark-POSS 4.A-3P.O/make-thing  
'Such [enormous] structures [could have made one think that] **someone** made them [on purpose].' (Dal Corso 2021, 277)

(6) *'An-kamesu-hu hee 'an-kaasiw-[H]e he 'an-ki kusu*  
**4.A-3S.O/help-NMLZ FOC 4.A-3S.O/aid-NMLZ FOC 4.A-3S.O/do CAU.FIN**  
*neampe nah ramu.*  
TOP COMP 3S.A/3S.O/think  
'She thought: "How in the world [can] I do to help or assist it?"' (Dal Corso 2021, 274)

Person is marked on Ainu verbs via affixes (both prefixes and suffixes). In both HA and SA third person singular is signalled by the lack of affixes. While for HA this is also true for third person plural, in SA this latter can sometimes be marked overtly, with the suffix *-(a)hci*, which is not obligatory (Murasaki 1979, 49). **Personal affixes are only used for the subject and the object (or indirect object) of a verb and a maximum of one affix (for intransitive verbs) or two affixes (for transitive verbs) can be attached to a verb.** The following tables show all personal agreement markers (subject referent) of the verbal paradigm on an intransitive and a transitive verb.

**Table 1** Personal agreement affixes of HA and SA with the intransitive verb *mina/miina* 'laugh'

person	HA	SA
1sg	<i>ku-mina</i>	<i>ku-miina</i>
2sg	<i>e-mina</i>	<i>e-miina</i>
3sg	<i>mina</i>	<i>miina</i>
1pl	<i>mina-as</i>	<i>miina-as</i>
2pl	<i>eci-mina</i>	<i>eci-miina</i>
3pl	<i>mina</i>	<i>miina(-hci)</i>
4	<i>mina-an</i>	<i>miina-an</i>

**Table 2** Personal agreement affixes of HA and SA with the transitive verb *nukar/nukara* 'see, look', with implied third person singular object

person	HA	SA
1sg	<i>ku-nukar</i>	<i>ku-nukara</i>
2sg	<i>e-nukar</i>	<i>e-nukara</i>
3sg	<i>nukar</i>	<i>nukara</i>
1pl	<i>ci-nukar</i>	<i>ci-nukara</i>
2pl	<i>eci-nukar</i>	<i>eci-nukara</i>
3pl	<i>nukar</i>	<i>nukara(-hci)</i>
4	<i>a-nukar</i>	<i>an-nukara</i>

→ Consider this additional information...

1. The verbal prefix *yay-* expresses reflexivity: the action carried out by the doer falls back on them - e.g. *yay-kar* (HA), *yay-kara* (SA) 'become [lit.: make oneself]'
2. The verbal prefix *u-* expresses reciprocity: the verb has a plural subject whose parts carry out an action towards each other - e.g. *u-koyki* (HA, SA) 'fight [lit.: beat each other up]'

## → Dataset 1 - Transitive agreement

Consider the following example sentences and the relative translations (sentences marked with \* are ungrammatical). Can you determine the full transitive agreement paradigm of Ainu verbs? Try to fill in the tables below. Can you determine what is the correct version of sentences marked as ungrammatical? What peculiarities do you notice? What generalisations on the syntactic typology of the language can you make? What revisions/additions to the previously given information can you propose?

## Set 1.1 (Hokkaidō Ainu)

- |                               |  |
|-------------------------------|--|
| 1. <i>Aynu poyson se.</i>     | The man carries the baby on his back.      |
| 2. * <i>Ciecinukar.</i>       | We (exc.) see you all.                     |
| 3. <i>Huci wakkata kopan.</i> | The old woman hates drawing water.         |
| 4. <i>Poyson kuse.</i>        | I carry a baby on my back.                 |
| 5. <i>Kuyupoho ekopan.</i>    | My older brother hates you.                |
| 6. <i>Ecinukar.</i>           | I see you all.                             |
| 7. <i>Aese.</i>               | Someone carries you on their back.         |
| 8. * <i>Kuennukar.</i>        | I see myself.                              |
| 9. <i>Aise.</i>               | We (exc.) carry someone on our back.       |
| 10. <i>Ecikopan.</i>          | I hate you.                                |
| 11. <i>Poro sike ecise.</i>   | You all carry a big luggage on your back.  |
| 12. * <i>Ciese.</i>           | We (exc.) carry you on our backs.          |
| 13. <i>Huci ise.</i>          | The old woman carries someone on her back. |
| 14. <i>Aecinukar.</i>         | Someone sees you all.                      |
| 15. <i>Apkasas.</i>           | We (exc.) walk.                            |
| 16. * <i>Enanukar.</i>        | Someone sees me.                           |
| 17. <i>Aenkopan.</i>          | Someone hates me.                          |

- |                                |  |
|--------------------------------|--|
| 18. <i>Eciense.</i>            | You all carry me on your back.           |
| 19. * <i>Ainukar.</i>          | We (inc.) see ourselves.                 |
| 20. <i>Tan poyson unkopan.</i> | This baby hates us (exc.).               |
| 21. <i>Aunse.</i>              | Someone carries us (exc.) on their back. |
| 22. <i>Aynu ennukar.</i>       | A person sees me.                        |
| 23. * <i>Eense.</i>            | You carry me on your back.               |
| 24. <i>Ni ase.</i>             | We (inc.) carry firewood on our back.    |
| 25. <i>Kuise.</i>              | I carry someone on my back.              |
| 26. <i>Ecikopan.</i>           | We (exc.) hate you all.                  |
| 27. * <i>Kuekopan.</i>         | I hate you.                              |
| 28. <i>Unnukar.</i>            | You see us (exc.).                       |
| 29. <i>Kuyaynukar.</i>         | I see myself.                            |
| 30. * <i>Ikuse.</i>            | I carry someone on my back.              |
| 31. <i>Apkasan.</i>            | We (inc.) walk.                          |
| 32. <i>Ni ese.</i>             | You carry firewood on your back.         |
| 33. <i>Teta eciinukar.</i>     | You all see someone here.                |
| 34. <i>Eciunkopan.</i>         | You all hate us (exc.).                  |
| 35. <i>Poyson ecinukar.</i>    | The baby looks at you all.               |
| 36. <i>Ainukar.</i>            | Someone sees us (inc.).                  |
| 37. <i>Ni cise.</i>            | We (exc.) carry firewood on our back.    |
| 38. <i>Enkopan ruwe?</i>       | Do you hate me?                          |

39. *Eciunukar.* You all look at each other.
40. *Ecise.* We (exc.) carry you on our back.
41. *Aynu ka poyson ka unnukar.* The man and the baby look at us (exc.).
42. *Eise.* You carry someone on your back.
43. \**Yayecinukar.* You all see yourselves.

## Set 1.2 (Sakhalin Ainu)

1. *Eciinuu.* You all hear us. [western dialects]
2. *Tan aynu etura.* This person accompanies you.
3. *Wen aynu seta koyki.* The bad man beats up the dog.
4. *Ceh ankoyki.* We beat up (= kill) the fish.
5. *Ecikoykiyan.* I beat you all.
6. \**Eentura.* You accompany me.
7. *Annuuhci.* We hear them.
8. *Ekasi ucaskuma nuu.* The old man hears the tale.
9. *Ennuu.* You hear me.
10. *Ukoykian.* We beat up (= strike) each other.
11. \**Kuenuu.* I hear you.
12. *Ahci ecitura.* You all accompany the old woman.
13. *Esetaha ekoykihci.* You beat up your dogs.
14. *Ennuuhci.* Someone hears me.
15. \**Kuenkoyki.* I beat up (= strike) myself.

- |  |   |
|--|---|
| 16. <i>Ecikoykihci.</i>                      | They beat you all.                                  |
| 17. <i>Enturayan.</i>                        | You all accompany me.                               |
| 18. <i>Ahciutah seta koyki.</i>              | The old women beat up the dog.                      |
| 19. <i>Annuu.</i>                            | We hear them.                                       |
| 20. * <i>Yaykukoyki.</i>                     | I beat up (= strike) myself.                        |
| 21. <i>Inuu.</i>                             | You hear us. [western dialects]                     |
| 22. <i>Ahci ka ekasi ka eciturahci.</i>      | You all accompany the old woman and the old man.    |
| 23. <i>Ahci nuuhci.</i>                      | The old woman hears them.                           |
| 24. <i>Ecikoyki.</i>                         | I beat you up.                                      |
| 25. * <i>Anikoyki.</i>                       | We beat up ourselves.                               |
| 26. <i>Iturahci.</i>                         | They accompany us. [western dialects]               |
| 27. <i>Inuuyan.</i>                          | You all hear us. [western dialects]                 |
| 28. <i>Ahci kunuu.</i>                       | I hear the old woman.                               |
| 29. <i>Anetura.</i>                          | We/I accompany you . [western and eastern dialects] |
| 30. <i>Ahci ka ekasi ka seta koykihci.</i>   | The old woman and the old man beat up the dog.      |
| 31. <i>Ahciutah kuturahci.</i>               | I accompany the old women.                          |
| 32. <i>Kuyaykoyki.</i>                       | I beat up (= strike) myself.                        |
| 33. <i>Aynu inuu.</i>                        | The man hears us. [western dialects]                |
| 34. <i>Ekoykihci.</i>                        | They beat you up.                                   |
| 35. <i>Ahciutah ekasi ka seta ka nuuhci.</i> | The old women hear an old man and a dog.            |

36. <i>Ekasi ecitura.</i>	The old man accompanies you all.
37. * <i>Ahci nuuhci.</i>	The old woman hears someone.
38. <i>Ecinuuyan.</i>	We/I hear you. [western and eastern dialects]
39. <i>Ceh ekoyki.</i>	You beat up (= kill) the fish.
40. <i>Aynu enkoyki.</i>	The man beats me up.
41. <i>Ecikoyki</i>	I beat you all
42. <i>Ecitura</i>	We (exc.) accompany you [eastern dialects]
43. <i>Inturayan</i>	You all accompany us (exc.) [eastern dialects]
44. <i>Aninukara</i>	Someone sees us (inc.) [eastern dialects]
45. <i>Einu</i>	You hear us (inc.) [eastern dialects]
46. <i>Ahci intura</i>	The old woman accompanies us (exc.) [eastern dialects]
47. <i>Seta cinuu</i>	We (exc.) hear the dog [eastern dialects]
48. <i>Aynu inkoyki</i>	A person beats us (exc.) [eastern dialects]
49. <i>Ahci itah</i>	The old woman speaks
50. <i>Itakanahci</i>	We (inc.) speak [eastern dialects]
51. <i>Ecinuuhci</i>	You all hear it
52. <i>Ahci ka seta ka paye</i>	The old woman and the dog go
53. <i>Ecipayehci</i>	You all go

Transitive agreement paradigm (HA)

	1SO	1PO	2SO	2PO	3SO	3PO	4O
1SA							
1PA							
2SA							
2PA							
3SA							
3PA							
4A							

Transitive agreement paradigm (SA)

	1SO	1PO	2SO	2PO	3SO	4O
1SA						
1PA						
2SA						
2PA						
3SA						
3PA						
4A						

Once you are finished, compare your results with the tables in the appendix.

### 3.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Phonological changes*

Consider the verb forms that appear in the following short sentences. All verb forms are given in IPA (note that: indicates a long vowel/double consonant) and they feature some of the intransitive and transitive personal agreement affixes, and the reflexive and reciprocal prefixes *yay-* [jaj-] and *u-* [u-] that you have just analysed. What changes do you notice in their phonological realisation or in the realisation of the verb they are attached to?

#### Set 2.1 (Hokkaidō Ainu)

- |                       |                         |
|-----------------------|-------------------------|
| 1. ajnu suma kik'     | The man hits the rock.  |
| 2. teta itanki kama   | I put the bowl here.    |
| 3. eŋcius             | You all extinguish.     |
| 4. sajo itanki?or oma | The rice is in the bowl |
| 5. itanki kukik'      | I hit the bowl.         |

6. φut̄ai seta ere	The old woman feeds the dog.
7. t̄aīīkehe t̄ama	We (exc.) put down our luggage.
8. atuj̄?orun kapkas	I walk to the sea.
9. eapkas	You walk.
10. kujosura	I throw someone.
11. φunakun et̄aī?osura ja	Where do you throw it?
12. ajnu pujaṛa kari suma osura	The man throws the rock through the window.
13. kera?an kam patek'ke	I eat only delicious meat.
14. φut̄ai ipe	The old woman eats.
15. ajnu itan̄t̄aīiki?ot:a su ama	The man puts the pot on the floor.
16. t̄ep̄t̄e ka somo ki	We (exc.) do not eat fish.
17. a?iosura	Someone throws us (inc.).
18. seta aere	We (inc.) feed the dog.
19. utara uwoma	The people are in each other (=gather together).
20. nupuri ejka	You cross the mountain.
21. φut̄ai rur̄u e	The old woman eats soup.
22. suma kosura	I throw the rock.
23. utara ukik'	The people hit each other.
24. ?a?inukara	Someone sees us (inc.).
25. kosura	I throw [it].
26. pet̄?ot:a suma t̄osura	We (exc.) throw the rock into the river.

27. ipeʔas	We (exc.) eat.
28. juḵpetʔorun ar̥apa	The deer goes to the river.
29. toan nupuri kujka	I cross that mountain.
30. φut̚ci ijere	The old woman feeds us (inc.).
31. tanto kuipe ka somo ki	Today I do not eat.
32. juḵ:am et̚ci	You all eat deer meat.
33. poron:o et̚ci:pe	You all eat a lot.
34. tunasno apkas	They walk fast.
35. pase ciike kuḵ	I take a heavy luggage.
36. et̚ciapkas	You all walk.
37. suma t̚suk	We (exc.) take a rock.
38. nupuri t̚ciika ka eajkap	We (exc.) cannot cross the mountain.
39. kus	I extinguish.
40. kamuḵ kuḵcihehe uk	A bear takes my luggage.
41. ipeʔan	We (inc.) eat.

**Set 2.2** (Sakhalin Ainu)

1. itanki kuʔampa	I bring a bowl.
2. ajnu ramu	The man thinks of it.
3. aht̚ci jo:nohka	The old woman lulls us.
4. itanki eampaha	Do you bring a bowl?
5. meko t̚ceh kue:re	I feed fish to the cat.

6. nupuru anika:	We cross the mountain.
7. aht̄ɕi t̄ɕeh eŋi?e:re	The old woman feeds you all fish.
8. kuramu	I think of it.
9. ajnu nupuru ika:	The man crosses the mountain.
10. aht̄ɕi iwante	The old woman knows us.
11. aht̄ɕi ten:ehpo o:nohka	The old woman lulls the baby.
12. ni: ku?uφ	I take firewood.
13. ni: eŋi uφ	You all take firewood.
14. ajnu haru jajkara	The man prepares provisions himself.
15. aht̄ɕi ajnu itah kue:t̄ɕa:kasno	I teach the old woman the Ainu language.
16. ku?oman	I go.
17. aht̄ɕi t̄ɕeh je:re	The old woman feed us fish.
18. seta ni: uφ	The dog takes firewood.
19. nupuru kuika:	I cross the mountain.
20. aht̄ɕi meko ajnu itah e:t̄ɕa:kasno	The old woman teaches the Ainu language to the cat.
21. ten:ehpo t̄ɕeh su: o:mare	The baby puts the fish in the pot.
22. haru aj:ajkara	We prepare provisions ourselves.
23. itanki anampa	We bring a bowl.
24. ajnu i?a:re	The man makes us sit down.
25. t̄ɕeh su: e?o:mare	You put the fish in the pot.
26. antamu	We think of it.

27. meko t̄eh e t̄ie:re	You all feed fish to the cat.
28. ah t̄ai ajnu itah ije:t̄a:kasno	The old woman teaches us the Ainu language.
29. ni ku:φ	I take firewood.
30. ah t̄ai su: io:mare	The old woman puts us in the pot.
31. ten:ehpo t̄eh ampa	The baby brings the fish.
32. ah t̄ai ten:ehpo a:re	The old woman makes the baby sit down.
33. ajnu itanki wo:mare	The man puts the bowls away [lit. makes the bowls be in each other]
34. nupuru an?ika:	We cross the mountain.
35. hemata eampaha	What do you bring?
36. ah t̄ai aw:ante	We know the old lady.
37. ten:ehpo eo:nohka	You lull the baby.
38. su: kuampa	I bring the pot.
39. nupuru ku?ika:	I cross the mountain.
40. ah t̄ai t̄eh i?e:re	The old woman feeds us fish.
41. t̄eh e t̄ai?uφ	You all take the fish.
42. ten:ehpo kuo:nohka	I lull the baby.
43. ajnu an?a:re	I make the man sit.

### Examples from Other Languages...

#### Ancient Greek (Hellenic, Greece)

γράφειν 'to write': perfect tense \*γεγραφ- / γεγραφ/

γέγραφα	γεγραφα	'I have written'
γέγραφας	γεγραφας	'you have written'

γέγραφε	γεγραφε	'he has written'
γεγράφαμεν	γεγραφαμεν	'we have written'
γεγράφατε	γεγραφατε	'you all have written'
γεγράφατον	γεγραφατον	'you two have written'
γέγραμμαι	γεγραμ:αι	'I have been written'
γέγραψαι	γεγραψαι	'you have been written'
γέγραπται	γεγραπται	'he has been written'
γεγράμμεθα	γεγραμ:εθα	'we have been written'
γέγραφθε	γεγραφθε	'you all have been written'
γέγραφθον	γεγραφθον	'you two have been written'

In Ancient Greek the perfect tense of the verb γράφειν is formed from the stem \*γεγραφ- [γεγραφ], that is made up of two **bound morphemes**: the verbal root γραφ- and the prefix Ce- (realised as γε- in this instance). When personal endings are added, the final sound of the verbal stem and the first sound of the personal suffix may be difficult to pronounce in sequence. Therefore, one of the two sounds is accommodated to ease pronunciation – one sound undergoes **assimilation** to the other. If the change concerns the second sound in the sequence, assimilation is said to be **progressive**. If the change concerns the first sound in the sequence, assimilation is said to be **regressive**. The case above shows two instances of regressive assimilation in the forms γεγραμμαι, γεγραμμεθα and γεγραπται, where the voiceless bilabial fricative /φ/ assimilates to the bilabial nasal /m/ and to the voiceless dental-alveolar plosive /t/ respectively, acquiring the same manner of articulation thus becoming itself the bilabial nasal [m] in the first case, or the voiceless bilabial plosive [p] in the second case. In all other phonetic environments /φ/ remains unchanged since we do not encounter difficulties in pronunciation.

We can formalise this assimilation as follows:

/φ/ > [m] / \_m

/φ/ > [p] / \_t

/φ/ > [φ] / elsewhere

The phonological change that concerns /φ/ in the form γεγραψαι is, on the contrary, a case of dissimilation (see below).

### Sanskrit (Indo-Aryan, India)

Declension of the noun /go:d<sup>h</sup>uk/ 'cow-milker'.

	singular	dual	plural
nom	go:d <sup>h</sup> uk	go:duhaw	go:duh <sup>l</sup> h
voc			
acc	go:duh <sup>l</sup> m	go:d <sup>h</sup> ugb <sup>h</sup> ja:m	go:d <sup>h</sup> ugb <sup>h</sup> i <sup>h</sup>
ins	go:duha:		go:d <sup>h</sup> ugb <sup>h</sup> j <sup>l</sup> h
dat	go:duhe:		
abl	go:duh <sup>l</sup> h	go:duho:h	go:duha:m
gen			go:d <sup>h</sup> uk <sup>s</sup> u
loc	go:duhi		

Throughout its declension, the Sanskrit noun go:d<sup>h</sup>uk 'cow-milker' features two phonological processes. The first process is assimilation (i.e. /k/ > [g] / \_C<sub>voiced</sub>) and the second is **dissimilation** which is the opposite of assimilation. With dissimilation a sound becomes less similar to another to ease pronunciation. In the case at hand the aspiration imposed on the voiced dental-alveolar plosive /d<sup>h</sup>/ is lost whenever the voiceless glottal fricative /h/ appears in the noun ending. Like assimilation, dissimilation can be progressive or regressive. We formalise dissimilation in Sanskrit as follows:

/d<sup>h</sup>/ > [d] / \_uh

Hanunó'o (Austronesian, Philippines) (data from Olson, Schultz 2002 in Payne 2006, 87)

ʔusa	'one'	kasʔa	'once'
duwa	'two'	kadwa	'twice'
tulu	'three'	katlu	'three times'
ʔupat	'four'	kapʔat	'four times'
pitu	'seven'	kapitu	'seven times'

In Hanunó'o numeral adverbs are formed with the addition of the prefix *ka-* to the cardinal number form. However, the first vowel of the cardinal number form disappears if it is *u*. This phonological process is called **elision** and again it serves to ease pronunciation. In addition to elision, cardinal numbers where *u* is preceded by the glottal stop also show **metathesis** – the glottal stop and the consonant following the elided *u* are inverted. We can formalise elision in adverbial numerals as follows:

/u/ > Ø / C\_C

We can formalise elision followed by metathesis as:

/u/ > Ø / ʔ\_C; ʔC\_i > C\_iʔ

Ancient Greek (Hellenic, Greece)Declension of the noun ἀνὴρ 'man' /aner/ (root \*avp- /anr/)

ἀνὴρ	aner	'the man'
ἀνδρός	andros	'of the man'
ἀνδρί	andri	'to the man'
ἄνδρα	andra	'the man'
ἄνερ	aner	'oh man'

The declension of the noun ἀνὴρ 'man' in Ancient Greek starts from the root \*avp- /anr/ that contains a consonant cluster that is difficult to pronounce (i.e. /nr/). In order to ease pronunciation, an epenthetic sound is added – this process is called **insertion** (or **epenthesis**) and it is the opposite of elision.

We formalise insertion as it appears in the case at hand as follows: Ø > [d] / n\_r

English (Germanic, UK) (data from Payne 2006, 76)

ækjəɹət	'accurate'	ɪnækjəɹət	'inaccurate'
kɔŋɡruəs	'congruous'	ɪŋkɔŋɡruəs	'incongruous'
pɔsəbəl	'possible'	ɪmpɔsəbəl	'impossible'
dəskɹɪˈbəbəl	'describable'	ɪndəskɹɪˈbəbəl	'indescribable'
tɔləɹənt	'tolerant'	ɪntɔləɹənt	'intolerant'
sensɪtɪv	'sensitive'	ɪnsensɪtɪv	'insensitive'
vɛɹiəbəl	'variable'	ɪnvɛɹiəbəl	'invariable'
ɡlɔɹiəs	'glorious'	ɪŋɡlɔɹiəs	'inglorious'
mɛzəɹəbəl	'measurable'	ɪmmɛzəɹəbəl	'immeasurable'
bæləns	'balance'	ɪmbæləns	'imbalance'

Morphemes can take different realisations depending on the **phonological environment** they are in. Sometimes, the phonological processes a morpheme undergoes (among which the ones above) can affect its realisation to the point where it is difficult to recognise the separate forms actually as the same morpheme. Usually semantics helps us in this case, giving us a hint of the same source for the separate forms we see. The prefixes [ɪn-], [ɪm-] and [ɪŋ-] in English are one such case, for which we can assume a same origin given the systematic meaning they contribute to the word they attach to (i.e. a negative meaning). To make linguistic analysis and description easier, morphemes are presented in one 'representative' form which may change due to phonological processes – this form is the **underlying form**. The underlying form should be the form that occurs in the largest number of environments and the one that is most difficult to derive by a rule – these two precautions save us a lot of time in writing derivation rules! In the case at hand, [ɪn-] appears before æ, d, t, s, v, [ɪm-] appears before p, m, b, and [ɪŋ-] appears before k, g. The most varied environment is the one of [ɪn-] that we take as our underlying form, while the other two realisations are **alloforms** of this latter. We can formalise the derivation rules as follows:

/ɪn-/ > [ɪm-] / \_C<sub>[bilabial]</sub>

/ɪn-/ > [ɪŋ-] / \_C<sub>[velar]</sub>

/ɪn-/ > [ɪn-] / elsewhere

See Payne 2006, 70-3 for further explanation.

### 3.3 Analysis and Description

Once you finish your analysis of the data, describe, in no less than 300 words, the phonological processes that characterise personal affixes of HA and SA. Provide the right name for them and, optionally, write a formal rule to describe them.

- From what premises did your analysis start?
- What is the underlying form of the HA first person singular subject and of the SA first person plural subject/fourth person (in transitive agreement)? Justify your answer.
- What type of alignment does Ainu display?
- If any, what doubts remain that prevent you from confidently answering this last question?
- How could these doubts be clarified?
- Go back to the last examples (41-53) of set 2.1 in which the suffix *-hci* is used. Do you notice any alternative forms of this suffix? Look at how the suffix is used with transitive and intransitive verbs: is it really a person agreement marker, as you were told in the opening of this lesson, or should we reconsider its status? Motivate your answer.





## 04

## Inalienable Possessive Forms

## Notes

4.1 Background Information  
and Observation

4.2 Research

4.3 Analysis and Description

## 4.1 Background Information and Observation

HA and SA distinguish among first, second, and third person. Both varieties have one more person, in addition to the canonical three, which for the time being we will call ‘fourth person’ and is expressed with the affixes *-an/a(n)-i-*.

The so-called ‘fourth person’ of HA is used to mark a first person plural inclusive (that is, a first person plural ‘we’ that includes the speaker and the interlocutor) (1), as opposed to the first person plural exclusive (that is, a first person plural ‘we’ that includes the speaker, some other referent(s) but not the interlocutor). The ‘fourth person’ is otherwise used to mark an indefinite agent (2), an honorific second person (3), or within reported speech to reference to a first or third person speaker (4).

- (1) *‘Eun i-nu-‘an kuni p somo ne na.*  
3S.O/towards AP-hear-**4.S** COND thing NEG COP FP  
[These] are things **we** (= you and I) shouldn’t pay attention to.’ (Tamura 2000, 63)
- (2) *Cise-tumam ‘anak ki ani ‘a-kar.*  
house-wall TOP reed with **4.A**-3P.O/make  
‘The walls of the house are made of reed [lit.: **someone** made the walls of the house with reed].’ (Tamura 2000, 71)
- (3) *Ku-yupo, sinenne ‘a-ani ruwe he ‘an?*  
1S.PSR-older.brother.POSS alone **4.A**-3S.O/carry DIR.RSN <FOC> DIR.RSN  
‘Older brother, did **you** carry [that] by yourself?’ (Tamura 2000, 67)
- (4) *Ta-p ‘a-e\_upaskuma tane ka ki ...sekor Haca sekor*  
this-thing **4.A**-APPL-3S.O/tell.NMLZ now even SLV/VO/do ADV Haca ADV  
*‘a-ye ‘acapo hawean.*  
4.A-3S.O/say old.man 3S.S/speak  
‘An old man called Haca said: “indeed now **I** tell these facts ...” (Tamura 1984, 22)

In her sketch grammar of Sakhalin Ainu, Murasaki (1979) says that there is no specific way to express a first person plural ‘we’ and that the only formal way to do that is with the affixes *-an/an-i-*, which are clearly cognate of the HA ‘fourth person’ affixes *-an/a-i-*. If this may apply to the western dialects spoken by the informants whom Murasaki worked with, it is certainly not true for all dialects of SA. In fact, a separate set of affixes for first person plural, cognate of those of HA, is present in eastern dialects of SA. Furthermore, the functions illustrated for the HA *-an/a-i-* in examples (1), (2) and (4) above are also attested for *-an/an-i-* (5)-(6) in both western and eastern dialects of SA. For this reason, it makes sense to acknowledge the presence of a polyfunctional ‘fourth person’ in SA as well (Dal Corso 2021). Besides the fact that in western dialects there seems to be no formal difference between

inclusive and exclusive first person plural, one more striking difference between HA and SA is that in this latter variety ‘fourth person’ markers are never used to cross-reference an honorific second person.

(5) *Ene an tok-hi ‘an-kara-pe.*  
like.this 3S.S/exist.PC 3.PSR/mark-POSS 4.A-3P.O/make-thing  
‘Such [enormous] structures [could have made one think that] **someone** made them [on purpose].’ (Dal Corso 2021, 277)

(6) *‘An-kasmesu-hu hee ‘an-kaasiw-[he] he ‘an-ki kusu*  
**4.A-3S.O/help-NMLZ** FOC **4.A-3S.O/aid-NMLZ** FOC **4.A-3S.O/do** CAU.FIN  
*neampe nah ramu.*  
TOP COMP 3S.A/3S.O/think  
‘She thought: “How in the world [can] **I** do to help or assist it?”’ (Dal Corso 2021, 274)

Person is marked on Ainu verbs via affixes (both prefixes and suffixes). In both HA and SA third person singular is signalled by the lack of affixes. While for HA this is also true for third person plural, in SA this latter can sometimes be marked overtly with the suffix *-(a)hci*, which is not obligatory (Murasaki 1979, 49). **Personal affixes are only used for the subject and the object (or indirect object) of a verb and a maximum of one affix (for intransitive verbs) or two affixes (for transitive verbs) be attached to a verb.** The following tables show all personal agreement markers (subject referent) of the verbal paradigm on an intransitive and a transitive verb.

**Table 1** Personal agreement affixes of HA and SA with the intransitive verb *mina/miina* ‘laugh’

person	HA	SA
1sg	<i>ku-mina</i>	<i>ku-miina</i>
2sg	<i>e-mina</i>	<i>e-miina</i>
3sg	<i>mina</i>	<i>miina</i>
1pl	<i>mina-as</i>	<i>miina-as</i>
2pl	<i>eci-mina</i>	<i>eci-miina</i>
3pl	<i>mina</i>	<i>miina(-hci)</i>
4	<i>mina-an</i>	<i>miina-an</i>

**Table 2** Personal agreement affixes of HA and SA with the transitive verb *nukar/nukara* ‘see, look’, with implied third person singular object

person	HA	SA
1sg	<i>ku-nukar</i>	<i>ku-nukara</i>
2sg	<i>e-nukar</i>	<i>e-nukara</i>
3sg	<i>nukar</i>	<i>nukara</i>
1pl	<i>ci-nukar</i>	<i>ci-nukara</i>
2pl	<i>eci-nukar</i>	<i>eci-nukara</i>
3pl	<i>nukar</i>	<i>nukara(-hci)</i>
4	<i>a-nukar</i>	<i>an-nukara</i>

→ Consider this additional information...

HA distinguishes between alienable and inalienable possession. When property of something can be suspended or removed, possession is said to be alienable. On the contrary, possession is inalienable when the property of something cannot be denied nor suspended and resumed – this kind of possession is common for nouns referring to body parts, bodily excretions, relatives and family, personal utensils, etc.

HA employs two distinct constructions to mark alienable and inalienable possession. Alienable possession is expressed with an analytic construction involving the verb *kor* ‘have’ on which the possessor is cross-referenced via transitive personal agreement markers in the subject form (7), while inalienable possession is expressed through dedicated morphology in a synthetic construction (8) (see e.g. Tamura 2000, 81-9; Bugaeva 2004, 19-21).

(7) **‘A-kor**                    *cise-soy-ta*.  
**4A-3S.O/-have** house-outside-in  
‘Outside of my house [lit.: the house that I have].’ (Bugaeva 2004, 291)

(8) **‘A-unu-hu-’oka-ke**.  
**4.PSR-mother-POSS**-behind-PTV  
‘Behind my mother.’ (Bugaeva 2004, 229)

In the synthetic possessive construction the possessor is again cross-referenced via transitive personal agreement markers in the subject form attached on the possessed noun. This latter noun also hosts the possessive suffix, which is *-hu* in (8).

The vowel in the possessive suffix is not fixed, but it is copied from the final vowel of the noun stem the suffix attaches to – e.g. *kampi* ‘letter’ > *kampihi* ‘his/her/their letter’, *sapa* ‘head’ > *sapaha* ‘his/her/their head’. Therefore, we can provisionally treat the possessive suffix as having the form *-hV*. If the noun stem ends in a consonant, the possessive suffix takes the form *-VhV* and the copied vowel is the pre-consonant one in the noun stem – e.g. *kisar* ‘ear’ > *kisaraha* ‘his/her/their ear’, *tek* ‘hand’ > *tekehe* ‘his/her/their hand’.

SA only displays the synthetic possessive construction for all nouns – formally there is no distinction between alienable and inalienable possession (Murasaki 1979, 81-4).

→ Dataset 1 - Transitive agreement<sup>1</sup>

Consider the following example sentences and the relative translations (sentences marked with \* are ungrammatical). Can you determine the full transitive agreement paradigm of Ainu verbs? Try to fill in the tables below. Can you determine what is the correct version of sentences marked as ungrammatical? What peculiarities do you notice? What generalisations on the syntactic typology of the language can you make? What revisions/additions to the previously given information can you propose?

<sup>1</sup> For the reader’s convenience, in this lesson I intentionally repeat Dataset 1 and part of the examples from other languages at the end of the activities from Lesson 3, since a proper understanding of the possessive forms’ morphology featured in Dataset 2 follows from having completed (or revised) this activity on personal agreement affixes.

## Set 1.1 (Hokkaidō Ainu)

- |                                |  |
|--------------------------------|--|
| 1. <i>Aynu poyson se.</i>      | The man carries the baby on his back.      |
| 2. * <i>Ciecinukar.</i>        | We (exc.) see you all.                     |
| 3. <i>Huci wakkata kopan.</i>  | The old woman hates drawing water.         |
| 4. <i>Poyson kuse.</i>         | I carry a baby on my back.                 |
| 5. <i>Yupoho ekopan.</i>       | The older brother hates you.               |
| 6. <i>Ecinukar.</i>            | I see you all.                             |
| 7. <i>Aese.</i>                | Someone carries you on their back.         |
| 8. * <i>Kuennukar.</i>         | I see myself.                              |
| 9. <i>Aise.</i>                | We (exc.) carry someone on our back.       |
| 10. <i>Ecikopan.</i>           | I hate you.                                |
| 11. <i>Poro sike ecise.</i>    | You all carry a big luggage on your back.  |
| 12. * <i>Ciese.</i>            | We (exc.) carry you on our backs.          |
| 13. <i>Huci ise.</i>           | The old woman carries someone on her back. |
| 14. <i>Aecinukar.</i>          | Someone sees you all.                      |
| 15. <i>Apkas'as.</i>           | We (exc.) walk.                            |
| 16. * <i>Enanukar.</i>         | Someone sees me.                           |
| 17. <i>Aenkopan.</i>           | Someone hates me.                          |
| 18. <i>Eciense.</i>            | You all carry me on your back.             |
| 19. * <i>Ainukar.</i>          | We (inc.) see ourselves.                   |
| 20. <i>Tan poyson unkopan.</i> | This baby hates us (exc.).                 |

- |                                       |  |
|---------------------------------------|--|
| 21. <i>Aunse.</i>                     | Someone carries us (exc.) on their back. |
| 22. <i>Aynu ennukar.</i>              | A person sees me.                        |
| 23. * <i>Eense.</i>                   | You carry me on your back.               |
| 24. <i>Ni ase.</i>                    | We (inc.) carry firewood on our back.    |
| 25. <i>Kuise.</i>                     | I carry someone on my back.              |
| 26. <i>Ecikopan.</i>                  | We (exc.) hate you all.                  |
| 27. * <i>Kuekopan.</i>                | I hate you.                              |
| 28. <i>Unnukar.</i>                   | You see us (exc.).                       |
| 29. * <i>Ikuse.</i>                   | I carry someone on my back.              |
| 30. <i>Apkasan.</i>                   | We (inc.) walk.                          |
| 31. <i>Ni ese.</i>                    | You carry firewood on your back.         |
| 32. <i>Teta eciinukar.</i>            | You all see someone here.                |
| 33. <i>Eciunkopan.</i>                | You all hate us (exc.).                  |
| 34. <i>Poyson ecinukar.</i>           | The baby looks at you all.               |
| 35. <i>Ainukar.</i>                   | Someone sees us (inc.).                  |
| 36. <i>Ni cise.</i>                   | We (exc.) carry firewood on our back.    |
| 37. <i>Enkopan ruwe?</i>              | Do you hate me?                          |
| 38. <i>Ecise.</i>                     | We (exc.) carry you on our back.         |
| 39. <i>Aynu ka poyson ka unnukar.</i> | The man and the baby look at us (exc.).  |
| 40. <i>Eise.</i>                      | You carry someone on your back.          |

## Set 1.2 (Sakhalin Ainu)

- |                                 |                                     |
|---------------------------------|-------------------------------------|
| 1. <i>Eciinuu.</i>              | You all hear us. [western dialects] |
| 2. <i>Tan aynu etura.</i>       | This person accompanies you.        |
| 3. <i>Wen aynu seta koyki.</i>  | The bad man beats up the dog.       |
| 4. <i>Ceh ankoyki.</i>          | We beat up (= kill) the fish.       |
| 5. <i>Ecikoykiyan.</i>          | I beat you all.                     |
| 6. * <i>Eentura.</i>            | You accompany me.                   |
| 7. <i>Annuuhci.</i>             | We hear them.                       |
| 8. <i>Ekasi ucaskuma nuu.</i>   | The old man hears the tale.         |
| 9. <i>Ennuu.</i>                | You hear me.                        |
| 10. <i>Ukoykian.</i>            | We beat up (= strike) ourselves.    |
| 11. * <i>Kuenuu.</i>            | I hear you.                         |
| 12. <i>Ahci ecitura.</i>        | You all accompany the old woman.    |
| 13. <i>Esetaha ekoykihci.</i>   | You beat up your dogs.              |
| 14. <i>Ennuuhci.</i>            | Someone hears me.                   |
| 15. * <i>Kuenkoyki.</i>         | I beat up (= strike) myself.        |
| 16. <i>Ecikoykihci.</i>         | They beat you all.                  |
| 17. <i>Enturayan.</i>           | You all accompany me.               |
| 18. <i>Ahciutah seta koyki.</i> | The old women beat up the dog.      |
| 19. <i>Ennuu.</i>               | We hear them.                       |
| 20. * <i>Yaykukoyki.</i>        | I beat up (= strike) myself.        |

- |  |  |
|--|--|
| 21. <i>Inuu.</i>                             | You hear us. [western dialects]                    |
| 22. <i>Ahci ka ekasi ka eciturahci.</i>      | You all accompany the old woman and the old man.   |
| 23. <i>Ahci nuuhci.</i>                      | The old woman hears them.                          |
| 24. <i>Ecikoyki.</i>                         | I beat you up.                                     |
| 25. * <i>Anikoyki.</i>                       | We beat up ourselves.                              |
| 26. <i>Iturahci.</i>                         | They accompany us. [western dialects]              |
| 27. <i>Inuuyan.</i>                          | You all hear us. [western dialects]                |
| 28. <i>Ahci kunuu.</i>                       | I hear the old woman.                              |
| 29. <i>Anetura.</i>                          | We/I accompany you. [western and eastern dialects] |
| 30. <i>Ahci ka ekasi ka seta koykihci.</i>   | The old woman and the old man beat up the dog.     |
| 31. <i>Ahciutah kuturahci.</i>               | I accompany the old women.                         |
| 32. <i>Aynu inuu.</i>                        | The man hears us.                                  |
| 33. <i>Ekoykihci.</i>                        | They beat you up. [western dialects]               |
| 34. <i>Ahciutah ekasi ka seta ka nuuhci.</i> | The old women hear an old man and a dog.           |
| 35. <i>Ekasi ecitura.</i>                    | The old man accompanies you all.                   |
| 36. * <i>Ahci nuuhci.</i>                    | The old woman hears someone.                       |
| 37. <i>Ecinuuyan.</i>                        | We/I hear you [western and eastern dialects]       |
| 38. <i>Ceh ekoyki.</i>                       | You beat up (= kill) the fish.                     |
| 39. <i>Aynu 'enkoyki.</i>                    | The man beats me up.                               |
| 40. <i>Aynu enkoyki.</i>                     | The man beats me up.                               |
| 41. <i>Ecikoyki</i>                          | I beat you all                                     |

- |                                 |  |
|---------------------------------|--|
| 42. <i>Ecitura</i>              | We (exc.) accompany you [eastern dialects]             |
| 43. <i>Inturayan</i>            | You all accompany us (exc.) [eastern dialects]         |
| 44. <i>Aninukara</i>            | Someone sees us (inc.) [eastern dialects]              |
| 45. <i>Einu</i>                 | You hear us (inc.) [eastern dialects]                  |
| 46. <i>Ahci intura</i>          | The old woman accompanies us (exc.) [eastern dialects] |
| 47. <i>Seta cinuu</i>           | We (exc.) hear the dog [eastern dialects]              |
| 48. <i>Aynu inkoyki</i>         | A person beats us (exc.) [eastern dialects]            |
| 49. <i>Ahci itah</i>            | The old woman speaks                                   |
| 50. <i>Itakanahci</i>           | We (inc.) speak [eastern dialects]                     |
| 51. <i>Eciniuuhci</i>           | You all hear it  |
| 52. <i>Ahci ka seta ka paye</i> | The old woman and the dog go                           |
| 53. <i>Ecipayehci</i>           | You all go   |

Transitive agreement paradigm (HA)

	1SO	1PO	2SO	2PO	3SO	3PO	4O
1SA							
1PA							
2SA							
2PA							
3SA							
3PA							
4A							

Transitive agreement paradigm (SA)

	1SO	1PO (4O)	2SO	2PO	3SO	3PO
1SA						
1PA						
2SA						
2PA						
3SA						
3PA						
4A						

Once you are finished, compare your results with the tables in the appendix.

## 4.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Phonological changes*

Consider the examples given below that show some nouns in the non-possessive and in the possessive forms. All noun forms are given in IPA (note that: indicates a long vowel/double consonant; ungrammatical examples are marked with \*). What changes do you notice in the phonological realisation of the possessive suffix  $-(V)hV$  and in that of the personal agreement prefixes cross-referencing the possessor? Do you notice any behaviors at odds with the information you were previously given?

### Set 2.1 (Hokkaidō Ainu)

1. topa	‘group’	topaha	‘his/her/their group’
2. set̃	‘nest’	kuseṯ̃ ɕiɕi	‘my nest’
3. ɕike	‘luggage’	aɕikehe	‘our (inc.) luggage’
4. kotparaɕ	‘chest’	ekotparoho	‘your chest’

5. nan	'face'	kunanuφu	'my face'
6. kewtum	'feeling'	kewtumφu	'his/her/their feeling'
7. ʔiriwakʔ	'sibling'	kuiʔiwakiçi	'my sibling'
8. kew	'body'	eŋcīkewehe	'you all's body'
9. etu	'nose'	eʔetuφu	'your nose'
10. kujʔoj	'bladder'	kujʔojehe	'his/her/their bladder'
11. φuŋcī	'grandmother'	* eŋcīφuŋcīçi	'you all's grandmother'
12. otopʔ	'hair'	ŋc̄otopiçi	'our (exc.) hair'
13. cīkʔ	'eye'	kuçīkiçi	'my eye'
14. emko	'half'	emkoho	'his/her/their half'
15. ru	'path'	ŋcīruwehe	'our (exc.) path'
16. etu	'nose'	e:tuφu	'your nose'
17. osoroç	'buttocks'	kosorocho	'my buttocks'
18. maŋ	'wife'	maŋcīçi	'his/her/their wife'
19. hapo	'mother'	koç hapo	'his/her/their mother'
20. kotparaç	'chest'	ekotparo	'your chest'
21. topa	'group'	topa	'his/her/their group'
22. uni	'house'	kuniçi	'my house'
23. uni	'house'	eŋcīʔuniçi	'you all's house'
24. iriʔwakʔ	'younger brother'	ŋcīiriʔwakiçi	'our (exc.) younger brother'
25. kisaraç	'ear'	ekisaraha	'your ear'

26. ɕike	'luggage'	kucike	'my luggage'
27. hon	'belly'	ahoniɕi	'our (inc.) belly'
28. haw	'voice'	kuhawehe	'my voice'
29. kuru	'shadow'	ekuriɕi	'your shadow'
30. ɸuɕi	'grandmother'	eɕikoroɸuɕi	'you all's grandmother'
31. iro	'colour'	kujroho	'my colour'
32. hoku	'husband'	ehokuɸu	'your husband'
33. uni	'house'	eɕiuniɕi	'you all's house'
34. hapo	'mother'	* hapoho	'his/her/their mother'
35. kujʔoj	'bladder'	kujʔoje	'his/her/their bladder'
36. otopʔ	'hair'	ɕotopɕi	'our (exc.) hair'
37. nan	'face'	kunanɸu	'my face'
38. matʔ	'wife'	matʔɕi	'his/her/their wife'
39. kuru	'shadow'	ekurɕi	'your shadow'
40. kew	'body'	eɕikewhe	'you all's body'

## Set 2.2 (Sakhalin Ainu)

1. Ƨikiri	‘marrow’	Ƨikiriɕi	‘his/her/their marrow’
2. sapa	‘head’	ʔesapaha	‘your head’
3. kem	‘blood’	ʔekemiɕi	‘your blood’
4. miɕ	‘grandson’	am:iƧiɕi	‘our grandson’
5. seturu	‘back’	eseturuɸu	‘your back’
6. kotan	‘village’	kotaniɕi	‘his/her/their village’
7. teh	‘hand’	anteki	‘our hand’
8. itah	‘speech’	eitakiɕi	‘your speech’
9. utara	‘people’	anutariɕi	‘our people’
10. re:	‘name’	kure:he	‘my name’
11. meko	‘cat’	eƧimekoho	‘you all’s cat’
12. etu	‘nose’	kuʔetuɸu	‘my nose’
13. seturu	‘back’	eseturiɕi	‘your back’
14. om	‘thigh’	omiɕi	‘his/her/their thigh’
15. teh	‘hand’	antekiɕi	‘our hand’
16. Ƨara	‘mouth’	Ƨaruɸu	‘his/her/their mouth’
17. am	‘nail’	kuamiɕi	‘my nail’
18. noh	‘chin’	noƧiɕi	‘his/her/their chin’
19. etu	‘nose’	kuetuɸu	‘my nose’
20. mun	‘waste’	eƧimuniɕi	‘you all’s waste’

21. seremaka	'ancestor'	seremakaha	'his/her/their ancestor'
22. saraŋiɕ	'cradle'	ansaranipiɕi	'our cradle'
23. tumam	'hip'	etumamuɕu	'your hip'
24. atuj	'sea'	atujehe	'his/her/their sea'
25. ɕi?amah	'savings'	anɕi?amapuɕu	'our savings'
26. ɕiɕ	'eye'	eɕiɕikiɕi	'you all's eye'
27. jarapoh	'hip'	aj:arapokiɕi	'our hip'
28. moɕiri	'land'	emoɕiriɕi	'your land'
29. ɕiɕros	'ciros (fish)'	anɕiɕiɕiɕi	'our ciros'
30. ɕum	'sound'	ɕumiɕi	'his/her/their sound'
31. nan	'face'	an:anuɕu	'our face'
32. seh	'nest'	kuseɕiɕi	'my nest'
33. takuɕ	'shoulder'	eɕitakupiɕi	'you all's shoulder'
34. non	'saliva'	kunoniɕi	'my saliva'
35. emus	'sword'	e?emuɕiɕi	'your sword'
36. ɕi?amah	'savings'	anɕi?amapu	'our savings'
37. iporo	'colour'	kuiporiɕi	'my colour'
38. ojpeh	'spoon'	kuojpepiɕi	'my spoon'
39. ɕiɕ	'boat'	eɕiɕiɕi	'your boat'
40. ramah	'soul'	antamatuɕu	'our soul'
41. oh	'spear'	opiɕi	'his/her/their spear'

42. sapa	'head'	esapa	'your head'
43. re:	'name'	ante:he	'our name'
44. sas	'konbu seaweed'	kusasuφu	'my konbu seaweed'
45. mi:	'clothes'	kumijehe	'my clothes'
46. mah	'wife'	eŋɕimaŋɕiɕi	'you all's wife'
47. haw	'voice'	hawehe	'his/her/their voice'
48. ru:	'path'	eruwehe	'your path'
49. atuj	'sea'	kuʔatujehe	'my sea'
50. nan	'face'	an:anφu	'our face'
51. itah	'speech'	eitakɕi	'your speech'
52. haw	'voice'	hawhe	'his/her/their voice'
53. kem	'blood'	ʔekemɕi	'your blood'
54. ojpeh	'spoon'	kuojpepɕi	'my spoon'

### Examples from Other Languages...

#### Ancient Greek (Hellenic, Greece)

γράφειν 'to write': perfect tense \*γεγραφ- /γεγραφ/

γέγραφα	γεγραφα	'I have written'
γέγραφας	γεγραφας	'you have written'
γέγραφε	γεγραφε	'he has written'
γεγράφαμεν	γεγραφαμεν	'we have written'
γεγράφατε	γεγραφατε	'you all have written'
γεγράφατον	γεγραφατον	'you two have written'
γέγραμμαι	γεγραμ:ai	'I have been written'
γέγραψαι	γεγραψαι	'you have been written'
γέγραπται	γεγραπται	'he has been written'

γεγράμμεθα	ɣɛɣram:ɛθa	‘we have been written’
γέγραφε	ɣɛɣrafθɛ	‘you all have been written’
γέγραφο	ɣɛɣrafθon	‘you two have been written’

In Ancient Greek the perfect tense of the verb γράφειν is formed from the stem \*γεγραφ- [ɣɛɣraf], that is made up of two **bound morphemes**: the verbal root γραφ- and the prefix Ce- (realised as γε- in this instance). When personal endings are added, the final sound of the verbal stem and the first sound of the personal suffix may be difficult to pronounce in sequence. Therefore, one of the two sounds is accommodated to ease pronunciation – one sound undergoes **assimilation** to the other. If the change concerns the first sound in the sequence, assimilation is said to be **progressive**. If the change concerns the second sound in the sequence, assimilation is said to be **regressive**. The case above shows two instances of regressive assimilation in the forms γεgrammai, γεgrammeθα and γεɣraptai, where the voiceless bilabial fricative /ɸ/ assimilates to the bilabial nasal /m/ and to the voiceless dental-alveolar plosive /t/ respectively, acquiring the same manner of articulation thus becoming itself the bilabial nasal [m] in the first case, or the voiceless bilabial plosive [p] in the second case. In all other phonetic environments /ɸ/ remains unchanged since we do not encounter difficulties in pronunciation.

We can formalise this assimilation as follows:

/ɸ/ > [m] / \_m

/ɸ/ > [p] / \_t

/ɸ/ > [ɸ] / elsewhere

The phonological change that concerns /ɸ/ in the form γεɣrapsai is, on the contrary, a case of dissimilation (see below).

### Sanskrit (Indo-Aryan, India)

Declension of the noun /go:d<sup>h</sup>uk/ ‘cow-milker’.

	singular	dual	plural
nom	go:d <sup>h</sup> uk	go:duhaw	go:duh <sup>h</sup> h
voc			
acc	go:duh <sup>h</sup> m	go:d <sup>h</sup> ugb <sup>h</sup> ja:m	go:d <sup>h</sup> ugb <sup>h</sup> i <sup>h</sup>
ins	go:duha:		go:d <sup>h</sup> ugb <sup>h</sup> j <sup>h</sup> h
dat	go:duhe:		
abl	go:duh <sup>h</sup> h	go:duho:h	go:duha:m
gen			go:duh <sup>h</sup> h
loc	go:duhi		

Throughout its declension, the Sanskrit noun go:d<sup>h</sup>uk ‘cow-milker’ features two phonological processes. The first process is assimilation (i.e. /k/ > [g] / \_C<sub>voiced</sub>) and the second is **dissimilation** which is the opposite of assimilation. With dissimilation a sound becomes less similar to another to ease pronunciation. In the case at hand the aspiration imposed on the voiced dental-alveolar plosive /d<sup>h</sup>/ is lost whenever the voiceless glottal fricative /h/ appears in the noun ending. Like assimilation, dissimilation can be progressive or regressive. We formalise dissimilation in Sanskrit as follows:

/d<sup>h</sup>/ > [d] / \_uh

### Hanunó'o (Austronesian, Philippines) (data from Olson, Schultz 2002 in Payne 2006, 87)

ʔusa	‘one’	kasʔa	‘once’
duwa	‘two’	kadwa	‘twice’
tulu	‘three’	katlu	‘three times’
ʔupat	‘four’	kapʔat	‘four times’
pitu	‘seven’	kapitu	‘seven times’

In Hanunó'o numeral adverbs are formed with the addition of the prefix *ka-* to the cardinal number form. However, the first vowel of the cardinal number form disappears if it is *u*. This phonological process is called **elision** and again it serves to ease pronunciation. In addition to elision, cardinal numbers where *u* is preceded by the glottal stop also show **metathesis** – the glottal stop and the consonant following the elided *u* are inverted. We can formalise elision in adverbial numerals as follows:

$$/u/ > \emptyset / C\_C$$

We can formalise elision followed by metathesis as:

$$/u/ > \emptyset / ?\_C; ?C_i > C_i?$$

If elision concerns the final segment of a word, it is otherwise called **truncation** or **apocope**.

#### Niimiipuutímt (Plateau Penutian, USA) (data from Aoki 1970)

mæq	'paternal uncle'	næʔmæq	'my paternal uncle'
tot	'father'	nəʔtot	'my father'
ʔic	'mother'	næʔic	'my mother'
cic	'paternal aunt'	nəʔcic	'my paternal aunt'

Vowels in Niimiipuutímt are divided into two classes – dominant and recessive. This subdivision serves to account for the phonological changes we witness when morphemes containing certain vowels attach to other morphemes. In this language /o/ and /a/ are dominant vowels and /æ/ and /u-ʉ/ are recessive vowels. The vowel /i/ belongs to both groups. When two or more morphemes combine, if any of these morphemes contain a dominant vowel then all recessive vowels present in all the morphemes of that word need to change to their dominant counterpart (see the first singular possessive /næʔ-/ that changes into /nəʔ-/ under the influence of the dominant vowel /o/ in the noun root /tot/). The reverse does not happen. This phenomenon is called **vowel harmony** and it is a **kind of long-distance assimilation**, by which two or more non-contiguous sounds assimilate. Since /i/ belongs to both vowel groups it may or may not trigger vowel harmony. We can formalise vowel harmony for the first singular possessive prefix of Niimiipuutímt as follows:

$$V > V_{[front]} / \_ CV_{[front]}$$

#### English (Germanic, UK) (data from Payne 2006, 76)

ækjəɹət	'accurate'	ɪnækjəɹət	'inaccurate'
kɒŋɡrʉəs	'congruous'	ɪŋkɒŋɡrʉəs	'incongruous'
pɒsəbəl	'possible'	ɪmpɒsəbəl	'impossible'
dəskɹə'ɪbəl	'describable'	ɪndəskɹə'ɪbəl	'indescribable'
tɒləɹənt	'tolerant'	ɪntɒləɹənt	'intolerant'
sensɪtɪv	'sensitive'	ɪnsensɪtɪv	'insensitive'
vɛɹiəbəl	'variable'	ɪnvɛɹiəbəl	'invariable'
ɡlɒɹiəs	'glorious'	ɪŋɡlɒɹiəs	'inglorious'
mɛzəɹəbəl	'measurable'	ɪmmɛzəɹəbəl	'immeasurable'
bæləns	'balance'	ɪmbæləns	'imbalance'

Morphemes can take different realisations depending on the **phonological environment** they are in. Sometimes, the phonological processes a morpheme undergoes (among which the ones above) can affect its realisation to the point where it is difficult to recognise the separate forms actually as the same morpheme. Usually semantics helps us in this case, giving us a hint to a same source for the separate forms we see. The prefixes [ɪn-], [ɪm-] and [ɪŋ-] in English are one such case, for which we can assume a same origin given the systematic meaning they contribute to the word they attach to (i.e. a negative meaning). To make linguistic analysis and description easier, morphemes are presented in one 'representative' form which may change due to phonological processes – this form is the **underlying form**. The underlying form should be the form that occurs in the largest number of environments and the one that is most difficult to derive by a rule – these two precautions save us a lot of time in writing derivation rules! In the case at hand, [ɪn-] appears before æ, d, t, s, v, [ɪm-] appears before p, m, b, and [ɪŋ-] appears before k, g. The most varied environment is the one of [ɪn-] that we take as our underlying form, while the other two realisations are **alloforms** of this latter. We can formalise the derivation rules as follows:

/ɪn-/ > [ɪm-] / \_C<sub>[bilabial]</sub>

/ɪn-/ > [ɪŋ-] / \_C<sub>[velar]</sub>

/ɪn-/ > [ɪn-] / elsewhere

See Payne 2006, 70-3 for further explanation.

### 4.3 Analysis and Description

Once you finish your analysis of the data, describe, in no less than 300 words, the phonological processes that characterise personal affixes cross-referencing the possessor in HA and SA and the possessive suffix (if any, highlight problematic cases). Try to provide the right name for these processes and, optionally, write a formal rule to describe them.

- From what premises did your analysis start?
- What is the underlying form of the SA first person plural subject/possessor?
- What is the underlying form of the possessive suffix in HA and SA? Is its underlying form -hV or -VhV? Can you say which one of the five Ainu vowels is the underlying vowel of the suffix? Justify your answer.
- If any, what doubts remain that prevent you from confidently answering these last questions?
- How could these doubts be clarified?



05

# The Ainu Passive Construction

Notes

5.1 Background Information and Observation	5.2 Research	5.3 Analysis and Description
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## 5.1 Background Information and Observation

Among the uses of the HA fourth person Tamura (2000, 71-2) discusses that of cross-referencing the starting point of the action in a passive construction. A sentence like (1) is regarded as a passive sentence by virtue of the fact that the actual performer of the event is expressed in a noun phrase with *'orowa*, an oblique. The performer of the action is referenced to by the fourth person prefix on the verb. This is different from the impersonal construction (2) where the indefinite agent is still marked via the fourth person on the verb but it is not overtly expressed.

(1) *Hapo-'oro-wa a-en-koyki.*  
mother-place-from 4A-1S.O-scold  
'I was scolded by mother' (Tamura 2000, 72)

(2) *Neno e-i-ki yak a-e-koyki na.*  
like.this 2S.A-4O-do if 4A-2S.O-scold FP  
'If you do that, someone will scold you [= you will be scolded].' (Tamura 2000, 71)

In the active version of sentences like (1) the agent is no longer marked by *'orowa* and it is cross-referenced to via third person null agreement on the verb.

(3) *Hapo en-koyki.*  
mother 1S.O-3S.A/scold.  
'Mother scolds me.'

Murasaki (1979), on the other hand, does not report any analogous passive construction in SA. In this variety of the language only the impersonal construction is reported, where the indefinite agent is cross-referenced to via the third person plural suffix *-hci* (4). This construction may be read as passive depending on context.

(4) *Taa cise-'oh-ta 'i-'ama-hci 'anah pirika kusu ne ya.*  
that house-place-in 4O-3P.A/put-COLL if 3S.S/be.good INTN FP  
'It would be good if someone left us at that house [= if we were left at that house]'  
(Murasaki 1979, 51)

If the third person agent is overtly expressed the construction is no longer impersonal and the passive reading is cancelled.



→ Consider this additional information...

We can trace four important stages in the development of the HA passive (Bugaeva 2011), that resulted in the construction attested in the textual sources:

- It all started in the existential construction with the verb 'an 'exist' that takes a noun as its sole argument.
- (Zero-)nominalisation of an intransitive verb happens and this nominalised verb functions as the sole argument of 'an 'exist'. The verb 'an begins to be regarded as a suffix or, better yet, a post-clitic. The general situation described by this construction soon develops an impersonal reading.
- The impersonal construction with an intransitive verb is transferred also to transitive verbs. At this stage we have the switch from the suffix '-an to the prefix 'an-, then 'a- in Southern Hokkaidō Ainu dialects, due to the preference of the Ainu language to have prefixes instead of suffixes. The HA 'a- is therefore clearly a cognate of the SA 'an-.
- Finally, the impersonal construction with a transitive verb, by virtue of its essentially passive semantics, allows for actant expression with an oblique phrase marked with 'orowa.

→ Dataset 1 - Constituent structure

Consider the following sentences (\* marks ungrammatical examples, ? marks dubious examples). What is the typological order of constituents in the passive construction? What additions and amendments can you make to the information you started from? What syntactic status do the constituents in the construction have (argument/oblique)? Justify your answer. Is the passive construction of HA and SA analytic or synthetic? Motivate your answer. What differences do you notice between HA and SA?

#### Set 1.1 (Hokkaidō Ainu)

1. *Toan kurorowa aenkik.*

'I was hit by that man.'

2. *Rera ani cikuni akekke.*

'The tree was broken by the wind.' (Bugaeva 2004, 41)

3. \**Kamuy ene aiyaynure.*

'I was taken in such consideration by a god.'

4. *Suci matkaci omap.*

'Her grandmother loves the girl.'

5. *Toan nispaorowa taan kur akusa a ruwe?*

‘Has this man been taken across [the river] by that noble man?’ (Satō 1995 in Bugaeva 2011, 535)

6. *Nispa seta kik.*

‘A noble man hits a dog.’

7. \**Toan orowa kur aenkik.*

‘I was hit by that man.’

8. *Seta kuipere.*

‘I let the dog eat.’

9. \**Toan kurorowa akukik.*

‘I was hit by that man.’

10. *Aipere katu ka isam.*

‘There was no sign [that] someone [would] let me eat [= I would be given food].’ (Tamura 1985, 2)

11. \**Toan nispaorowa taan kur kusa a ruwe?*

‘Has this man been taken across [the river] by that noble man?’

12. *Kamuyorwa ene aiyaynure.*

‘I was taken in such consideration by a god.’ (Tamura 1985, 46)

13. *Matkaci suciorowa aomap.*

‘The girl is loved by her grandmother.’ (Bugaeva 2004, 42)

## Set 1.2 (Sakhalin Ainu)

- 1.
- 'Ohkayo [...]'iso'ohta kupapa.*

'The young boy was bitten by a bear.' (Dal Corso 2021, 195)

2. [
- 'Ohkayo]'onahcin'orowa 'ikoro 'ankohohpahci.*

'[The young boys] were given short swords by their father.' (Dal Corso 2021, 262)

3. \*
- Neya 'orowa 'ohacisuye 'annospa.*

'He was chased by that empty-house-devil.'

- 4.
- Hemata ka kamuy'orowa 'annukareraye.*

'They were stared at by some kind of animals.' (Dal Corso 2021, 303)

5. \*
- Seta 'iso 'ankupapa.*

'The dog was bitten by a bear.'

- 6.
- 'Ona 'ohkayo 'emus kohohpa.*

'The father gave the young boys swords.'

- 7.
- Neya 'ohacisuyeorowa 'annospa.*

'He was chased by that empty-house-devil.' (Pilsudski 1912, 100)

- 8.
- 'Ekasi'orowa 'anekoytahkara.*

'I was told by grandfather.' (Dal Corso 2021, 388-9)

- 9.
- Kamuyorowa mah kayki 'anekontehci.*

'You were given even a wife by the gods.' (Pilsudski 1912, 23)

10. ?
- 'Onahahcin'orowa 'ohkayo 'ikoro 'ankohohpahci.*

'The young boys were given short swords by their father.'

11. \**‘Ekasi’orowa ‘an‘enekoytahkara.*

‘I was told by grandfather.’

12. *Pon tohkori tuh ‘enkontehci.*

‘They gave me two small cups.’ (Dal Corso 2021, 207)

13. \**Neya ‘ohacisuyeorowa nospa.*

‘He was chased by that empty-house-devil.’

## 5.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Syntactic tests*

Consider the following clauses paying particular attention to ungrammatical examples (marked with \*). Only HA examples are provided for this dataset. The passive construction is here used in combination with three other constructions – what are they and how are they expressed morphosyntactically? Why do you think ungrammaticality arises?

### Set 2 (Hokkaidō Ainu)

1. *Tane nupuri osmak cup rari.*

‘Eventually the sun set behind the mountain.’ (UK 1986, line 125)

2. *Nea wenkur okkaypo [...] kor wa okay pe opitta rurapa.*

‘That poor young man [...] carried all the things he possessed.’ (Tamura 1985, 42)

3. \**Nispa wen kamuyutarorowa siosmakwa akik.*

‘The noble man was hit from (his own) behind by evil gods. (Satō 1995, 9)

4. *Pon menoko utar ka uwehopunpa wa horippa.*

‘Even the young women stood up together and danced.’ (Tamura 1985, 72)

5. *Seta kam e hi eki rusuy.*

'You want the the dog to eat the meat.'

6. *Huciorowa aenommap hi kuki rusuy.*

'I want to be loved by grandmother.' (Satō 2008, 206)

7. *Ne menokopo kor rusuy kuni ye.*

'He said that he wanted to have that young girl.' (Tamura 1985, 58)

8. *Suma rura.*

'He carried back a stone.'

9. *Henke utar inawneni tuye wa...*

'The elders cut the *inaw* wood and...'

10. *Nispa wen kamuyutarorowa osmakwa akik.*

'The noble man was hit from (his own) behind by evil gods. (Satō 1995, 9)

11. *Unu patek akor.*

'I only had a mother.' (Tamura 1984, 36)

12. \**Huciorowa aenommap rusuy.*

'I want to be loved by grandmother.'

13. *Siosmakun kuinkar.*

'I looked behind myself.' (Satō 1995, 9)

14. *Horipian kor...*

'While I danced...' (IH 1985, line 287)

15. *Eper [...] nimakihi ka [...] amihi ka nispaorowa atuypa.*

'The bear's nails and teeth were cut off by the noble man.' (adapted from Bugaeva 2011, 536)

## Examples from Other Languages...

## Japanese (Japonic, Japan)

*Sensei-ga gakusei-o yob-u. Gakusei-ga sensei-ni yob-a-rer-u.*  
 teacher-NOM student-ACC call.NPST student-NOM teacher-by call-INFL-PASS-NPST  
 'The teacher calls the student.' 'The student is called by the teacher.'

The Japanese passive is a synthetic construction since passive voice is expressed on the verb via the suffix *-(ra)rer*. In the (direct) passive construction what was the object in the active sentence is **promoted to subject** and it gets assigned subject morphology (i.e. the NOM postposition *-ga*), while the subject of the active sentence is **demoted to an oblique role** and marked by *-ni*. The passivised verb is now grammatically **intransitive**. These characteristics make the Japanese *-(ra)rer* construction a prototypical passive.

## Nivkh (Amuric/Isolate, Russia) (data from Nedjalkov, Otaina 2012, 255)

*ətək p<sup>ʰ</sup>-su-ɖ.*  
 father REF-wash-IND  
 'Father washes himself.'

*ətək p<sup>ʰ</sup>-ōla-du-ɖ.*  
 father REF-child-wash-IND  
 'Father washes his own son.'

*umgu ŋivx-ŋǎ-r p<sup>ʰ</sup>-ōla-du-ɖ.*  
 woman man-see-CONV.NAR.3SG REF-child-wash-IND  
 'The woman sees the man and washes \*his / her own son.'  
 (constructed example)

*ətək ōla-aχ p<sup>ʰ</sup>-su-gu-ɖ.*  
 father child-DAT/ACC REF-wash-CAUS-IND  
 'Father has his son wash him(= father) / himself(= son).'

The personal/possessive reflexive pronoun *p<sup>ʰ</sup>/p<sup>ʰ</sup>i* in Nivkh can only refer to the subject. This is the rule of **reflexive binding** in Nivkh and in the majority of languages. In the third sentence given here *umgu* 'woman' is the subject of both coordinate clauses (implied for the verb 'wash'), while *ŋivx* 'man' and *ōla* 'child' are objects respectively of the first and second clause. Although it could be contextually possible for the child to be the man's, this reading of the sentence is ruled out by the use of the possessive reflexive *p<sup>ʰ</sup>* which can only bind the subject of the sentence (i.e. the woman). In order to express the meaning 'his (= the man's) son' a third person possessive pronoun would be needed. The last sentence shows a causative construction. Causativisation results in the promotion of an originally (more) peripheral argument to a (more) core argument. Here what is marked as the indirect object (with the suffix *-aχ*) of the causative verb 'make wash' is actually the logical subject of the non-causative verb 'wash'. That is, despite its morphological marking the noun *ōla* also functions as a subject in this case. Therefore reflexive binding becomes ambiguous and the double reading of the reflexive pronoun is possible.

## Kalaallisut (Inuit, Greenland) (data from and adapted from Bjørnum 2012, 86-8)

*Qimmi-a sinip-poq.*  
 dog-POSS.ABS.3SG sleep-3SG  
 'His dog sleeps.'

*Qimmi-ata*                      *kiiva-anga.*  
dog-POSS.ERG.3SG    bit-3SG>1SG  
'His dog bit me.'

*Piita-p*    *qimmi-a*                      *nerukkar-paa.*  
Peter-ERG    dog-POSS.ABS.3SG    fed-3SG>3SG  
'Peter fed his (= someone else's) dog.'

Kalaallisut (West Greenlandic) has morphological **ergative-absolutive alignment**. Besides being evident in the marking of verbal arguments, the ergative-absolutive alignment also concerns possession that is expressed with suffixes on the possessed noun. These suffixes agree in number and person with the possessor and they are also marked for ergative or absolutive case according to the grammatical function covered by the possessee.

Gude (Chadic, Nigeria and Cameroon) (data from Hoskison 1983, 107)

*Kə*            *digə*            *ənji*            *tə*            *ci.*  
COMP    beat.p    people    DEF            he  
'He was beaten up / Someone beat him up.'

Paamese (Oceanic, Vanuatu) (data from Crowley 1982, 180)

(\**kaile*)    *a-munumunu*            *Vauleli.*  
\*they    3PL.REAL-drink            Vauleli  
'There is drinking going on at Vauleli.'

Impersonal constructions are defined as such due to the **lack of reference** to a specific agent. In some languages like Gude a generic noun or pronoun can be used to refer to an **unspecified agent** (e.g. *ənji* '(some) people') and it functions as the subject of the active sentence, which may also have a passive reading. In other languages like Paamese, the expression of the agent (even an unspecified one) via a separate noun phrase is not possible and impersonality is solely expressed by verbal morphology (in Paamese, third person agreement).

### 5.3 Analysis and Description

With the data at hand do you think Ainu has a passive construction? Why/why not? Justify your answer in no less than 400 words making reference to the examples given in the sections above. If you would not call the construction under investigation 'passive', how else would you call it? Why?



## Set 1.1 (Hokkaidō Ainu)

1. \*
- Kuyupo kamuy cotca acapo.*

‘The uncle together with whom my elder brother shot the bear.’

- 2.
- Katkemat ehotke usi kar.*

‘The woman prepared a [sleeping] place on which he [could] lie down.’ (adapted from Bugaeva 2004, 400)

- 3.
- Teppo ani kuyupo kamuy tukan.*

‘My older brother shot the bear with a gun.’

4. \*
- Cep poronno hemesu pet.*

‘A river in which many fish go upstream.’

- 5.
- Cikirihi tanne kikir.*

‘An insect whose legs are long.’ (Tamura 2000, 189)

- 6.
- Cisesoy pakno arki utar.*

‘The men who came up to the doorway.’ (Bugaeva 2004, 95)

- 7.
- Katkemat orota hotke usi kar.*

‘The woman prepared a [sleeping] place on which he [could] lie down.’

- 8.
- Turano kuyupo kamuy cotca acapo.*

‘The uncle together with whom my elder brother shot the bear.’ (Bugaeva 2004, 96)

9. \*
- Katkemat hotke usi kar.*

‘The woman prepared a [sleeping] place on which he [could] lie down.’

- 10.
- Petotta cep poronno hemesu.*

‘In the river many fish go upstream.’

11. *Acapo turano kuyupo kamuy cotca.*

‘My elder brother shot the bear together with the uncle.’

12. \* *Cikir tanne kikir.*

‘An insect whose legs are long.’

13. *Ani kuyupo kamuy tukan teppo.*

‘The gun with which my older brother shot the bear.’ (Bugaeva 2004, 95)

14. *Aekasihi ka nupe ranke.*

‘My grandfather dropped tears (= was weeping).’

15. \* *Sinuma cisesoy pakno arki utar.*

‘The men who came up to the doorway.’ (Bugaeva 2004, 95)

16. *Kikir cikirihi tanne.*

‘The insect’s legs are long.’

17. *Orota cep poronno hemesu pet.*

‘A river in which many fish go upstream.’ (Bugaeva 2004, 96)

18. *Aekasihi ka ranke nupe.*

‘The tears my grandfather shed.’ (Bugaeva 2004, 95)

19. *Oro aiyomare otor aiyomare hine iwororun aiyani.*

‘I was put into a coffin in which people are put [when they die] and I was taken to the borders of the village.’ (Tamura 1985, 4)

20. *Aupsoro aomare wa arpaan.*

‘I put them in my bosom and went.’ (Bugaeva 2004, 127)

## Set 1.2 (Sakhalin Ainu)

1. \**Kannapaake 'eniskurukerotoh 'oyasi.*

'A monster whose upper jaw touched the sky.'

2. *Pon hekaci nunnun kirupu.*

'The [animal] fat that a small baby boy sucked.' (Dal Corso 2021, 293)

3. \**Hemata 'oyasiykehe tekihi 'ahun usiikehe.*

'The place into which the paw of some kind of spirit entered.'

4. 'Oyasi kannapaakehe 'eniskurukerotoh.

'The monster's upper jaw touched the sky.'

5. *Pon kahkemah [...] koitah 'ahciutah.*

'The old women to whom [our] little young woman speaks.'

6. *Hemata 'oyasiykehe tekihi usiikehe'onne 'ahun.*

'The paw of some kind of spirit entered into [that] place.'

7. *Pon hekachi kirupu nunnun.*

'A small baby boy sucked the [animal] fat.'

8. \**Pon hekaci pe nunnun kirupu.*

'The [animal] fat that a small baby boy sucked.'

9. *Hemata 'oyasiykehe tekihi 'onne 'ahun usiikehe.*

'The place into which the paw of some kind of spirit entered.' (Dal Corso 2021, 335)

10. \**Pon kahkemah [...] itah 'ahciutah.*

'The old women to whom [our] little young woman speaks.'

11. *Kannapaakehe 'eniskurukerotoh 'oyasi.*

'A monster whose upper jaw touched the sky.' (adapted from Dal Corso 2021, 394)

12. *Pon kahkemah [...] 'ene an 'ahciutah koitah.*

'[Our] little young woman speaks to such old women.' (adapted from Dal Corso 2021, 180)

13. *Neya 'oro 'anreske 'ekasi.*

'The old man by whom [the bear] had been raised.' (Dal Corso 2021, 200)

14. *'Iso neya 'ekasi'orowa 'anreske.*

'The bear had been raised by the old man.'

## 6.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Other cases*

Consider the following examples (? marks dubious cases). Given what you have discovered up to this point of your analysis, do you think these are relative clauses too? Why/why not? What is the morphosyntactic structure of these sentences? If you think these structures are not in fact relative clauses, how else would you call them?

### Set 2.1 (Hokkaidō Ainu)

1. *Kamuyutar nuwap kor okay hawe anu.*

'I heard the voices of gods groaning.' = 'I heard that gods are groaning.' (Bugueva 2015, 92)

2. ? *Pase katkemat kor wa uwepirka asur [...] anu.*

'I heard the news (= that) he married a noble woman and they are happy together.' (Tamura 1985, 22)

3. *Pon menoko [...] nepka ye siri ka anukar.*

'I even saw the looks that (= that) the young girl said something.' (Bugueva 2004, 277)

## Set 2.2 (Sakhalin Ainu)

- 1.
- 'Aynu 'okay kotan nee wakayki ...*

'Although it was a village in which there were [many] people.' (Dal Corso 2021, 401)

- 2.
- Ku'unuhu naa kuacapoho naa [...] arikihci [...] wepekere nee.*

'It is the story [of when] both my aunt and my uncle [...] went [there].' (Dal Corso 2021, 302)

- 3.
- Kotan koro utara ceh e kotanonne payehci.*

'The inhabitants of the village went to the village where they ate fish.' (Pilsudski 1912, 99)

## Examples from Other Languages...

Yoruba (Niger-Congo, Nigeria et al.) (examples from Lawal 1987, 69)

*Ọkùnrin tí [ó ra aṣọ] ti dé.*  
Man that he bought cloth has come  
'The man who bought the cloth has come.'

*Aṣọ tí [ọkùnrin náà rà] dára.*  
cloth that man the bought good  
'The cloth that the man bought is good.'

*Àdà tí [mo fi gé igi] mú.*  
Cutlass that I with cut tree sharp  
'The cutlass that I cut the tree with is sharp.'

Some languages may employ **retention** as a means to retrieve the original position of the relative head within the relative clause. Sometimes retention can be used **along with the gap strategy**, like in the case of Yoruba. In Yoruba retention is obligatory for both arguments and obliques. With arguments, we see **pronoun retention** which is when a pronoun is found within the relative clause to reference to the relativised noun. In the first sentence the resumptive pronoun is *ó*, that refers to the animate *ọkùnrin* 'man', while in the second sentence the pronoun is *náà*, that refers to the inanimate *aṣọ* 'cloth'. With obliques, on the other hand, the gap strategy is used, but we also see **retention of the preposition** that indicates the original function that the relative head had prior to relativisation. In the third sentence the relative head *àdà* 'cutlass' is gapped, but the preposition *fi* 'with' is retained within the relative clause.

Japanese (Japonic, Japan)

*[Kinō Hiroko-ga atta] hito-ga ki-ta.*  
yesterday Hiroko-NOM meet.PASS person-NOM come-PASS  
'The man whom Hiroko met yesterday came.'

[*Watashi-ga sakana-o tabe-ta*] *hashi*.  
I-NOM fish-ACC eat-PASS chopstick  
'The chopsticks with which I ate the fish.'

In some languages the gap strategy is the only available strategy for relativisation and it is used **regardless of the function** that the relativised noun had in the relative clause. Japanese, for instance, employs the gap strategy for both arguments and obliques. In the first sentence above, the relativised *hito* 'person' is an argument of the verb *atta* 'met' in the relative clause. In the second sentence, the relativised *hashi* 'chopsticks' is an oblique (instrument) of the verb *tabeta* 'ate'. Nevertheless, there is **no morphosyntactic indication** within the relative clause to signal this original function, which is then understood solely on a pragmatic basis.

Karachay-Balkar (Turkic, Russia) (examples from Comrie 1998, 81)

[*Prezident kel-gän*] *hapar*.  
president come-PTCP news  
'The news that the president has come.'

[*Et biš-gän*] *iyis*.  
meat cook-PTCP smell  
'The smell of meat cooking.'

Many languages also display constructions that, when we look at the linear order of constituents, are identical to relative clauses. In the Karachay-Balkar examples above the nouns *hapar* 'news' and *iyis* 'smell' follow a clause that they are the head of. This is exactly the order of constituents found in relative clauses in this language. However, both these nouns originally **do not occupy any position within the relative clause** – both *kel* 'come' and *biš* 'cook' are intransitive verbs whose subject is already present. This means that nothing has been gapped from within the clause in square brackets. These constructions are not relative clauses, but rather they are treated as **general noun-modifying clause constructions** (or GNMCCs) (Comrie 1998). In GNMCCs a noun heads a clause while not being formerly included in it. There is **no explicit expression of the relation** between this head noun and the clause, but the clause simply describes the semantics of the head noun. We can think of the first sentence as 'What kind of news?' 'The president-has-come news.' Some languages employ a subordinator of some kind (like the participle *-gän* in Karachay-Balkar) but many others do not employ any overt marking of dependency.

### 6.3 Analysis and Description

In no less than 400 words discuss relative clauses in HA and SA on the basis of your analysis of the data provided in Set 1 and Set 2.

- What premises did your analysis start from?
- What strategies are employed in HA and SA for relativisation?
- What are the limitations of these strategies?
- Are there specific kinds of verbs or specific constructions that trigger an unexpected kind of retention in relative clauses?
- Are there constructions that resemble relative clauses which are not actually a relative clause? What are they and how are they different from relative clauses?
- Do HA and SA behave differently in some way?





## Set 1.1 (Hokkaidō Ainu)

1. *Asir cip ecinukare.*

'I show you a new boat.'

2. *Seta somo kukor.*

'I don't have a dog.'

3. *Seta kusak.*

'I don't have a dog.'

4. *Nea kotan kor nispa ki.*

'That noble man who had the village (= the village chief) did it.' (Tamura 1985, 64)

5. *Kamuy oruspe somo aye hike kusu...*

'Whether I don't tell a tale of gods...' (Tamura 1984, 30)

6. *...sekor yaynuan pe ne kusu, akosomasnu.*

'Because I thought so, I pretended I didn't know [anything] about it.'  
(IH 1986, line 710)

7. *Nep akar ka somo ki.*

'I didn't prepare any [food].' (Tamura 1985, 22)

8. \**Aep esomo kar.*

'You don't prepare food.'

9. *Tane hosipian somo ki yak...*

'If you don't return now...' (Bugaeva 2004, 143)

10. *Tunasno ainukare.*

'You show me quickly.' (Tamura 1985, 18)

11. *Asinuma anak aerampewtek.*

‘As for me, I don’t know that.’ (Tamura 1984, 56)

12. \* *Tunasno eek ka somo yak...*

‘If you don’t come quickly...’

13. *Cikir ka sak tek ka sak pone ka sak...*

‘It doesn’t have legs, hands nor bones...’ (Tamura 1984, 56)

14. \* *Tanpe aeraman ka somo ki.*

‘I don’t know that thing.’

15. *Pirka esiruwante [...] wa eapkas somo ki yakun...*

‘If you walk without paying attention...’ (AM 1987, line 672)

#### Set 1.2 (Sakhalin Ainu)

1. *‘Ampene ‘ipe ka hannahka kii.*

‘She didn’t eat at all.’ (Dal Corso 2021, 350)

2. *Pirikano ‘ewante.*

‘He knows you well.’ (Dal Corso 2021, 220)

3. *Hanka etunne wa kamuyonne kosmahne yaykaraa!*

‘Don’t be unwilling and give yourself as a wife to a god!’ (Dal Corso 2021, 286)

4. *Hannahka ‘emeerayki wa?*

‘Aren’t you cold?’ (Murasaki 1979, 109)

5. *‘Ampene nukara ka hankihci.*

‘[The people] didn’t see her at all.’ (Dal Corso 2021, 351)

6. *Poso kuniine 'an kah ka hannehka koro.*

'It didn't have the looks of [something that could be] stabbed.' (Dal Corso 2021, 393)

7. *\*Etunne hanka wa kamuyonne kosmahne yaykaraa!*

'Don't be unwilling and give yourself as a wife to a god!'

8. *'Aynu'ohta ka yee ka hankii.*

'She didn't tell [that] to anyone.' (Dal Corso 2021, 317)

9. *Ray utaraohta toytunketa hankayki ahunke yan!*

'Don't put [the precious objects] in the ground for the dead men!' (Pilsudski 1912, 89)

10. *'Ampene kuerameskari 'ampe.*

'I absolutely don't know him.' (Dal Corso 2021, 217)

11. *Hancinukara siri.*

'A land that is not seen.' (Dal Corso 2021, 315)

12. *Neampe 'ankii 'ani tani [...] 'oyasi [...] 'asin.*

'While I did that eventually [...] the monster [...] came out.' (Dal Corso 2021, 392)

13. *Pu'onne 'ahun teh ponno 'an.*

'It went to the store house and stayed [there] a little while.' (Dal Corso 2021, 329)

14. *'Ipe ka sah.*

'They didn't have food either.' (Dal Corso 2021, 328)

15. *Itomokene hanneampe eh manuy.*

'Not towards me it came.' (Pilsudski 1912, 206)

16. *Sine aynu kayki ta aynu hanne cohca.*

'One man [among them] didn't hit that man (= No-one of them could hit that man).'  
(Pilsudski 1912, 70-1)

17. \* *Aynu'ohita ka hankii yee.*

'She didn't tell [that] to anyone.'

## 7.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Constituent structure*

Consider the following negative clauses and pay attention to the non-negative examples too. Only SA examples are provided for this dataset. What syntactic structures/processes are present in the non-negative clauses and how much of them can you find in the negative constructions? Review (if necessary) what word classes the constituents in the negative constructions belong to and provide a justification for your statements.

### Set 2 (Sakhalin Ainu)

1. *Nuca cankionne etaraka ye kayki hanne ki.*

'They do not speak to Russian officials without reflection.' (Pilsudski 1912, 62)

2. *Poronispauta irenkaha nee.*

'It is the order of important people.' (Dal Corso 2021, 216)

3. *Anihi humpecehpo hannehka.*

'I myself am not a puffer fish.' (Murasaki 2001, 198)

4. *Kipirika 'okarakahsekahci yahka 'ampene pirika ka hankii.*

'They made her roll down from atop of a hill but it was not good at all.' (Dal Corso 2021, 353)

5. *Annu yahka asih ka hamanki.*

'Although I heard it, I did not go out.' (Pilsudski 1912, 161)

6. *Tu to pahno re to pahno hamo ipe makapan.*

‘I went uphill without eating for two or three days.’ (Pilsudski 1912, 123)

7. *Nean pon teynehpo reske ki.*

‘He indeed raised that small baby.’ (Dal Corso 2021, 371)

8. *Mahpohohcin ‘aynu po kayki hanne.*

‘Her daughters were not even children of a human being.’ (Pilsudski 1912, 59)

9. *‘Ampene ceh kayki ‘anee ka hankii.*

‘I didn’t eat fish at all either.’ (Dal Corso 2021, 170)

10. *Kimoykian yahka sine hoynu kayki hamanrayki.*

‘Although I hunted in the mountains, I did not kill a single marten.’ (Majewicz 1998, 265)

11. *Ota pahko neampe nakene ka oman ka hankii.*

‘As for the old Ota, she [will] not go anywhere.’ (Dal Corso 2021, 217)

12. *Urayki neampe hamutara ki kun pe ne.*

‘As for fighting, the Ainu wouldn’t be [the ones to] do that.’ (Pilsudski 1912, 70)

13. *Nean jitosa oo ‘ankii.*

‘I did get into that car.’ (Dal Corso 2021, 185)

14. *‘Ekotan itah neh [...] nuure waa!*

‘Make her listen [...] to some of the language of your village!’ (Dal Corso 2021, 169)

15. *Sine pon tohkori ikuree koroka ‘ankuu ka hankii.*

‘They [gave] me one small cup to drink but I didn’t drink.’ (Dal Corso 2021, 206)

16. \* *Nupuru'onne ku'oman ka.*

'I also went to the mountain.'

17. *Hamecinu yayne...*

'You didn't listen and then...' (Pilsudski 1912, 121)

18. *'Ikuu raapokeketa nukaraha neampe neya teh pu'onne 'ahun.*

'As for the fact that he looked at it while smoking, the hand went into the store house' =  
'When he looked at it as he was smoking [he noticed that] the hand went into the store house' (Dal Corso 2021, 329)

19. *Tani repun 'aynuutah nukara.*

'The people saw him eventually going at sea.' (Dal Corso 2021, 364)

20. *Taata kayki poro 'aynu kotan 'an.*

'There too was a big Ainu village.' (Dal Corso 2021, 325)

21. *Hamo sisrampa teekoro inkararay manu.*

'They stared fixedly without blinking.' (Pilsudski 1912, 109)

22. *Nea aynu neampe numa kayki hanne ki.*

'That man did not get up.' (Pilsudski 1912, 126)

### Examples from Other Languages...

Persian (Iranian, Iran) (examples from Neiloufar 2014, 26)

*Hærf zædæn* word hit = 'speak'

*Guf kærdæn* ear do = 'listen'

*Bolænd kærdæn* high do = 'lift'

*Pæs dadæn* back give = 'return'

English (Germanic, UK)

*Have a rest* = rest  
*Take a walk* = walk  
*Do cleaning* = clean

Many languages possess periphrastic verb constructions made up of a verb and a non-verbal element (usually a noun, but also adjectives, adverbs or prepositions are common). Verbs such as ‘do’, ‘take’, and ‘give’ are most commonly used, but the choice of the verbs allowed to appear in these constructions is strictly language dependent and always limited to a certain number of elements. The verbal element in these constructions does not contribute any meaning to the whole phrase (or its meaning is downgraded), but it is the non-verbal element what contributes the core meaning to the expression. See for instance the Persian *guf kærðæn* where the noun ‘ear’ contributes the meaning of ‘listening’, or the English *do cleaning* where the semantic content of the verb phrase is in the verbal noun *cleaning*. For this reason, the verb in these constructions is said to be a ‘**light verb**’, in the sense that its original meaning is not retrievable as it would be when it is used alone and it only has the syntactic function of heading a verb phrase. The whole construction is referred to as ‘**light verb construction**’ (see e.g. Butt 2010).

Malay (Austronesian, Malaysia) (examples from Yap, Grunow-Hårsta, Wrona 2011, 13)

<i>Makan</i>	<i>lewat</i>	<i>tak</i>	<i>bagus</i>
eat	late	not	good

‘Eating late is not good.’

Korean (Koreanic, Korea) (examples from Yoon 1991 in Yap, Grunow-Hårsta, Wrona 2011, 6)

*Chelswu-ka chayk-ul ppalli ilk-ess-um-i pwunmyengha-ta.*  
 Chelswu-NOM book-ACC quickly read-PST-NMLZ-NOM evident-DECL  
 ‘It is evident (the fact) that Chelswu read the book quickly.’

**Nominalisation** is a process through which a verb, verb phrase or an entire clause, headed by a verbal element, becomes to function as a noun. Nominalisation can be a morphosyntactic or a semantic process. In the first case, the change of word category (from verb to noun) is overtly signalled by a morphosyntactic element, usually a **nominaliser**, like the Korean *-um*. The new nominal status of the phrase/clause marked with *-um* is clear from the fact that the whole constituent can bear morphological elements that are only compatible with nouns (see the NOM suffix *-i*). Alternatively, nominalisation is not signalled overtly in any way morphosyntactically. In this case a verb phrase or an entire clause starts to function as a noun, like in the Malay case above where the verb phrase *makan lewat* ‘eat late’ functions as the argument of the main verb *bagus* ‘be good’. Nominalisation in this case is also termed ‘**zero-nominalisation**’, ‘**zero-derivation**’ (e.g. Lieber 2005) or ‘**conversion**’ (e.g. Bauer, Valera 2005).

### 7.3 Analysis and Description

In no less than 400 words, list all constructions used in HA and SA to express negation providing an example for each construction.

- What word classes are involved in these constructions and how would you describe their morphosyntactic structure?
- What syntactic or non-syntactic processes are at work? Motivate your answer.
- Are the negative forms (i.e. *somo*, *hannehka*, ...) morphologically analysable? If yes, what are the morphemes involved and which one would you point out as the one morpheme that encodes negation?
- What constructions (if any) remain difficult to analyse? Why? How would you think of resolving the problem?
- Reconsider the examples in Sets 1.2 and 2: are there any negative forms that seem to be used in specific functions and/or with a specific meaning? Which ones? How would you describe these functions or meanings?





→ *Dataset 1 - Evidence of incorporation*

Consider the following examples. Some feature noun incorporation and some do not (\* marks ungrammaticality). What morphosyntactic evidence do we have to say that noun incorporation has or has not occurred? What are the syntactic processes or the morphology that are insightful in this regard? Why does ungrammaticality arise?

**Set 1.1** (Hokkaidō Ainu)

1. *Orota eahun wa ape eare.*

'You enter there and light a fire.'

2. *Rapok suy tokap wakkataan.*

'Meanwhile I again drew water at noon.' (IH 1987, line 453)

3. \**Rapok suy tokap awakkata.*

'Meanwhile I again drew water at noon.'

4. *Eare ape.*

'The fire that you light.'

5. *Sirsesek.*

'It is hot.' (Tamura 2000, 194)

6. *Ata wakka.*

'The water that You drew.'

7. *Orota eahun wa eapeare.*

'You enter there and light a fire.' (OS 1977, line 409)

8. \**Taan wakka.*

'The water that You drew.'

9. \**Kusirsesek.*

'I am hot.'

10. *Rapok suy tokap wakka ata.*

‘Meanwhile I again drew water at noon.’

### Set 1.2 (Sakhalin Ainu)

1. *Mahkoro’an ike yaycisekoro’an.*

‘I got a wife (= married) and got myself a house.’ (adapted from Dal Corso 2021, 417)

2. *Ahapan teh [...] unci’an’aare.*

‘I entered and lit a fire.’ (Dal Corso 2021, 397)

3. \**Yaykoro’an cise.*

‘The house I got [for] myself.’

4. \**Koro’an mah.*

‘The woman I married.’

5. *Cehrayki’an [...] hecacita tura’an’ee.*

‘I killed fish (= fished) [and] ate them with the boys.’ (Dal Corso 2021, 169)

6. *Koro kun mah’isam manu.*

‘They say that there is not a woman whom he could have.’ = ‘There’s no good wife for him.’ (Dal Corso 2021, 232)

7. \**Ancehrayki [...] hecacita tura’an’ee.*

‘I killed fish (= fished) [and] ate them with the boys.’

## 8.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Limits and peculiarities of NI*

Consider the sentences given below (\* marks ungrammaticality, ? marks dubious cases; some examples are repeated from Set 1.2 above). Only SA examples are given for this dataset. Is there any syntactic or non-syntactic behavior that does not comply with what you have just observed about noun incorporation in Set 1? Why do you think ungrammaticality arises?

### Set 2 (Sakhalin Ainu)

1. *Iki'an.*

'We act [like this].'

2. *Cehrayki'an [...] hekacita tura 'an'ee.*

'I killed fish (= fished) [and] ate them with the boys.' (Dal Corso 2021, 169)

3. *'Atuyonne 'ampene [...] haweikihci.*

'They cried out loudly towards the sea.'

4. \* *Cikahrayki'an [...] hekacita tura 'an'ee.*

'I killed birds (= hunted for birds) [and] ate them with the boys.'

5. ? *Pon cehrayki'an [...] hekacita tura 'an'ee.*

'I caught small fish [and] ate them with the boys.'

6. *Neewa 'an haweikihci yahka ...*

'Even though they make such voices (= they are so insistent) ...' (Dal Corso 2021, 282)

7. *Mahkoro'an 'ike yaicisekoro'an.*

'I got a wife (= married) and got myself a house.' (adapted from Dal Corso 2021, 417)

8. *Nispa Rurupa kotan kohosipi.*

'The noble man returned to the village of Rurupa.'

9. *Aynu anne kusu yaykisorokaraan kusu neyke ...*

‘Because we are Ainu, if we create our own offspring ...’ (Pilsudski 1912, 46)

10. *Rurupa un nispa yaykotankohosipi.*

‘The noble man of Rurupa returned to his village.’ (adapted from Pilsudski 1912, 144-5)

### Examples from Other Languages...

Mohawk (Iroquoian, USA and Canada) (examples from Baker 1996 in Muro 2009, 118)

*Thíka*      *ɔ-ye-nakt-a-núhwe?-ne?*  
**that**      FUT-3F.SG.S/3N.O-**bed**-LNK-like-PUNC  
‘She will like this bed.’

In some languages incorporation only allows noun roots to be incorporated into a verb. Some others also allow **larger nominals** to be incorporated (like noun stems made up of a noun root plus, for example, an adjective root) but do not allow these nominals to have modifiers (like quantifiers, demonstratives, relative clauses, ...). This is not the case of Mohawk. In Mohawk a noun with **modifiers** can be incorporated, like we see for the noun *nakt* ‘bed’ in the example above. The modifier of this noun, here the demonstrative *thíka* ‘that’, remains **stranded** (i.e. outside of the verbal form) but it still references the incorporated noun (Muro 2009, 108-25). The languages that allow this kind of incorporation usually impose **limitations on the syntactic kind** of the element that can remain stranded, so that not all syntactic constituents are acceptable in that position.

Hindi (Indo-Aryan, India) (examples from Dayal 2011 in Borik, Gehrke 2015, 20)

*Anu*      *sirf*      *puraanii*      *kitaab*      *becegli.*  
Anu      only      **old**      **book**      sell.FUT  
‘Anu will only sell old books.’

In some languages noun incorporation is less strict syntactically. The incorporated noun is usually **less marked morphologically** (e.g. it cannot have markers of person, possession, number, ...) but it **retains some syntactic freedom** – e.g. it can be separated from the incorporating verb by an adverb, a particle and the like. This never happens in noun incorporation proper, which is why these cases are defined as **pseudo-noun incorporation** (PNI) (Borik, Gehrke 2015). Pseudo-incorporated nouns too can have modifiers, like the adjective *puraanii* ‘old’ that modifies the pseudo-incorporated noun *kitaab* ‘book’ in the example above. However, PNI imposes some **restrictions in the semantics** of modifiers so that only modifiers with semantics that help deriving a verbal form describing an action with **cultural relevance** are acceptable. In Hindi, selling old books is recognised as an activity that belongs to the culture of the people speaking the language while, for instance, ‘selling red books’ is not. Therefore it would be impossible to substitute ‘old’ with ‘red’ in the example above. A different structure (one that does not involve PNI) must be used.

Chukchi (Chukotka-Kamchatka, Russia) (examples from Polinskaja, Nedjalkov 1987 in Muro 2009, 3)

*ətləg-ən*      *kawkaw-ək*      *mətqə-rkele-gʔe.*  
father-ABS bread-LOC **butter**-spread.on-3SG.S  
‘Father spread butter on the bread.’

Blackfoot (Algonquian, Canada) (examples from Frantz 1971 in Mithun 1985, 858)

*iīhpokón-sskaawa nóko'sa.*

**ball-acquire.3SG** my.child  
'My child got a ball.'

*Nít-ōhpokón-sskoawa nóko'sa.*

**I-ball-acquire.3SG** my.child  
'I provided my child with a ball.'

Noun incorporation may result in the **syntactic saturation** of the verb. For instance, if a noun is incorporated in a transitive verb, this verb becomes syntactically intransitive – i.e. it may take now just one argument, the subject. This is shown by the Chukchi example where the transitive *rkele* 'spread on' incorporates the noun *mətqə-* 'butter' and becomes intransitive. The new valency of the verb is clearly signalled by the **agreement** suffix *-gʔe*, that is used for marking third person subject on intransitives.

In other languages noun incorporation does not necessarily result in the syntactic saturation of the verb. In the first example from Blackfoot we see object incorporation of the noun *iīhpokón-* 'ball' into the verb *sskaawa* 'acquire' which causes syntactic saturation – the only argument the verb can take is now the subject, here *nóko'sa* 'my child'. However, this same incorporation **may not cause syntactic saturation** and the argument slot left vacant by the incorporated noun is filled by a new nominal or by an already present one. In the second example from Blackfoot *nóko'sa* 'my child' takes the empty slot of the object, it leaves the subject slot empty and so the verb can now take a new subject, here *nít* 'I'. The verb **has not changed in valency** as it is still transitive. With this kind of incorporation (with no syntactic saturation) the semantics of the verb **may slightly change**. Furthermore, many languages impose **restrictions on the semantics** of the noun that can replace the incorporated noun.

### 8.3 Analysis and Description

In no less than 400 words discuss noun incorporation in HA and SA.

- Where did your analysis start from?
- What kind(s) of NI can you observe in HA and SA? Motivate your answer citing examples from Set 1 and Set 2 above where necessary.
- What is the morphosyntax of NI?
- What are the limitations of NI? Are they morphosyntactic or semantic?
- Is there any behavior or structure you observe that remains difficult to explain and define?
- Specifically, go back to Lesson 3, where the reflexive *yay-* was introduced: how does this valency decreasing strategy interact with noun incorporation?



- On this point HA and SA may differ as some 'regular' possessive forms in HA are 'irregular' in SA, like for example *tek* 'hand' > *tekehe* (HA) but *tek* 'hand' > *tekihi* (SA).
- The possessor on these forms is marked again on the noun via a transitive personal agreement prefix in the subject form – e.g. *kusapaha* 'my head' (HA, SA), *eparoho* 'your mouth' (HA), or *tekihi* 'his/her/its/their hand' (SA).
- When the possessor is a third person it can be expressed by a separate noun that always precedes the possessed noun – e.g. *seta paroho* 'the dog's mouth'.

→ *Dataset 1 - Variety of forms*

Among the following example clauses there are some that include other sentence-final expressions like the ones we saw in (1) and (2) above and some others that do not (additional examples are given for you to infer the meaning of words). Besides *siri ne* and *humih* 'an what are the other forms present in HA and SA? Make a list of them. Then make reference to the other examples to understand what is the morphological structure of the forms you have listed and what word classes are involved. After you are done with the morphological analysis return to the examples that include the sentence-final forms – can you make any observations on their syntactic structure? Background context information is given for these examples, but you will need it later for Set 2.

**Set 1.1** (Hokkaidō Ainu)

1. *Sinuma ka korayniwkes siri ne (noyne iki a).*

'It was (like) he couldn't [separate from me] either.' (Kayano 4-4,10)

[The speaker is being hugged by her husband and sees that he cannot let go of her since he is too happy]

2. *Areska wa an.*

'I had raised her [so].' (Bugaeva 2004, 307)

3. *Yuptek menoko ane.*

'I was a hard-working woman.' (Tamura 1984, 16)

4. *Ayupih* *iyekari ek kor an siri iki.*

'It seemed my brother was coming towards me.' (adapted from Tamura 1985, 60)

[A stoat, character of the tale, turns himself into a woman and from afar sees his brother walking in his direction]

5. *Nep humih* [...] *a(n)nu.*

'I heard the sound of something.' (OS 1981, line 798)

6. *Awenmatnepoho purio kasperu siri an.*

'It seems that my degenerate daughter has had too much of a violent temperament.'  
(Tamura 1984, 34)

[The speaker comments like this after the main character of the story recounts the difficult travel he had to make because his mother, the speaker's daughter, had told him to].

7. *Husko nituyru ka an.*

'There was also the trace of an old tree cutting.' (Bugueva 2004, 254)

8. *Usa sisakpe aiyere humi ne.*

'I was given various delicious food.' (Tamura 1984, 42)

[A blind woman comments on the food she was given by her relatives]

9. *Apesamta ek'an.*

'I went next to the fire.' (Bugueva 2004, 270)

10. *Hunakun ka aiyani wa payean humi as.*

'It seemed I was carried and going somewhere.' (Tamura 1985, 4)

[A woman is inside a coffin and from the movements and the voices coming from outside she figures out she is being carried some place up a hill]

11. *Hopuni wa as.*

'[My father] jumped and stood up.' (Bugueva 2004, 204)

12. *Aeramiskari okkaypo ek wa an ruwe ne.*

'A young man, who I don't know, has come.' (Bugueva 2004, 256)

[A young woman says this to the owner of the house after having met an unknown man at the door]

13. *Apoho ene hawe ne ciki, isamun ek.*

‘If you are my child, come next to me.’ (Tamura 1984, 40)

[A woman says this after a young boy introduced himself to her saying that he was her son]

14. *Tanto sirpirka.*

‘Today the appearance is good (= the weather is nice).’

15. *Kantoorun payean yakka ...*

‘Even though we went to heaven ...’ (Bugueva 2004, 149)

16. *Akor sapo pasrota [...] kor ek hawe as.*

‘It seemed my older sister came while swearing’ (Tamura 1985, 19)

[The younger sister just played a prank to the older sister and from inside the house hears her coming back angry]

17. *Kem ruwe.*

‘The trace of a needle.’ (Bugueva 2004, 162)

18. *Neun poka ikian.*

‘I [had to] do something at least.’ (Bugueva 2004, 192)

#### Set 1.2 (Sakhalin Ainu)

1. *Utara reekoro tohseno humihi ‘an.*

‘It seemed [those] people were really sleeping deeply.’ (Pilsudski 1912, 184)

[The speaker, the character of the tale, is resting in the dark next to some other people who are perfectly still and silent]

2. *Neya ruu kaari san.*

‘He went down through this path.’ (Dal Corso 2021, 328)

3. *Tuhso neeno 'an puy 'ahun sirihi 'an.*

'It seemed a hole like a cave opened [on the side of the mountain].' (Dal Corso 2021, 389)

[The speaker looks from a distance and guesses there is a cave ahead of him from the shape of the mountain]

4. *Cise'onnay neeno 'oseh.*

'It was wide like the inside of a house.' (Dal Corso 2021, 333)

5. *Na sukuh mahtekuh neehci.*

'They were still young women.' (Dal Corso 2021, 305)

6. *'Ehankeno 'an pe ka 'emuyke kehke wa cokoko wa 'isam ruwehe 'an.*

'It must have ended up breaking and felling even all the things (the trees) around.' (Dal Corso 2021, 396)

[The character of the story, after having killed a monster from inside its belly, jumps out and sees the damage it caused while squirming because of the pain.]

7. *Tenkorasi yahka pirika, 'ampene an hemata kihci?*

'Even if [one] hugs [bear cubs] it is fine. What do they do, really?' (Dal Corso 2021, 196)

8. *Tani 'onne haw 'ankoroo.*

'Now we have an old voice.' (Dal Corso 2021, 182)

9. *Ta ohacisuye seta humpa hawehe an.*

'It seemed that empty-house-devil crushed the dogs [that were inside the house].' (Pilsudski 1912, 79)

[The speaker is outside the house that his dogs just went into and hears them howling while the devil kills them]

10. *Anhawehe nuu yahka wantehe nee nanko.*

'He [will] probably know if he hears our voice.' (Dal Corso 2021, 182)

11. *'Aynu ka 'emuyke [...] 'ee wa 'isam.*

'[The monster] ended up eating [...] even all the people.' (Dal Corso 2021, 390)

12. *Hemata humihi reekoh nuhci.*

'They heard loudly the sound of something.' (Dal Corso 2021, 316)

13. *Sine too reekoh siripirika.*

'One day the appearance was good (= the weather was nice).' (Dal Corso 2021, 302)

14. *Kuikuu yayne ahun.*

'I smoked and then she entered.' (Dal Corso 2021, 175)

## 9.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Structure and meaning*

Consider the sentences given here together with the ones in Set 1 for which background context is given. Do you find any variants of the sentence-final forms you have just listed? Why are the sentences marked with \* ungrammatical? What are the alternative forms you see and what changes in their morphosyntactic structure? On the basis of background context can you explain what is the meaning(s) and function(s) of the different sentence-final forms? How can they be subdivided within each variety and what are the differences between HA and SA?

### Set 2.1 (Hokkaidō Ainu)

1. *Aonaha heru earanukar kor ora ihoppa siri an?!*

'Only once I see my father and then he leaves me?!' (adapted from Kayano 1-8,12)

[The speaker utters this sentence after the father he hadn't seen for a long time walks away from him]

2. *Ukuran ka yaanipo isam [...] sirki.*

'Even in the evening it seemed he was almost [...] dying.' (Tamura 1984, 14)

[The speaker tells about the time she healed a sick person and speaks about their physical conditions]

3. *Okkayo haw* [...] “*ahunke yak pirka wa*” *sekor hawas*.

“You may let him come in” said the voice [of] a young man.’ (Bugueva 2004, 257)

[The speaker hears the woman who just met him at the door say this once she goes back in to inform the owner of the house about who just arrived]

4. *Toop oyakketa ray pe aynu ne sekor hawas*.

‘It’s said that the ones who [go] to a faraway land [when] they die are people.’ (Nakagawa 2001, 87)

[The speaker reports what others have told her]

5. \**Usa sisakpe aiyere hum ne*.

‘I was given various delicious food.’

6. *Nispa poka sone siknu wa an hawe an?*

‘Truly at least [that] man has survived?’ (adapted from Tamura 1985, 12)

[The speaker asks this to herself after having heard about the casualties and survivors of a famine at her old village]

7. *Pet put an (noyne) siran wa ...*

‘It seemed (like) there was the mouth of a river.’ (Bugueva 2004, 319)

[The speaker observes the surroundings by the seashore from a distance]

8. *Hapo itak ne wa siran*.

‘[Those] had been the words [of my] mother.’ (Kayano 19-4,6)

[The speaker finally realises that what she heard previously, though strange to her, were the words of her mother.]

9. *Sermaka akor hawas.*

‘It seemes I have a protective god [on my side].’ (Kayano 2-6,14)

[The speaker says this after hearing the distinctive cry of a bird that is the embodiment of a protective god]

10. *Tane icire (noyne) humas [...] kusu ...*

‘Because now it seemed (as if) he grilled me ...’ (Kayano 19-4,27)

[The speaker character of the story (an animal) is inside a pot and feels heat coming from below]

## Set 2.2 (Sakhalin Ainu)

1. *Tan husko karauto an ruwehe ‘an.*

‘There was this old box.’ (Pilsudski 1912, 200)

[The speaker looks around the house searching for something his brothers are hiding and finds a box]

2. \* *Pon nayohta ihuraye ruwe ne.*

‘She washed me in a small river.’

3. *Reekoh etoorohci ‘ani mokoro hawehehcin ‘an.*

‘It seemed they were sleeping while snoring loudly.’ (Dal Corso 2021, 318)

[The speaker is lying nearby some people who are sleeping]

4. \* *‘Usahpa ‘usahpa cisehehcin ‘onne [...] ‘ampahci.*

‘[The man] took [the bears] one by one to their house (=cage).’ (Dal Corso 2021, 202)

5. \* *Ta ohacisuye seta humpa haw an.*

‘It seemed that empty-house-devil crushed the dogs [that were inside the house].’

6. *Oropekano inkaran yako, osomaciseohta ahupan ruhe an.*

‘When I looked around, [I realised] I must have entered a privy.’ (adapted from Pilsudski 1912, 160)

[The speaker is lured into a dark privy by two gods. After smelling a foul smell and not understanding where it came from, he finally realises where he is.]

## Examples from Other Languages...

*Ngiyambaa* (Pama-Nyungan, Australia) (data from Donaldson 1980 in Aikhenvald 2004, 34)

*ŋindu-gara girambiyi.*  
you.NOM-SENS.EV sick.PAST  
‘You were sick (one could see it).’

*Dhagun-gir-gara ŋina dhinga: ga-ɾa.*  
earth-NASTY.WITH- this.ABS meat.ABS be-PRES  
SENS.EV  
‘This meat tastes nasty with earth (I have tasted it).’

*Foe* (Austronesian, Papua-New-Guinea) (data from Rule 1977 in Aikhenvald 2004, 62)

*Aiya bare wa-boba’ae.*  
plane come-EV.VIS  
‘A plane is coming (I can see it).’

Many languages of the world have a system of forms dedicated to indicate how the speaker acquired the information that is the content of what she says and, additionally, what was the physical or non-physical means through which this acquisition happened. These forms are called **evidentials** and the category to which they belong is called **evidentiality** (e.g. Aikhenvald 2004). One type of evidentials are the ones that indicate that the content of information is acquired directly (or first-hand) by the speaker – these are usually called **direct evidentials**. A language may not have separate direct evidentials depending on the kind of source through which information was acquired, like *Ngiyambaa* where the form *-gara* can be used regardless of the stimulus at the basis of the acquisition (in the first sentence the speaker knows that ‘you were sick’ from sight but in the second sentence she knows that ‘the meat tastes nasty’ from taste). Direct evidentials may otherwise differ according to the stimulus at the basis of the acquisition, like in *Foe* where the form *-boba’ae* specifically indicates that information is acquired directly through a visual stimulus.

*Amdo Tibetan* (Tibeto-Burma, China) (data from Sun 1993 in Aikhenvald 2004, 45)

*Tʂaɕ<sup>hi</sup>=kə<sup>h</sup>tæ n<sub>u</sub>=zəg.*  
Bkra-shis=ERG horse buy=INFR  
‘Bkra-shis bought a horse (speaker inferred it).’

Another kind of evidentials are the ones that indicate that information was acquired indirectly – these are called **indirect evidentials** or also **inferentials**. In many languages of the world the stimulus or means of acquisition of inferentials is left unspecified, like in Amdo Tibetan. In the sentence above the inferential =zəg only indicates that acquisition of the fact that ‘Bkra-shis bought a horse’ happened indirectly, but does not specify whether this happened through a visual stimulus (i.e. the speaker seeing that Bkra-shis built a stable), an auditive stimulus (i.e. the speaker hears a horse neighing) or else. In this case only context may provide clarification.

Lezgian (Caucasic, Azerbaijan) (data from Haspelmath 1993 in Aikhenvald 2004, 31)

*Baku.d-a irid itim gülle.di-z aqud-na-lda.*  
Baku-INESS seven man bullet- take.out-AOR-REP  
DAT

‘They say that in Baku seven men were shot.’

Finally, some languages have evidentials dedicated to mark verbal report – these are called **hearsay evidentials**. Hearsay evidentials mark that the information content of the utterance was acquired from someone else and it is being reported as it is. Some languages may distinguish **quotatives** and **reportatives** within hearsay evidentials. With quotatives the speaker reports an information repeating, or somehow ‘quoting’, the person who originally said those words. With reportatives the speaker reports an information indirectly, most times without specifying the original source of the statement. The Lezgian *-lda* is used above in this latter function.

### 9.3 Analysis and Description

In no less than 400 words, list all forms used in HA and SA to mark source of information (if present, indicate the variants of one same form). Making reference to the examples in the sets above, describe in your own words the meaning(s) and function(s) of each form. If necessary, make reference to the examples from other languages in your argumentation.

- How would you call these forms?
- Would you subdivide them into separate classes? How many? How would you define them and why?
- Would you propose the same subdivision in HA and SA and, more in general, what are the differences between the two language varieties?
- What is the morphosyntactic structure of the constructions when these forms are used?
- Are there any forms or any uses of one particular form that are difficult to analyse? Why are they so?
- How would you think of resolving the problem?



- The Ainu antipassive *i-* is traced back to the incorporation of a generic noun *hi/i* ‘fact, thing’. This noun does not exist anymore as an independent noun in Ainu, but it is retained as a nominaliser (see Lesson 15).
- The opaque semantics of this noun led the marker *i-* to refer to a generic object: an argument of the verb that has a peripheral discourse function and that can therefore be downplayed or omitted.
- The fourth person object marker *i-* would have then originated from the antipassive *i-* thanks to the referentiality properties of this latter. The reanalysis as a personal agreement marker probably started when it was necessary to avoid mentioning some speech act participants directly (out of respect or for other reasons). This hypothesis nicely explains the functions of the 4O marker to refer to the inclusive first person plural, an honorific second person, and a logophoric first person (see Lesson 3).

→ *Dataset 1 - Morphosyntactic constraints*

Examples (1)-(4) above already show a behavior of the Ainu antipassive that is at odds with the characteristics of a prototypical antipassive construction. Consider the following examples (\* marks ungrammatical examples). What is the morphosyntactic structure of the Ainu antipassive construction? What causes the ungrammaticality of examples marked with \*? Does antipassivisation affect verbal valency? How? What is the morphological evidence for that?

**Set 1.1** (Hokkaidō Ainu)

1. \* *Uepekerotta inuas.*

‘We heard a news.’

2. \* *Sinenne aponpohootta iyomapan.*

‘I love the child all alone.’

3. *Aponpoho aomap kusu ...*

‘Because I love our little baby ...’ (adapted from OS 1981, line 969)

4. *Uepeker cinu.*

‘We heard a news.’

5. \* *Sinenne aponpoho eun iyomapan.*

‘I love the child all alone.’

6. *Sinenne iyomapan.*

‘I love the child all alone.’ (Bugueva 2018, 14)

7. *Inuas.*

‘We heard a news.’

8. \**Uepekerorwa inuas.*

‘We heard a news.’

## Set 1.2 (Sakhalin Ainu)

1. \**Sine paa tani weepkere’ohta inuan.*

‘Eventually one year we heard a news.’

2. \*‘*Episkanne ciseta utara’ohta ‘iwooneka.*

‘He checked on the situation of people in the houses around.’

3. *Sine paa tani inuan.*

‘Eventually one year we heard a news.’

4. ‘*Episkanne ciseta ‘iwooneka.*

‘He checked on the situation of people in the houses around.’ (Dal Corso 2021, 330)

5. \**Sine paa tani weepkere’orowa inuan.*

‘Eventually one year we heard a news.’

6. *Sine paa tani weepkere annuu.*

‘Eventually one year we heard a news.’

7. \*‘*Episkanne ciseta utara’orowa ‘iwooneka.*

‘He checked on the situation of people in the houses around.’

**10.2 Research**

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Antipassive's semantics*

Consider the following examples that illustrate the semantic characteristics of the Ainu antipassive and the relative translations. Judging from the grammatical and ungrammatical examples given here, how is the semantic reference of the antipassive restricted? Do the semantic restrictions of the antipassive affect the meaning of the verb form as a whole? How? Is there any difference between HA and SA? Are there any instances where the antipassive causes a morphological change of the non-antipassive base verb?

**Set 2.1 (Hokkaidō Ainu)**

1. *Aunuhu usey ku.*

'My mother drinks hot water (= tea).'

2. *Hepunian wa inkar'an akus ...*

'As I raised my head and looked around ...' (OS 1980, line 160)

3. \**Iyomante kusu ekasi utar uwekarpa.*

Intended meaning: 'The elders gathered to make the man go.'

4. *Ikuan wa usa sinotcakian.*

'We drank sake and sang many songs.' (OS 1980, line 625)

5. *Tan kamuy menoko onuytasa aomante.*

'I made her go instead of this divine young woman.' (OS 1988, line 839)

6. *Cep hene akoyki wa ae.*

'I caught fish too and ate them.' (OS 1981, line 333)

7. \**Ikuan wa usa sinotcakian.*

Intended meaning: 'We drank tea and sang many songs.'

8. *Cikap secihiotta omante.*

‘He made the birds go to their nests.’

9. *Iyomante kusu ekasi utar uwekarpa.*

‘The elders gathered to make the [spirit of the bear] go (= to perform a bear ceremony).’

10. *Ipean wa hotkean.*

‘I ate and went to sleep.’ (OS 1980, line 552)

11. \**Secihiotta iyomante.*

Intended meaning: ‘He made the birds go to their nests.’

12. *Setane eciinukar.*

‘You saw me in the shape of a dog.’ (OS 1979, line 669)

13. *Sake aku ka eramiskari.*

‘I had never drunk sake.’ (IH 1986, line 482)

**Set 2.2** (Sakhalin Ainu)1. *‘Ipe’an hemaka tani ‘asipan.*

‘I finished eating [and] at that point I went out.’ (Dal Corso 2021, 412)

2. *Nay ‘ururukasketa ‘aa teh [...] ikuu.*

‘He sat on the river bank and [...] smoked.’ (Dal Corso 2021, 328)

3. *‘Ikaamesu kamuy ruy kusu ...*

‘Because the god who helps people (= the protective god) was strong ...’ (Dal Corso 2021, 308)

4. *Ponno wahka kukuu.*

'I drink a little water.'

5. \*Nay 'ururukasketa 'aa teh [...] ikuu.

Intended meaning: 'He sat on the river bank and [...] drank water.'

6. Cisesoykene 'inkara.

'He had a look at the situation aouside of the houses.' (Dal Corso 2021, 387)

7. Penke 'an kuh [...] 'utarihi kamesu.

'The man of the upper course of the river [...] helped [his brother's] people.' (Dal Corso 2021, 338)

8. Nean kamuy pooho na nukara teh ...

'He saw that divine son of hers too and ...' (Dal Corso 2021, 296)

9. \*'Ikaamesu kamuy ruy kusu ...

Intended meaning: 'Because the god who helps the village was strong ...'

10. Rukumihi pateh ku'ee.

'I only ate a piece of it.' (Dal Corso 2021, 205)

11. Renkayne sake ekuu?

'Did you drink a lot of sake?' (Dal Corso 2021, 206)

12. \*Nay 'ururukasketa 'aa teh [...] ikuu.

Intended meaning: 'He sat on the river bank and [...] drank sake.'

## Examples from Other Languages...

Central Alaskan Yup'ik (Eskimo-Aleut, USA) (examples from Miyaoka 2012)

*Angute-m kuvya-ni allg-aa.*  
man-REL.SG net-ABS.SG.3SG.PSR tear-IND.3SG>3SG  
'The man tore his (own) net.'

*Angun kuvya-minek allg-i-uq.*  
man.ABS.SG net-ABM.3RSG.SG tear-ANTIP-IND.3SG  
'The man tore his (own) net.'

A **prototypical antipassive** construction has three formal characteristics (Payne 2006, 255): 1) the A argument (subject of transitive verb) **becomes the S argument** (subject of intransitive verb), which may be clear from a **morphological change** in the person agreement forms used on the verb, 2) the originally transitive **verb becomes intransitive**, which makes antipassivisation a **valency-changing** (valency-decreasing) strategy, 3) the original object of the transitive verb appears in an **oblique case**. The Central Alaskan Yup'ik examples above illustrate a prototypical antipassive. After antipassivisation is obtained via the suffix *-i*, the formerly transitive verb becomes intransitive – this is evident from person agreement as in the first example we find the transitive agreement *-aa* (referencing to a third person subject acting on a third person object), but in the second example we find the intransitive agreement *-uq* that only references a third person subject. The subject in the antipassive construction is an S – this is evident from the absolutive null marking on *angun* 'man' in contrast to the relative-ergative suffix *-m* in the non-antipassive sentence. Finally, the original direct object *kuvya* 'net' is expressed in the antipassive construction via an oblique (here with the ablative case in *-minek*).

Puma (Sino-Tibetan, Nepal) (examples from Bickel, Gaenszle 2015)

*Som-kha-mλ-tuk.*  
love-ANTIP-3PS-love.NPTS  
'They love people.'

Antipassives can have their origin in **noun incorporation**. The antipassive *-kha* of Puma originated from a no longer existent noun meaning 'all' which was incorporated in the verb and later developed the function of referencing to a **generic object**. In the example above, the antipassive on the verb *som* 'love' references to 'people' in general. The peculiarity of antipassives that originate from noun incorporation seems to be that the construction **does not allow** the demoted object to be expressed overtly via an oblique. In languages possessing this kind of antipassives the demoted object is **always omitted**.

Tlachichilco Tepehua (Totonac-Tepehua, Mexico) (examples from Watters 2017)

<i>Sa</i> :-y	<i>Sa</i> :- <b>nan</b>
hit-IPFV	hit.IPFV- <b>ANTIP</b>
‘S/he hits him/her/it.’	‘S/he plays music.’
<i>Mispa</i> :-y	<i>Mispa</i> :- <b>nan</b>
know-IPFV	know.IPFV- <b>ANTIP</b>
‘S/he knows him/her/it.’	‘S/he knows the location.’

Antipassivisation often results in **lexicalisation**. This happens more commonly in those languages (like Puma above) whose antipassive construction does not allow the overt expression of the demoted object. Tlachichilco Tepehua represents one more case of such languages. In fact, once the antipassive is obtained via the suffix *-nVn*, object expression is blocked and the antipassive takes a **restricted set of objects** or even only **one object specifically** as its semantic referent. This often causes a **change of meaning** in the antipassivised verb form compared to the one of the non-antipassive verb. Therefore, for instance the verb form *sa:nan* from *sa*: ‘hit’ only means ‘play music’, with the antipassive referencing specifically to musical instruments.

### 10.3 Analysis and Description

Discuss, in no less than 300 words, the morphosyntactic and semantic characteristics of the Ainu antipassive. Cite relevant examples from Set 1 and Set 2 where needed.

- From what premises did your analysis start?
- Do HA and SA feature a prototypical antipassive construction? Why/why not? Motivate your answer.
- How does antipassivisation affect verbal valency?
- Is the semantic reference of the antipassive limited? How? How does this affect the overall meaning of the antipassive verb form?
- What are the differences between HA and SA?



riety, the presence of *-pa* can indicate 1) plurality of subject, 2) plurality of object, or 3) plurality of action (i.e. the event is performed many times in a row). Usually, on the verbs taken as an example here and on transitive verbs in general, *-pa* indicates either plurality of object or plurality of action. In SA, the only function of *-pa* seems to be that of indicating plurality of action. In both varieties, there are several lexicalized verb forms featuring *-pa* in which, however, the semantic input of the suffix is not clear.

→ *Dataset 1 - Causative suffixes*

The following examples feature all causative suffixes present in HA and SA besides *-re*, which was presented above. Non-causative examples are also included to help you extrapolate the meaning of verbs. How many causative suffixes are there? Make a list of them. On what factors does the choice of the suffix depend? Is there any difference between HA and SA?

**Set 1.1** (Hokkaidō Ainu)

1. *Hoku ka akore.*

'I give her a husband too.' (Tamura 1985, 70)

2. *Nep ka aep kor wa ek nankor.*

'He may have some food and come [bringing it].' (Bugueva 2004, 122)

3. *Aahunke yak pirka ya?*

'Is it good if (= may) I make him come in?' (Bugueva 2004, 265)

4. *Paye ayne ekimne ahup.*

'They went on and eventually entered the mountain [area].' (Bugueva 2004, 241)

5. *Akor kotan orun eekte.*

'He made you come to my village.'

6. *Amip kamure.*

'He made her put clothes [over herself to hide].' (Tamura 1985, 48)

7. *Pon menoko [...] nepka ye siri ka anukar.*

'I even saw the looks that (= that) the young girl said something.' (Bugueva 2004, 277)

8. *Soyne oka utar ahupte.*

‘She made the people who were outside enter.’

9. *Petaruorun ran’an.*

‘I descended to the riverside.’ (Bugaeva 2004, 154)

10. *Apoutari aporore.*

‘We made our children be big (= we raised our children).’ (Bugaeva 2004, 285)

11. *Ahun rusuy kusu ...*

‘Because he wanted to enter ...’ (Bugaeva 2004, 394)

12. *Kamuyutara nisorowa rap.*

‘The gods descended from the sky.’

13. *Panake un nispa sine matnepo kor.*

‘The noble man who lived downstream had one young daughter.’ (adapted from Tamura 1985, 58)

14. *Nerok sikehe rapte.*

‘They made come down (= took off their shoulders) those loads of theirs.’

15. *Pirka uske aiere katu ka isam.*

‘There was no sign that I was given to eat the good parts [of the food].’ (Tamura 1985, 2)

16. *Kotansoy akus wa ...*

‘I passed by the outer part of the village and ...’ (Bugaeva 2004, 255)

17. *Orowa pista san’an.*

‘Afterwards, I went down to the sea shore.’ (Bugaeva 2004, 217)

18. *Poro hawe sanke.*

[The creature] made go down (= let out) a loud cry. (Bugaeva 2004, 299)

19. *Kamuy ewak siri kamuy inukare.*

'The gods have shown me the land where gods live.' (Tamura 1985, 56)

20. *Cikuy pas akuste.*

'Someone had made crushed ashes go over it (= had covered it with crushed ashes).'  
(Bugaeva 2004, 190)

21. *Nea sikehe ranke.*

'He made come down (= took off his shoulders) that load of his.' (Tamura 1985, 38)

#### Set 1.2 (Sakhalin Ainu)

1. *Suu'orowa annukara.*

'I looked into the pot.' (Dal Corso 2021, 406)

2. *Poro popo israphu anikontehci.*

'I am given the gift of big offerings.' (Pilsudski 1912, 214)

3. *Kunne aynuutara asipahci.*

'In the night time, the people went out [of their houses].' (Pilsudski 1912, 96)

4. *Nanunko tupohnakotan eiomante.*

'You almost made me go (= sent me) to the underworld.' (Pilsudski 1912, 175)

5. *Tom i pirikay emuyke anasihte.*

'I made come out (= took out) all the nice swords.' (Pilsudski 1912, 210)

6. *Iwan ohko imirehci.*

'They made me wear six silk dresses.' (adapted from Pilsudski 1912, 232)

7. *Tekihi [...]'ururu'empoketa 'ahun.*

'The paw [of the mouse spirit] [...] entered under under the bank [of the river].' (Dal Corso 2021, 334)

8. *Emusihi asinke ike ...*

'He made his sword come out (= he took out his sword).' (Pilsudski 1912, 78)

9. *Orakata ciseonne makapahci.*

'The Orok tribe went up to the house.' (Pilsudski 1912, 67)

10. *Anhoskiramhu ciseonne anahunke.*

'I let my older brother enter the house.' (Pilsudski 1912, 240)

11. *Ruu kaari makan.*

'He went uphill along the trail.' (Dal Corso 2021, 402)

12. *Horokewpo ahun aysam.*

'A young men entered [my house and] I married him.' (Majewicz 1998, 291)

13. *Cinkewhe ope kanne horahte!*

'Dig [around] its roots and make it fall!' (Majewicz 1998, 301)

14. *Yoitahkaene makahte.*

'He made them go up (= put them back) on top of the shelf.'

15. *Wen kaya mi aynu.*

'A person who wore a poor fish-skin garment.' (Pilsudski 1912, 99)

16. *Rihta numare.*

'He made him stand high up.' (Pilsudski 1912, 85)

17. *Neya ururihi tani 'aynu 'emuyke [...] wente.*

'Eventually, all the people made that river shore bad (= they destroyed it).' (Dal Corso 2021, 333)

18. *Ruroosota 'oman.*

'He went to the main seat.' (Dal Corso 2021, 377)

19. *Kumatakhi ecisamte kusu ...*

'To make you marry my daughter ...' (Pilsudski 1912, 227).

20. *Utara ramatu nukante.*

'The people made see (= showed) her soul [around].' (Pilsudski 1912, 179)

21. *Pu tuntuhu mukara ani tohpa puhe horah.*

'He chopped the beams of the storehouse with an axe and their storehouse collapsed.' (adapted from Pilsudski 1912, 48)

22. *Kam suke ike anhokho ere.*

'She cooked the meat and gave it to my husband to eat.' (Pilsudski 1912, 118)

23. *'Esinnisahta 'enuma ike ...*

'This morning you got up and ...' (Dal Corso 2021, 167)

24. *Yoitahkaene makanke.*

'He made it go up (= put it back) on top of the shelf.' (Pilsudski 1912, 234)

## 11.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Types of causation*

In this second set, two more causative suffixes are introduced in addition to those that appeared in Set 1: *-ka* and *-yar*. Only HA examples are provided in this dataset and non-causative examples are included to help you extrapolate the meaning of words. Compare the sentences in which different suffixes are used. Does their distribution depend only on morphophonological factors or do they encode different kinds of causation? How would you distinguish them? Pay attention also to the meaning of verbs that employ the different suffixes and to the participants involved.

### Set 2 (Hokkaidō Ainu)

1. *Kuye wa ecinure kusu ne.*

‘I will say it and make you listen to it (= tell it to you).’ (Tamura 1984, 18)

2. *Kucaotta arpaan wa rewsian.*

‘I went to the hut and spent the night.’ (Bugaeva 2004, 245)

3. *Matnepo su sesekka.*

‘The young girl made the pot hot (= heated up the pot).’

4. *Akotanu un utar asikasuyre.*

‘I had the people of my village help me.’

5. *Teeta ekasi huci utar newaan pe nuyar.*

‘Old men and old women from the past let [people] hear such story.’

6. *Opitta atuye wa arayke.*

‘We cut and killed all of them.’ (Bugaeva 2004, 178)

7. *Cikuy pas akuste.*

‘Someone had made crushed ashes go over it (= had covered it with crushed ashes).’ (Bugaeva 2004, 190)

8. *Apoutari aporore.*

‘We made our children be big (= we raised our children).’ (Bugueva 2004, 285)

9. *Nispa arpa wa hok wa isamka.*

‘The noble man went, bought [the clothes] and made them disappear.’

10. *Akor kotan orun eekte.*

‘He made/forced you (to) come to my village.’

11. *Sesek usey enkore yan!*

‘Please give me hot water.’

12. *Ahokuhu ka ray.*

‘My husband too died.’ (Bugueva 2004, 198)

13. *Poro sike aseyar wa aarpare.*

‘I had them carry big loads and made them go.’

14. *Tan ukuran teta irewsire!*

‘Let me spend the night here tonight!’ (Bugueva 2004, 246)

**Examples from Other Languages...**

Hindi (Indo-Aryan, India) (data from Bhatia 2016, 110-11)

*Ghar jal-aa.*

house burn-PFV

‘The house burned.’

*Zamindaar-ne ghar jal-aa-yaa.*

landlord-ERG house burn-CAUS-PFV

‘The landlord burned the house.’

*Zamindaar-ne ghar jal-vaa-yaa.*

landlord-ERG house burn-CAUS-PFV

‘The landlord had the house burned.’

One way to derive a causative verb in Hindi is with the suffixes *-aa* and *-vaa*. These two suffixes express different types of causation. On the one hand, *-aa* indicates that **the causer directly acts** upon the causee or the patient and causes it to participate in the event – that is, *-aa* encodes **direct causation**. On the other hand, *-vaa* expresses that **the causer acts in a way to create the circumstances** for the causee or the patient to be involved in the event without intervening directly – that is, *-vaa* encodes **indirect causation**. Direct and indirect causation need not be distinguished via inflectional affixes, but can be encoded analytically or lexically with dedicated verb forms. Also, direct and indirect causation need not be expressed by the same morphosyntactic strategy, and therefore appear even more differentiated on the formal side.

### 11.3 Analysis and Description

Discuss, in no less than 300 words, the distribution and use of causative suffixes in Ainu with specific reference to how they are employed in HA.

- On what does the choice of the causative suffix depend?
- Do some of the suffixes seem to have limitations in terms of the kind of verbs they can be used with? How would you describe these limitations?
- What are the differences between HA and SA?
- What aspects of causative constructions remain dubious?



12

# Motion and Location

Notes

12.1 Background Information and Observation

12.2 Research

12.3 Analysis and Description

## 12.1 Background Information and Observation

In both HA and SA motion and location are usually obliques (more rarely they appear as arguments). Morphosyntactically motion and location are expressed via a construction involving the noun *or* (HA), *oh/oro* (SA) ‘place’. This noun follows another noun that indicates a specific place and it is in its turn followed by a locative postposition that indicates location or specifies the kind of motion involved. One example of such postpositions is *-wa*, expressing motion away from a place, that we have already encountered in the impersonal-passive construction (cf. Lesson 5). Examples (1) and (2) illustrate the construction with *-orwa/-oro-wa* in HA and SA respectively.

(1) *Tu hekattar cise-or-wa cisoyokuta.*  
two young.boys house-**place-from** 3P.S/come.out.of.house  
‘Two young boys came out of the house.’ (Tamura 1985, 8)

(2) *‘Ipe ka tek-ih-i-‘oro-wa haaree.*  
food even 3.**PSR**/hand-POSS-**place-from** 3S.A/3S.O/drop  
‘She dropped the food from her hands.’ (Dal Corso 2021, 345)

Besides *-wa* there exist other locative postpositions **which are all only compatible with nouns**. In HA we find *-ta* that indicates stative location, *-un* that indicates motion towards a place, and *-peka* that indicates motion through a place (Tamura 2000, 104-8). In SA we find *-ta* that indicates stative location, *-(e)ne* that indicates motion towards a place, *-peka* that indicates straight motion through a place, and *-poka* that indicates irregular motion through a place. Sometimes, depending on the semantics of the verb and on the kind of place where motion happens, *-peka* and *-poka* can be interchangeable (Murasaki 1979, 118-19; Dal Corso 2021, 61-5).

→ Consider this additional information...

The HA postposition *-un* has its origin in the transitive verb *un* ‘be in (a certain place)’. The original meaning of this verb is essentially stative, therefore its development into a postposition indicating motion is not clear.

(3) *Ya un kur.*  
mainland 3S.A/3S.O/**be.in** person  
‘A person who is in the mainland (= who lives/comes from the mainland, i.e. an Ainu).’

The same verb is also present in SA, but the use of *-un* as a locative postposition in this Ainu variety is much more limited. In fact it is used only with the meaning of ‘from’ in expressions that indicate the origins of someone or something.



- (4) *Tokyo-oro-un* 'aynu.  
Tokyo-**place-in** person  
'A person from Tokyo.' (Murasaki 1979, 99)

→ *Dataset 1 - Semantic complexity of motion and location*

Consider the following examples paying attention to ungrammatical ones (marked with \*). What are the phonological processes occurring on the noun *oro* 'place' when used with the various locative postpositions (cf. Lesson 3)? Do you notice any discrepancies in the use and/or meaning of locative postpositions with regards to the information you have been given? What makes the ungrammatical examples so?

**Set 1.1** (Hokkaidō Ainu)

1. *Nea kotanotta nea wenkur okkaypo kotan kor nispa poho ne.*

'In that village, that poor young boy was the son of the village chief.' (Tamura 1985, 42)

2. *Petaruurun ran'an.*

'I went down to the riverside.' (Bugueva 2004, 154)

3. \**Nea ciseta ekan.*

'I came to that house.' (Tamura 1985, 32)

4. *Ciseorun okkayo itak haw ene haweas.*

'From the house the speaking voice of a young man can be heard like this.' (Tamura 1985, 18)

5. *Kimpeka payekaan.*

'I walked around in the mountains.' (OS 1980, line 433)

6. *Tu hekattar ciseorwa cisoyokuta.*

'Two young boys came out of the house.' (Tamura 1985, 8)

7. \**Kimotta ka arpa'an.*

'I went to the mountains too.'

8. \*Pisorpeka [...] cep ka koyki.

‘He caught also fish along the shore.’

9. Nea ciseotta ekan.

‘I came to that house.’ (Tamura 1985, 32)

10. Hemanta nisorwa ran siri ne.

‘Something fell from the sky.’ (Tamura 1985, 48)

11. Cep poronno ne tootta okay.

‘There were a lot of fish in that lake.’ (Tamura 1985, 54)

12. Kinta ka arpa’an.

‘I went to the mountains too.’ (Bugueva 2004, 240)

13. Tono kotanta tapan upaskuma anu.

‘I heard this very story in the village of great people (= Japan)’ (Tamura 1984, 24)

14. Piskeka [...] cep ka koyki.

‘He caught also fish along the shore.’ (OS 1981, line 567)

15. Sumaorwa a.

‘He sat on a rock.’

#### Set 1.2 (Sakhalin Ainu)

1. Siska Tarayka nah ‘ayyee kotan’ohta [...] ‘orohko renkayne ‘an.

‘In a village called Siska Tarayka [...] lived a lot of Oroks.’ (Dal Corso 2021, 251)

2. Susucayteh’orowa hemata rusasoma rahki.

‘Some kind of straw bundle was hanging from the limbs of a willow.’  
(Dal Corso 2021, 254)

3. *Rurosoohta ‘aa.*

‘He sat on the main seat.’ (Dal Corso 2021, 381)

4. *‘Enko utah neampe [...] ‘Usoro‘onne ‘oman.*

‘Half of the people [...] went towards ‘Usoro.’ (Dal Corso 2021, 254)

5. *\*Nean nupuruta yaykotankoro.*

‘[The monster] had its dwelling in that mountain.’

6. *Kinta nean henkeuta cehkoykihci.*

‘Those elders fished in the mountains.’ (Dal Corso 2021, 255)

7. *Cih‘ohta sapahci.*

‘They went down to the boat.’ (Dal Corso 2021, 305)

8. *Cuhniskuruorowa tani [...] kamuyhenke ran.*

‘At that point from the highest sky [...] a divine elder came down.’ (Dal Corso 2021, 371)

9. *Nean nupuru‘ohta yaykotankoro.*

‘[The monster] had its dwelling in that mountain.’ (Dal Corso 2021, 412)

10. *‘An‘unuhu cisehehcin‘ohta tusuu ‘orohko ‘ahci sineh ‘an.*

‘In my mother’s house lived one shaman Orok woman.’ (Dal Corso 2021, 307)

11. *‘Ankotanta okayan ike sianno akianji renkayne ‘an.*

‘When I lived in my village, there were really a lot of salmon.’ (Dal Corso 2021, 169)

12. *Suu‘orowa annukara.*

‘I looked into the pot.’ (Dal Corso 2021, 406)

13. *Pohseh'onne reekoh 'erum hocikacika hawehe 'an.*

'It seemed the mouse was squirming violently inside the trap.' (Dal Corso 2021, 321)

14. \**Kimohta nean henkeuta cehkoykihci.*

'Those elders fished in the mountains.'

15. \**Cihta sapahci.*

'They went down to the boat.'

16. *Ruroosota 'oman.*

'He went to the main seat.' (Dal Corso 2021, 377)

## 12.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Intrinsically locative nouns*

Consider the following examples. Only SA examples are given for this set. What new items expressing location do you see used as substitutes of *oh/oro*? Are these all nouns? If not, what word class do you think they belong to? Motivate your answer. What kind of locative relation do they express (under, over, next to, ...)? Try to find the semantic difference among the ones with a similar meaning. How do locative constructions change morphologically when the referent of the locative expression is not a third person?

### Set 2 (Sakhalin Ainu)

1. \**Tooro hekotane cas.*

'It ran towards Tooro.'

2. *Tekihi [...]'ururu'empoketa 'ahun.*

'The paw [of the mouse spirit] [...] entered under the bank [of the river].' (Dal Corso 2021, 334)

3. *Nupurutonkeene [...] hemata puyehe 'ahun.*

'In the centre of the mountain [side] [...] some kind of hole opened.' (Dal Corso 2021, 389)

4. *Ruu kaari makan.*

'He went uphill along the trail.' (Dal Corso 2021, 402)

5. \**Apa kuhekota.*

'I went towards the door.'

6. *Ota poyehci teh 'otatunketa 'ahunkehci.*

'They dug [holes in] the sand and put [praying sticks] in the centre of the sand.' (Dal Corso 2021, 242)

7. *Kuy naa yayuh naa renkayne tocaapeka 'okay.*

'There were a lot of larches and Sakhalin firs too along the lake's shores.' (Dal Corso 2021, 360)

8. \**Ruu kaaripeka makan.*

'He went uphill along the trail.'

9. \**Orohko 'ahci sineh 'iyohta [...] 'an.*

'One old Orok woman lived [...] at my place.' (Dal Corso 2021, 307)

10. *Tooro hekota cas.*

'It ran to Tooro.' (Dal Corso 2021, 306)

11. *Cipihisanketa neeroh kamuyutah yapahci.*

'Those gods surfaced [from the sea] next to his boat.' (Dal Corso 2021, 296)

12. *Enhekota ahkas.*

'He walked towards me.'

13. *Kenemoto'owsiketa hemata ka kamuy he 'an.*

'Under an alder there was some kind of animal.' (adapted from Dal Corso 2021, 303)

14. \**'Itanki [...] ansanketa ama.*

'He placed the bowl [...] next to me.'

15. *Rerannoskekepoka 'anciw.*

'I [had] pierced him through the center of [his] chest.' (Dal Corso 2021, 384)

16. *'Enko utah neampe [...] 'Usoro'onne 'oman.*

'Half of the people [...] went towards 'Usoro.' (Dal Corso 2021, 254)

17. *'Inoskeketa 'an kamuy reekoh 'aspekoro kamuyhenke.*

'The animal that was in the center [of the group was] an old god with mighty big back fins.' (Dal Corso 2021, 289)

18. *'Eyooko utah rawta 'okay.*

'The people who lay in wait were under [the slope].' (Dal Corso 2021, 248)

19. *'Itanki [...] isanketa ama.*

'He placed the bowl [...] next to me.' (Dal Corso 2021, 378)

20. *Niitonke tuye teh horahte.*

'He cut the centre of the tree and felled it.'

### Examples from Other Languages...

#### Finnish (Uralic, Finland)

<i>Talossa</i>	'in the house'	<i>Talolla</i>	'on the house'
<i>Talosta</i>	'out from inside the house'	<i>Talolta</i>	'from the house'
<i>Taloon</i>	'into the house'	<i>Talolle</i>	'onto the house'

Finnish has a complex system of grammatical cases that distinguishes **locative cases** into **internal** and **external**. Internal locative cases indicate state inside (inessive), motion out of (elative), or motion into something (illative). External locative cases indicate state on (adessive), motion away from (ablativ), or motion onto something (allative). The use of these cases can be extended to express meanings that are not locative *per se*. For instance, the inessive is used to express punctual time (e.g. 'in January') and the adessive is used to express, among other things, means and instrument (e.g. 'by train').

Icelandic (Germanic, Iceland)*Ég fór í skólann.* 'I went to school.'*Ég er í skólanum.* 'I am at school.'

In Icelandic the prepositions *í* and *á* are used to express state and motion to some place. The choice of which one of these prepositions to use is determined on the semantics of the noun they accompany. The reading of the locative expression as a state or as a motion, on the contrary, is clear from **grammatical case** (besides being possibly clear from the verb's semantics). In fact, the accusative case is used with *í* and *á* to express motion and the dative case is used to express state.

**12.3 Analysis and Description**

Describe, in no less than 400 words, the ways to express motion and location in SA drawing from the examples given in Set 1.2 and Set 2. Be specific about the morphosyntactic structure of locative constructions and about the word classes involved. Provide a motivation for your statements.

- What is your proposed semantic subdivision of the locative items that appear in Set 2?
- Describe in your own words the semantic differences of the items displaying a similar meaning.
- On the basis of their usage, would you propose labels for the locative postpositions found in SA? If yes, which ones? If no, why? Be specific about problematic cases.



→ *Dataset 1 - Types of aspect*

Consider the following examples featuring three different aspectual forms of HA and SA. Examples not including aspectuals are also included for you to extrapolate the meaning of words. What are the three aspectual forms found in the dataset? What is the meaning of the words that constitute them? What type of aspect do they encode? Do you notice any morphological change among instances of the same aspectual form? Of what kind? How can you account for them? How do aspectual markers with the same function differ formally between HA and SA?

**Set 1.1** (Hokkaidō Ainu)

1. *Tumunci kamuy umurek wa oka.*

'The evil gods were married.' (Tamura 1984, 20)

2. *Menoko suwe kor keraan pe ne.*

'When the woman [my wife] cooked it, it was delicious.' (Bugueva 2004, 283)

3. *Cise kor kur soypeka omanan kor an.*

'The owner of the house was walking around outside.' (Bugueva 2004, 319)

4. *Pista sanan wa ne tasiro ka isam.*

'I went down to the shore and that knife wasn't [there].' (Tamura 1985, 38)

5. *Nea o kur ka ray wa isam.*

'That man on board [of the boat] ended up dying (= died) too.' (Tamura 1984, 24)

6. *Areska wa an.*

'I had raised her.' (Bugueva 2004, 307)

7. *Nea matnepo ramatu uk [...] hine ek kor an.*

'He took that young girl's soul [...] and was coming [back].' (Tamura 1985, 60)

8. *Aonaha anakne sumiyaki sisam ne hine okaan.*

'Our father is a Japanese coal-maker and we are (= live) [here].' (Tamura 1985, 8)

9. *Kamuy asurne anu kor okaan.*

'I was hearing it as a news [from] the gods.' (Tamura 1985, 22)

10. *Kunne tere wa okay akusu sirkunne.*

'As they were waiting for nightfall, it became dark.' (Bugaeva 2004, 178)

#### Set 1.2 (Sakhalin Ainu)

1. *Oha kemihi pateh [...] pon nay neeno an teh netopakihisam.*

'There was only his blood [...] [flowing] like a little river and his corpse was not [there].' (Pilsudski 1912, 110)

2. *'Ehankeno 'an pe ka 'emuyke kehke wa cokoko wa 'isam.*

'[In the confusion of the battle, the monster] ended up breaking and felling even all the things (= the trees) around.' (Dal Corso 2021, 396)

3. *Soyta oka utah temana kihci kusu okayahci?*

'How were the people outside doing?' (Dal Corso 2021, 193)

4. *'Onnewrah ramrenkayne uyna wa eyhoh.*

'He picks up eagle's feathers as he wishes and sells them.' (Dal Corso 2021, 363)

5. *Hosipihci nukarahci kusu neeroh hekacita kanna sapahci.*

'Since they saw them returning, those boys went back down [to the village.]' (Dal Corso 2021, 260)

6. *'Otakata 'ampene ruwehehcin maake teh an.*

'[The animals] had clearly left their footprints on the beach.' (Dal Corso 2021, 309)

7. *Kemaha ka 'okore tuyteh wa 'isam.*

'Even her legs ended up falling off.' (Dal Corso 2021, 350)

8. *Susucayteh'orowa hemata rusesoma rahki kusu an.*

‘Some kind of straw bundle was hanging from the willow’s limbs.’ (Dal Corso 2021, 254)

9. *Ahciutah na henkeutah na ‘okayahci.*

‘There were both old women and old men.’ (Dal Corso 2021, 384)

10. *Tumi kihci kusu suy taata sapahci.*

‘They went down there again to make war.’ (Dal Corso 2021, 254)

11. *Nah kii yayne ‘ampene pakakara teh ‘an.*

‘She acted [like] so and eventually she got completely crazy.’ (adapted from Dal Corso 2021, 347)

### 13.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Functional overlap and semantic differences*

Consider the following examples that feature two more aspectual markers of HA and SA respectively. Are there other markers in the two varieties that are similar in function to the new ones introduced here? How would you explain this variety of forms to express the same (or a similar) function? Are there any uses of aspectual markers that remain difficult to account for given the data provided?

#### Set 2.1 (Hokkaidō Ainu)

1. *Apepasuy kor wa a wa ...*

‘He took fire-chopsticks and sat down and ...’ (Bugueva 2004, 141)

2. *Atuy oarsat wa isam.*

‘The sea dried up completely.’ (Bugueva 2004, 339)

3. *Areska wa an.*

‘I had raised her.’ (Bugueva 2004, 307)

4. *Ray’an wa an a ayne ...*

'I had [almost] died and then... ' (Bugaeva 2004, 159)

5. *Kumonrayke a.*

'I have worked.' (Bugaeva 2012, 495)

6. *Tani sikeruraan okere.*

'I finished moving the luggage already.' (OS 1979, line 87)

7. *Hosipi wa isam.*

'[The uncle] went away (= returned).' (Bugaeva 2004, 124)

8. *Tu tamasay kukor wa kan.*

'I have gotten two necklaces.' (adapted from Bugaeva 2012, 495)

9. *Nea o kur ka ray wa isam.*

'That man on board [of the boat] ended up dying (= died) too.'  
(Tamura 1984, 24)

10. \**Kumonrayke wa an.*

'I have worked.'

11. *Orowa uwerankarap'an okere wa ...*

'Then we finished greeting each other and ...' (Bugaeva 2004, 259)

12. *Akor cise aokere hine ...*

'I finished my house and ...' (OS 1981, line 1940)

13. *Opitta arayke wa isam.*

'We killed off all [of them].' (Bugaeva 2004, 178)

14. *Kucasoy pak arkian a korka ...*

'We had reached the outside of the hunting hut, but ...' (Bugaeva 2004, 192)

15. *Tumunci kamuy umurek wa oka.*

'The evil gods were married.' (Tamura 1984, 20)

### Set 2.2 (Sakhalin Ainu)

1. *'Ehankeno 'an pe ka 'emuyke kehke wa cokoko wa 'isam.*

'[In the confusion of the battle, the monster] ended up breaking and felling even all the things (= the trees) around.' (Dal Corso 2021, 396)

2. *Ciseorowano pa numa ea.*

'Smoke was rising from the house.' (Pilsudski 1912, 99)

3. *Hekaci'ihunkeh 'ehci ike 'ekokahci 'an.*

'They ate the baby boy's placenta and they had gotten sick from it.' (adapted from Dal Corso 2021, 255)

4. *Wen poro nii sineh wahka tura makan 'an.*

'A huge tree had come up with the water.' (Dal Corso 2021, 367)

5. *'Ipe 'okore 'anee hemaka.*

'We finished eating all the food.' (Dal Corso 2021, 379)

6. *'Otakata 'ampene ruwehehcin maake teh an.*

'[The animals] had clearly left their footprints on the beach.' (Dal Corso 2021, 309)

7. *Sine sukuh aynu tata an ea kusu an.*

'One young man was [standing] there.' (Pilsudski 1912, 122)

8. *Neya 'emus kara hemakahci.*

'They finished making that sword.' (Dal Corso 2021, 263)

9. *Omantene hemaka teh tani asin.*

'Eventually he stopped and at last went out.' (Dal Corso 2021, 403)

10. *Kemaha ka 'okore tuyteh wa 'isam.*

'Even her legs ended up falling off.' (Dal Corso 2021, 350)

11. *Monimahpo 'omayehe'enkaskewa 'ahte teh 'an.*

'Someone had hung [their loincloth] above the young woman's futon.' (Murasaki 1989, 3)

12. *Uncionne inkaran koh suke ea.*

'When I looked towards the fire, [my wife] was cooking.' (Pilsudski 1912, 134)

13. *Henke kayki 'ampene 'emuyke sinka hemaka.*

'Even the old man ended up being tired.' (Dal Corso 2021, 374)

14. *Henke tani 'isam weepkere utah nuu teh 'an.*

'The people had heard the rumor that the old man eventually died.'  
(Dal Corso 2021, 366)

### Examples from Other Languages...

English (Germanic, UK) (examples from van Lambalgen, Hamm 2005, 90-6)

*Know*

*Push*

*Push a cart*

*Reach the top*

*Build a house*

*Flash*

Verbs in any given language differ strikingly one from the other not only with regards to their pronunciation, syntactic valency, etc., but also with regards to the **type of event(s)** they denote – i.e. their **core semantics**. Events in the real world do not have all the same properties: some can be prolonged, some cannot, some subsume a change of some kind, some others do not. The English verbs above serve to illustrate the verb classes usually distinguished in languages according to the properties of the denoted event. The verb ‘know’ is here an example of a **state verb** – it denotes a type of event which subsumes no change nor is initiated by a force of some kind. The verb ‘push’ alone is considered an **action (in the narrow sense) verb** – it denotes a type of event initiated by a force (e.g. someone starting a motion) but it subsumes no change whatsoever. In the predicate ‘push a cart’, on the contrary, the verb ‘push’ is an **action (in the wide sense) verb** – it denotes a type of event that is initiated by someone and that subsumes some kind of change (in this case, a change of position in the place where the cart is). The verb ‘reach’ in ‘reach the top’ is called an **achievement verb** – it denotes a type of event subsuming a change that happens suddenly and that usually implies 1) that the situation present before (here someone’s being on their way to the top), which culminates with the sudden change, ceases to exist and 2) the achievement of a new state of things (here being at the top of some place). ‘Build’ in ‘build a house’ is referred to as an **accomplishment verb** – it denotes a type of event initiated by someone, that subsumes some kind of change (here the house being built), that culminates (gradually) with a change (the finished house), and ends with the achievement of a new state of things (a house where before there was nothing). Finally, ‘flash’ is referred to as a **semelfactive verb** – it denotes a type of event that only has a culmination, but lacks a force that initiates it, a resultant state, and any kind of change. These are the six classes of **Aktionsart** outlined by van Lambalgen, Hamm (2005), which include the four classes originally distinguished by Vendler (1967). Defining the **Aktionsart** of a predicate is useful to understand its **incompatibilities with certain categories or lexical items** (e.g. time adverbs, aspect, number, definiteness, ...) that, with their function or semantics, affect the internal structure of the event. It is important to remember that the **Aktionsart** of verbs that are synonymous in different languages may be very different – that is, not all languages **perceive events the same way**. Moreover, one verb of a language may belong to **more than one Aktionsart class**, depending on the type and semantics of its arguments and adjuncts.

#### Japanese (Japonic, Japan)

*Chawan-ga koware-te iru.*  
teacup-NOM break.TE be

‘The teacup has/is broken.’

Intended meaning: \* ‘The teacup is breaking.’

*Hito-ga kōhī-o nonde iru.*  
person-NOM coffee-ACC drink.TE be

‘A person is drinking coffee.’

Intended meaning: \* ‘A person has drunk coffee.’

One category that is found to **interact closely with Aktionsart** is aspect. In various languages certain types of aspect cannot be used with predicates/verbs belonging to certain **Aktionsarten** because the properties of aspect are **incompatible with the event structure** denoted by the predicate/verb. In Japanese the verb *kowareru* ‘break’ is a static (instantaneous) verb, which means that the event of breaking is perceived as not possibly having a duration – a teacup is either broken or it is not. On the contrary, *nomu* ‘drink’ is a dynamic verb as it denotes an event with a duration – the event persists all the time a person takes to drink and finish coffee. The auxiliary form *-te iru* is employed in Japanese to express both progressive and resultative aspect. **The reading as one or the other** is decided on the basis of the **Aktionsart** of the predicate. Japanese shows a case where an aspectual form can be used with different **Aktionsarten** and takes different readings, but in many languages it can be the case that a certain aspectual form is simply **completely unacceptable**.

### 13.3 Analysis and Description

Describe, in no less than 300 words, the HA aspectual markers *wa an/okay* and *wa isam*, and the SA aspectual markers *teh an* and *wa isam*. Draw from the examples in Set 1 and Set 2 where needed.

- What is the internal semantics and the function(s) as aspectuals of these expressions? How would you define them?
- What are the differences with the expressions obtained with *a* in HA and *an/ea* in SA, and with *okere* in HA and *hemaka* in SA?
- Can you account for the use of double aspect? What is suggested by these examples? What remains difficult to explain? Be specific about problematic cases.
- What issues should be addressed to have a better understanding of aspect in Ainu?





from the reflexive *si-*, this circumscriptive/augmentative *si-* does not affect the base verb's valency.

→ *Dataset 1 - The choice between yay- and si-*

Consider the following examples featuring the reflexives *yay-* and *si-*. Non-reflexive examples for you to extrapolate the words' meaning are also included. Are the two reflexive prefixes interchangeable? What do you think is the verb's feature on which the choice between *yay-* and *si-* depends? Pay particular attention to the examples featuring a causative verb form.

#### Set 1.1 (Hokkaidō Ainu)

1. *Eyayreska.*

'You raised yourself (= grew up alone).' (Bugaeva 2004, 371)

2. *Sinuye'an.*

'I wrote myself (= I got a tattoo).'

3. *Ayuputari akasuy kus ne na!*

'I will help my brothers!' (Bugaeva 2004, 144)

4. *Ekasine yaykar'an.*

'I turned myself (= transformed) into [the boy]'s grandfather.' (adapted from Bugaeva 2004, 208)

5. *Tonoski sipuni.*

'The centre of the lake bubbled up.' (Tamura 1985, 12)

6. *Nea ipirma kamuy isinukare.*

'The god that had warned me made himself visible to me.'

7. *Akotanu un utar asikasuyre.*

'I had the people of my village help me.'

8. *Ikor ka nuye.*

'I wrote (= carved) also the [sheath] of the sword.' (Bugaeva 2004, 161)

## Set 1.2 (Sakhalin Ainu)

1. *Kamuyne ka yaykara koh ...*

'When she turned herself (= transformed) into a god ...' (Dal Corso 2021, 353)

2. *Utara sinka.*

'The people were tired.' (Pilsudski 1912, 156)

3. *Otakata sante yaysista.*

'She went down to the sea shore [and] hit herself.' (Majewicz 1998, 330)

4. *Henke [...] mahpoho tura san teh sikomuyte.*

'The old man [...] went down [to the beach] with his daughter and had her check him for lice.' (Dal Corso 2021, 284)

5. *Mosinnoskehe sipuni.*

'The middle of the island raised (itself) [due to the strength of the gods].' (Pilsudski 1912, 228)

6. *Tani 'ieyaysinkare.*

'Eventually [the old man] exhausted himself because of me.' (Dal Corso 2021, 380)

7. *Irukay ikomuyte!*

'Check me for lice just a little!' (Majewicz 1998, 294)

8. *Temana 'ankara ike 'aneyaykaamesu kusu ne.*

'Doing how will I help myself against [the monster]?' (Dal Corso 2021, 393)

9. *Tu aynu Taraykata tumi eyaycakasno.*

'Two men in Tarayka taught themselves (= learned) how to fight.' (Pilsudski 1912, 70)

10. *Pon monimahpo yayreske hawehe nee.*

'It was the voice of the little girl raising herself (= growing up by herself).' (Dal Corso 2021, 249)

11. *Sihnu utah tani 'emuyke situsahci.*

'All the people who had survived eventually cured themselves (= healed).' (Dal Corso 2021, 337)

#### 14.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Limitations of use and non-prototypical uses of reflexives*

Consider the following additional examples (\* marks ungrammatical examples). Are there uses of *yay-* and *si-* in this dataset that are at odds with your conclusions from the analysis of dataset 1? What are the limitations of use of the reflexive prefixes? Why do you think ungrammaticality arises? Are there behaviours of the Ainu reflexives that seem to go against the typological prototype presented at the beginning of this lesson?

##### Set 2.1 (Hokkaidō Ainu)

1. *Anoka anak yaycisekohosipian na.*

'As for me, I [will] return to my own house.' (OS 1981, line 415)

2. *Nea sikehe ranke.*

'He put down his (own) luggage.' (Tamura 1985, 38)

3. \**Anoka anak sicisekohosipian na.*

'As for me, I [will] return to my own house.'

4. *Tomari osmakta sirun menoko an.*

'Behind the pond there was a poor young woman.'

5. *Siyetokun inkaran ayke ...*

'As I looked in front of myself ...' (Tamura 1985, 40)

6. \**Yayetokun inkaran ayke ...*

'As I looked in front of myself ...'

7. *Ahawehe pirka.*

'My voice was beautiful.' (Bugaeva 2004, 155)

8. \**Nea yaysikehe ranke.*

'He put down his own luggage.'

9. \**Anoka anak sicise akohosipi.*

'As for me, I [will] return to my own house.'

10. *Anoka ka akor kotan akohosipi.*

'I too return to my village.' (OS 1981, line 428)

11. \**Anoka anak yaykor cise akohosipi.*

'As for me, I [will] return to my own house.'

12. \**Nea sisikehe ranke.*

'He put down his own luggage.'

13. *Yayhawesinaan.*

'I hid my own voice (= I remained silent).' (OS 1981 line 800)

14. \**Yayhawehe anu.*

‘I heard my own voice.’

15. *Siosmakun kuinkar.*

‘I looked behind myself.’ (Satō 1995, 9)

16. \**Yayosmakun kuinkar.*

‘I looked behind myself.’

17. \**Anoka anak yaycise akohosipi.*

‘As for me, I [will] return to my own house.’

18. *Pon nay etokta [...] pon to neno kane siran uske an.*

‘In front of a small river, [there was] a place like a small pond.’ (adapted from Tamura 1985, 4)

#### Set 2.2 (Sakhalin Ainu)

1. *Onuman hekota sine mosiri aysetokonukara.*

‘Upon the evening, I saw one island in front of myself.’ (Pitsudski 1912, 18)

2. \**Ni [...] aneenke ike siimahsuh anekoyki.*

‘I sharpened a [piece of] wook [with the knife] and picked my own teeth with it.’

3. *Tu to pahno torianahci.*

‘I remained doing nothing for two days.’ (adapted from Pitsudski 1912, 241)

4. *Kotankes un nispa yayahkas yahka ...*

‘A noble man of Kotankes, even [when] he went for a walk [away from the village] ...’ (Pitsudski 1912, 76)

5. *Aynu anne kusu yaykisorokaraan.*

'Because we are Ainu, we [can] have a [new] offspring of our own.' (Pitsudski 1912, 46)

6. \**Neroh hekaciutara yaycise wekoro.*

'Those young men had a house of their own together (= they shared a house).'

7. *Riukaohata sapan teh sietoko inkaraan.*

'I went down to the bridge and looked in front of myself.' (adapted from Pitsudski 1912, 134)

8. \**Riukaohata sapan teh yayetoko inkaraan.*

'I went down to the bridge and looked in front of myself.'

9. \**Ahkas 'easkay 'utah okore.*

'All the people who could walk.' (Dal Corso 2021, 332)

10. *Nea henke mahpoho kusa.*

'The old man made his (own) daughter board [the boat].' (Dal Corso 2021, 289)

11. \**Nea henke yaymahpoho kusa.*

'The old man made his own daughter board [the boat].'

12. *Neroh hekaciutara weyaycisekoro.*

'Those young men had a house of their own together (= they shared a house).'

(Majewicz 1998, 287)

13. *Ciseohta yaytori yan ua!*

'Remain at home doing nothing [away from your duties], please!' (Pitsudski 1912, 120)

14. *Tani nay etohta makapahci.*

'Eventually they reached up to the front (= the source) of the river.' (Dal Corso 2021, 313)

15. *Ni [...]* aneenke ike anesiimahsuhkoyki.

‘I sharpened a [piece of] wood [with the knife] and picked my own teeth with it.’  
(adapted from Pitsudski 1912, 181)

16. \**Nea henke simahpoho kusa.*

‘The old man made his own daughter board [the boat].’

### Examples from Other Languages...

Nivkh (Isolate/Amuric, Russia) (data from and adapted from Nedjalkov and Otaina 2013, 14, 51)

*ətək*      *p’-ōla*      *vi-gu-ɖ.*  
father      **REFL-**      **go-CAUS-IND**  
child

‘Father sent his (own) son.’

*if*      *i-ɖaɖo*      *ɣe-ɖ.*  
S/he      **3SG-knife**      take-IND.

‘S/he took his/her (someone else’s) knife.’

Nivkh makes a clear formal distinction when it comes to the subject’s **co-referentiality** with a possessor or object in the same context. In the first example sentence, the personal/possessive reflexive *p’-/p’i-* is used because the subject is also the ‘owner’ of the verb’s object *ōla* ‘child’. On the contrary, in the second example sentence, the knife belongs to a different person than the subject and the lack of co-referentiality is marked by the personal/possessive prefix *i-*. The use of *p’-/p’i-* in Nivkh is not limited to third persons, but it also applies to first and second persons.

Sumerian (Isolate, Ancient Mesopotamia) (data from D’Agostino et al. 2016, 147-50)

*u<sub>4</sub> iri-ni-še<sub>3</sub> ba-ḡen-na.*  
\**ud*      *iri=ani=še*      *ba-ḡen-Ø=a=a.*  
day      city=his=TER      **MID(AND)-go-ABS=NMLZ=LOC**  
‘When he went away to his city.’

*ša<sub>3</sub>-gal ur-ra-še<sub>3</sub> im-ši-ḡen-na.*  
*šaḡgal ur=ak=še*      *i-m-b-ši-ḡen-Ø=a.*  
feeding dog=GEN=TER      FIN-**VEN**-3N.OO-TER-go-ABS=REL  
‘[He] who came for the dogs’ feeding’

In Sumerian, the prefix *ba-* marks middle voice and can be used to express both passive and reflexive. However, with some verbs, and provided a congruous context, its use cannot be recognized to be that of a **prototypical reflexive** or passive. Rather, *ba-* indicates that the event expressed by the verb is performed by the subject together with a **motion away** from the speaker and it also may imply that this is done to the subject’s benefit. Therefore, in such cases *ba-* has an **andative** (also **dislocative**) meaning – that is, it indicates motion away from the speaker or a centre of attention. With this function, *ba-* alternates with the prefix *m(u)-*, which indicated the opposite **motion towards** the speaker or a center of attention and as such has a **ventive** (also **cislocative**) meaning. In Sumerian these two prefixes are necessary to distinguish between ‘go’ and ‘come’ since the event of motion is not formally distinguished in the verb’s form, which is always *ḡen*.

### 14.3 Analysis and Description

In no less than 400 words describe the use of the Ainu reflexive prefixes *yay-* and *si-*, by referencing the data provided above. What is the criterion that rules the use of the two prefixes? Is it morphosyntactic or semantic? How would you explain the seeming non-prototypical uses of the prefixes?





## Set 1.1 (Hokkaidō Ainu)

1. \*
- Taihō koak.*

‘He shot with a cannon.’

- 2.
- Akor kamuy aepotara wa ...*

‘I worried about my god.’ (Bugaeva 2010, 765)

3. \*
- Pirka usike onaha epuni.*

‘She offered the good parts [of the meat] to her father.’

4. \*
- Akor ekasi ioonne.*

‘My grandfather lived with me for a long time.’

- 5.
- Kuioroinkar kusu kek ruwe ne.*

‘I came [here] for sightseeing.’

6. \*
- Taihō oak.*

‘He shot with a cannon.’

- 7.
- Akor ekasi ikoonne.*

‘My grandfather lived with me for a long time.’ (adapted from Bugaeva 2010, 780)

- 8.
- Pirka usike onaha kopuni.*

‘She offered the good parts [of the meat] to her father.’ (Bugaeva 2010, 776)

9. \*
- Akor yupo aoitak.*

‘I said [so] to my older brother.’

- 10.
- Aarserkehe toytumta rer.*

‘Half of my body sank in the earth.’

11. \**Pirka usike onaha opuni.*

‘She offered the good parts [of the meat] to her father.’

12. *Akor yupo akoitak.*

‘I said [so] to my older brother.’ (OS 1980, line 11)

13. \**Akor kamuy akopotara wa ...*

‘I worried about my god.’

14. \**Aarserkehe toytum korer.*

‘Half of my body sank in the earth.’

15. *Kuioroinkar eek ruwe ne.*

‘I came [here] for sightseeing.’ (Bugaeva 2010, 767)

16. \**Akor yupo aeitak.*

‘I said [so] to my older brother.’

17. *Taihō eak.*

‘He shot with a cannon.’ (Bugaeva 2010, 768)

18. *Taihō ani ak.*

‘He shot with a cannon.’

19. \**Kuioroinkar oek ruwe ne.*

‘I came [here] for sightseeing.’

20. *Akor ekasi iturano onne.*

‘My grandfather lived with me for a long time.’

21. *Aarserkehe toytum orer.*

‘Half of my body sank in the earth.’ (Bugueva 2010, 783)

22. *Akor yupo eun itakan.*

‘I said [so] to my older brother.’

### Set 1.2 (Sakhalin Ainu)

1. \**Nis esikiru wa niskurukaene rikin.*

‘He turned to the sky and ascended to above the clouds.’

2. *‘Utarihihcin ‘onne ‘utasa ‘epayehci.*

‘They went to their relatives to visit [them].’ (Dal Corso 2021, 313)

3. *Nokanramuhu‘ohta pisi.*

‘He asked his younger brother.’

4. *Huu hay newa pehsamus tura, ‘utura tenkoro.*

‘She held together in her arms fresh *hay* and mat grass.’

5. *Suma kema ‘etuhseka.*

‘He/she kicked the stone with [his/her] foot.’ (Murasaki 1979, 32)

6. *Nis‘ohta sikiru wa niskurukaene rikin.*

‘He turned to the sky and ascended to above the clouds.’

7. \**Nokanramuhu episi.*

‘He asked his younger brother.’

8. *Nokanramuhu cisehehcin neya ‘arapesca oan kusu ...*

‘Since the houses [of the village] of his younger brother were on the opposite bank [of the river] ...’ (Dal Corso 2021, 328)

9. \* *Suma kema kotuhseka.*

‘He/she kicked the stone with [his/her] foot.’

10. \* *Nokanramuhu cisehehcin neya ‘arapesca koan kusu ...*

‘Since the houses [of the village] of his younger brother were on the opposite bank [of the river] ...’

11. \* *Utarihihcin ‘onne ‘utasa kusu payehci.*

‘They went to their relatives to visit [them].’

12. \* *Suma kema ani tuhseka.*

‘He/she kicked the stone with [his/her] foot.’

13. \* *Suma kema ‘otuhseka.*

‘He/she kicked the stone with [his/her] foot.’

14. \* *Huu hay newa pehsamus tura ‘uotenkoro.*

‘She held together in her arms fresh *hay* and mat grass.’

15. \* *Nokanramuhu cisehehcin neya ‘arapescata an kusu ...*

‘Since the houses [of the village] of his younger brother were on the opposite bank [of the river] ...’

16. \* *Nokanramuhu kopisi.*

‘He asked his younger brother.’ (Dal Corso 2021, 331)

17. \* *Nis kosikiru wa niskurukaene rikin.*

‘He turned to the sky and ascended to above the clouds.’ (Dal Corso 2021, 276)

18. \* *Huu hay newa pehsamus tura ‘ukotenkoro.*

‘She held together in her arms fresh *hay* and mat grass.’ (Dal Corso 2021, 403)

19. \*‘Utarihihcin ‘onne ‘utasa ‘opayehci.

‘They went to their relatives to visit [them].’

→ Consider this additional information ...

In both Hokkaidō and Sakhalin Ainu, there exist the verbal prefixes *he-* and *ho-*. These two prefixes have long been a debated topic in Ainu studies and are traditionally intended to mean ‘head’ and ‘bottom’ respectively. Not always can they be translated literally and, generally, they indicate that the upper or lower part of a referent is chiefly involved in the event expressed by the verb. Therefore, we may have *hepuni* (from *puni* ‘lift’) ‘lift one’s head up’, *hekiru* (from *kiru* ‘turn’) ‘turn forward in the direction of something’, or *hopita* (from *pita* ‘loosen’) ‘become untied’ (Tamura 2000, 197). These prefixes do not influence the verb’s valency and, with regard to their phonological characteristics, they may lose the initial fricative and be realised as *e-* and *o-*. When this happens, you see how they become identical to two of the applicative prefixes you have just been introduced to.

## 15.2 Research

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ Dataset 2 - Polysemy and polyfunctionality

Consider the following additional examples. Given what you have discovered up to this point of the analysis, what is peculiar about the use of applicatives in these instances? What new functional extensions and/or semantic properties of applicatives do you notice? Which instances of *e-* and *o-* are not applicatives but are better recognised as the prefixes *he-* and *ho-*? What is the semantic and/or syntactic evidence for that? In light of this, how can you refine your account of HA and SA applicatives?

### Set 2.1 (Hokkaidō Ainu)

1. *Sirar aiekikkik.*

‘I was thrown on(to) the rock.’ (Bugaeva 2010, 770)

2. *Akor huciape aekoitak.*

‘I told [about that] to the Fire Goddess.’ (adapted from OS 1977, line 348)

3. *Akor katkemat aekira.*

‘I escaped with my wife.’ (OS 1988, line 315)

4. *Siknuan wa yacyisekohosipian.*

‘I came back to life and returned to my own house.’ (Bugueva 2010, 789)

5. *Akor kotanu iorura.*

‘He carries me to my village.’ (adapted from Bugueva 2010, 783)

6. *Tan nupuri [...] ekohemesu.*

‘You climbed to [the top of] this mountain.’ (Bugueva 2010, 779)

7. *Suy nituyean hike aeenke.*

‘Again I cut a piece of wood and sharpened its tip.’ (HS 1969 line 385)

8. *Kasi ca otuye hine ...*

‘Above, he cut some tree branches at the base and ...’ (NP 1980 line 170)

**Set 2.2 (Sakhalin Ainu)**1. *Otakata cih ehekem.*

‘They dragged the boat up to the shore.’ (Pilsudski 1912, 85)

2. *Ueyacyisekorohci.*

‘They had a house for themselves together.’ = ‘They shared a house together.’  
(Dal Corso 2021, 313)

3. *Sine ehorah cisehe ‘an.*

‘There was one house with a collapsed roof.’ (Dal Corso 2021, 371)

4. *Neya horokeypo tani oro’omos teh [...] ‘koweepekere.*

‘The young man eventually woke up and [...] she told him about it.’  
(Dal Corso 2021, 319)

5. *Mokoro poka ankoyakus reusian. Kosistono tonoske kooman kane ...*

'I couldn't even sleep [but] I lay down [anyway]. Having [the day] gotten to midday, when it was plainly bright ...' (Pilsudski 1912, 146)

6. *Nean poohohcin henke 'eko'imokakorohci.*

'That daughter of theirs gave [that] to her father as a gift.' (Dal Corso 2021, 296)

7. *Ciseohta esirepaan.*

'I headed back to [my] house.' (Pilsudski 1912, 160)

8. *Eikupapa ka koyaykus [...] 'imaki 'ohawke.*

'They cannot bite food with [their teeth] [...], their teeth are weak at the base.' (Dal Corso 2021, 206)

## Examples from Other Languages...

Malang Javanese (Austronesian, Indonesia) (examples from Hemmings 2013, 168-71)

*Pelem ceblòk menyang gentèng ómah-ku.*  
mango fall towards roof house-1SG.POSS  
'A mango fell on the roof of my house.'

*Pelem nyeblòk-i gentèng ómah-ku.*  
mango fall-APPL roof house-1SG.POSS  
'A mango fell on the roof of my house.'

*Ibu-ku ng-gupuk kasur nganggó sapu.*  
mother-1SG.POSS AV-hit mattress AV.use broom  
'My mother hit the mattress with a broom (once).'

*Ibu-ku ng-gupuk-i kasur nganggó sapu.*  
mother-1SG.POSS AV-hit-ITER mattress AV.use broom  
'My mother hit the mattress with a broom (many times).'

Malang Javanese has two suffixes (*-i* and *-aké*) that fulfill the primary function of applicatives. Like **prototypical applicatives**, *-i* promotes a noun, that is otherwise expressed via an oblique, to argument of the verb – i.e. applicatives are a **valency-changing strategy**. The applicative *-i* of Malang Javanese typically targets nouns with the **thematic functions** of location or goal. In the first example above you see a non-applicative construction where the location 'on the roof' is expressed via the oblique *menyang gentèng* 'towards the roof'. In contrast, in the second example the verb bears the applicative *-i* and the noun *gentèng* 'roof' is **promoted to argument**. The formerly intransitive verb is now transitive. There are also cases, however, where the applicative suffix *-i* **does not affect** the verb's valency but rather encodes an aspectual meaning (iterative meaning specifically). In such instances, the applicative *-i* has a **valency-preserving** function.

### 15.3 Analysis and Description

Describe, in no less than 300 words, the semantics and functions of the applicatives *e-*, *ko-*, and *o-* in HA and SA.

- Where did your analysis start from?
- What properties of the applied object determine the choice of the applicative form?
- Are there cases of polysemy?
- Do applicatives have special functional extensions? Of what kind? How would you describe them?
- What are the differences between HA and SA?
- Do you think the applicatives *e-* and *o-* and the verbal prefixes *he-* and *ho-* are related? How would you explain the common semantics that bring the two pairs of prefixes together?
- What would be needed to refine our analysis of Ainu applicatives?





→ Consider this additional information...

In HA and SA the clause linker *kusu* is polysemous as it entails both cause or aim. The causal or final reading is established on context. Examples (3) and (4) illustrate the uses of *kusu* with an example from SA.

(3) [*'Eci-mahpo-ho pirika]* **kusu** *'eci-'oskoro 'anahka ...*  
2P.PSR-daughter-POSS 3S.S/be.good **CAU.FIN** 3P.A-3S.O/be.jealous if  
'If you are jealous of your daughter because she is [so] beautiful... ' (Dal Corso 2021, 283)

(4) [*Nean kito-ta-hci usi-ke-he wooneka-hci]* **kusu**  
that 3P.S/kito-collect-COLL 3.PSR/place-PTV-POSS 3P.A/3S.O/check. **CAU.FIN**  
situation-COLL

*ariki-hci-hi neampe ...*

3P.S/ come.PL-COLL-NMLZ TOP

'As they went back to check the situation of the place where they collected the *kitos*...'  
(Dal Corso 2021, 309)

→ Dataset 1 - Semantics of clause linkers

Look at the following examples that feature the HA clause linkers *wa* and *yak* and the SA clause linkers *teh* and *yahka(yki)*. Consider the translations provided, determine the primary meaning of these linkers, and (if needed) try to propose an equivalent translation that would better fit the context. Then give a closer look at the instances of *wa* and *teh*. Are there cases where the meaning of these linkers is not straightforwardly retrievable in translation? How is clause linking rendered instead? What in the Ainu construction can account for this different interpretation and translation?

#### Set 1.1 (Hokkaidō Ainu)

1. *Arkian yak iociwe kuni eramu.*

'If I come you will think to throw me away.' (OS 1979, line 663)

2. *Apa caka wa ikore.*

'[My mother] opened the door for me.' (Bugaeva 2004, 131)

3. *Kusur epitta keman wa aep ka isam.*

'In the whole Kushiro there was a famine and there was no food.' (Tamura 1984, 26)

4. *Ikoonkami wa akoonkami.*

'He greeted me and I greeted him.' (Bugaeva 2004, 262)

5. *Ekimnean wa inkar'an sekor yaynuan.*

'I [will] try to go to the mountains [to hunt], I thought.' (Bugueva 2004, 186)

6. *Na ci yak kera pirka.*

'It [will] taste better if it ripens more.' (Tamura 2000, 163)

7. *Tektaksa poka eekar wa [...] kor tasum pirka.*

'You give at least a massage [to the sick person] and [...] the sickness they have gets better.' (Tamura 1984, 12)

8. *Atumamaha opitta munin wa isam.*

'My whole body went rotten.' (Bugueva 2004, 372)

9. *Ienonnoitak yak pirka na!*

'It's good if you pray to me.' (OS 1980, line 480)

**Set 1.2 (Sakhalin Ainu)**1. *'Eerameskari yahka pirikaha.*

'You don't know that, but it's alright!' (Dal Corso 2021, 332)

2. *'Otakata 'ampene ruwehehcin maake teh an.*

'[The animals] had clearly left their footprints on the beach.' (Dal Corso 2021, 309)

3. *Nean henkeutah neyke renkarankorohci yahka neya mahtekuh 'ampene etunne.*

'Those elders agreed [to the wedding], but the young woman [their daughter] really didn't want to.' (Dal Corso 2021, 282)

4. *'Ururukata rikinkehci teh 'ampene 'emus 'ani tatakihci.*

'They lifted [the mouse spirit] up onto the river bank and beat it up with the swords.' (Dal Corso 2021, 336)

5. *Neya cih [...] hesuyehci teh tani 'atuykaene repahci.*

'[The whale-gods] went round the boat and eventually went out to the open sea.' (Dal Corso 2021, 291)

6. *'Ankuu ka hankii teh henkeuta 'ankuure.*

'I didn't drink it and made the men drink it [instead].' (Dal Corso 2021, 206)

7. *Seta neeno tenkorasi yahka pirika.*

'One hugs [a bear cub] like a dog, but it's fine.' (Dal Corso 2021, 196)

**16.2 Research**

Now look at this other dataset. Additional examples from other languages are not given for this lesson.

→ *Dataset 2 - Semantic overlap*

Examples in the following dataset feature some other clause linkers: *hine*, *hike*, *ciki*, and *yakun* of HA and *koroka*, *waka(yki)*, *ike*, and *wa* of SA. Background context is given in square brackets below each example. Looking at the translation and at the background context try to explain 1) how *hine* and *hike* are different from *wa*, 2) how *ciki* and *yakun* are different from *yak*, 3) how *koroka* and *waka(yki)* are different from *yahka(yki)*, and 4) how *ike* and *wa* are different from *teh*. For each of these linkers the same English translation is given, but you are free to propose a better one according to the context. What kind of semantic relation between clauses do these four groups of linkers entail?

**Set 2.1 (Hokkaidō Ainu)**1. *Upascironnup kamuy ane hine okaan.*

'I was a stoat god and [so] I lived.' (Tamura 1985, 58)

[This is the beginning of a tale when the main character introduces himself.]

2. *Ekor rusuy pe an ciki hok!*

'If there's something you want, buy it!' (Tamura 2000, 165)

[The speaker gives a suggestion]

3. *Tektaksa poka eekar wa [...] kor tasum pirka.*

'You give a massage [to the sick person] and [...] the sickness they have gets better.'  
(Tamura 1984, 12)

[The speaker is explaining how to perform a healing massage on a sick person and goes through the phases of the treatment]

4. *Ase aeyayetokoyki hine nea katkemat anak akor poyson kay tek.*

'I got ready to carry [provisions] and [my] wife carried our small baby on [her] back.'  
(Tamura 1985, 26)

[The character of the story is telling about his and his wife's daily life, making a list of the different activities they used to do]

5. *Pewre okkaypoutar ne yakun pokor wa po resu kusu nepki.*

'If they are young men, they have children and they work to provide for them.'  
(Bugaeva 2004, 249)

[The speaker is imagining how the life of some young men, from whom food has been stolen, must be]

6. *Ienonnoitak yak pirka na!*

'It's good if you pray to me.' (OS 1980, line 480)

[The character is told by a god that he will benefit from praying to him]

7. *Kamuy iyerampokwen kusu ene sikoan humi an sekoy yaynuan hike cisan a an a.*

'"Because the gods had mercy towards me [now] I regained my sight like this!" I thought and continued to cry.' (Tamura 1985, 8)

[An old lady suddenly gets her eyesight back, a signal that the curse previously cast on the village she comes from has left her, and now that she is able to see again she is overwhelmed with joy]

8. *Ikoonkami wa akoonkami.*

'He greeted me and I greeted him.' (Bugaeva 2004, 262)

[The character of the story is welcomed by the owner of a house and he responds likewise upon entering]

9. *Arkian yak iociwe kuni eramu.*

‘If I come you will think to throw me away.’ (OS 1979, line 663)

[A dog explains what it expects if it will follow the owner]

10. *A: Kunu ka eramiskari ruwe tapan na.*

‘I’ve never ever heard [that story].’

*B: Yakun kuye wa ecinure kusu ne.*

‘If [it’s so], I’ll tell it to you.’ (Tamura 1984, 18)

[Two people are speaking about a story that A has never heard but about which she is curious]

11. *Aynu okkaypone yaykaran hine pasan kane terkean kane sanan.*

‘I turned myself into a human young man and ran downhill leaping.’ (Tamura 1985, 60)

[A stoat god describes how he disguised himself in order to then go meet a human young woman who was walking on a mountain trail and deceive her]

12. *Taan hekaci itakan ciki pirkano enu kus ne na.*

‘Boy, if I speak you should listen well.’ (Bugueva 2004, 205)

[The speaker is about to share important details on his identity with the boy, who is the main character of the story]

**Set 2.2 (Sakhalin Ainu)**

1. *Seta neeno tenkorasi yahka pirika.*

‘One hugs [a bear cub] like a dog, but it’s fine.’ (Dal Corso 2021, 196)

[Two speakers are talking about a man being bitten by a bear and one says it couldn’t have been a bear cub since they are usually very docile]

2. *'Oriikawa karakahseka wa ranke.*

'They made her roll down and threw her from a high place.' (Dal Corso 2021, 348)

[The narrator tells how some people tried to cure the madness of a young woman]

3. *'Oniste koroka herohki nee nah 'an'eraman kusu sianno keera'anno 'an'ee.*

'[The flesh] was firm, but I thought they were *herohkis* so I ate them with much pleasure.' (Dal Corso 2021, 206)

[The speaker is remembering the food she ate at an event and comments on it with a friend]

4. *Oyasine yaykara manu ike 'atuykaapoka tani 'ahkas.*

'She turned into a spirit and eventually roamed across the sea.' (Dal Corso 2021, 353)

[In this passage the narrator tells how a crazy woman ended up after being thrown at sea]

5. *Nean henkeutah neyke renkarankorohci yahka neya mahtekuh 'ampene etunne.*

'Those elders agreed [to the wedding], but the young woman [their daughter] really didn't want to.' (Dal Corso 2021, 282)

[In this tale a young woman refuses to get married and turns down all the suitors she has]

6. *Niicauta 'anse wa sapan.*

'I carried the tree limbs and went [back].' (Dal Corso 2021, 167)

[The speaker tells about her activities in the morning]

7. *Neya cih [...] hesuyehci teh tani 'atuykaene repahci.*

'[The whale-gods] went round the boat and eventually went out to the open sea.' (Dal Corso 2021, 291)

[After a father gives away his daughter to a whale god, the group of whales makes its farewell this way before leaving]

8. *Kucasamta sapan teh inuan [...] ike suke hum annu.*

'I proceeded down to the hut and listened [...] and I heard the sound of cooking.'  
(Pilsudski 1912, 134)

[The character of the tale tells the moments before he met with a she bear that had disguised herself as his wife.]

9. *Ramma ray 'aynu ka 'anhi nee waka sihnu utah tani 'emuyke situsahci.*

'There [had] certainly been people who [had] died, but all the people who [had] survived eventually recovered.' (Dal Corso 2021, 337)

[The characters of the story manage to avoid a famine to get worse by bringing food to people in need, who escape from death thanks to it]

10. *'Anrekucihi kayki [...] 'araka nee koroka kahkemah simma oman kusu [...] 'ariki'anhi nee ko.*

'I also had a sore throat, but because the young woman (= our friend) leaves tomorrow [...] I came, you see.' (Dal Corso 2021, 177)

[The speaker stresses how much it meant to her to be present at the last recording session before the collector of the data (i.e. the young woman) returned home]

11. *'Ururukata rikinkehci teh 'ampene 'emus 'ani tatakihci.*

'They lifted [the mouse spirit] up onto the river bank and beat it up with the swords.'  
(Dal Corso 2021, 336)

[After catching the evil spirit that had stolen the village's provisions, a group of man kills it]

12. *Anemakankehe ne numan eperay wakayki ekoyaykus.*

'I sent you [there and] yesterday you fished, but you couldn't [catch anything].'  
(Pilsudski 1912, 197)

[A god, who had disguised himself as a fish, reveals his plan to the character of the story]

### 16.3 Analysis and Description

In no less than 300 words give an overview of the semantics of the clause linkers *wa*, *hine*, *hike*, *ciki*, *yak*, and *yakun* in HA and *koroka*, *yahka(yki)*, *waka(yki)*, *ike*, *teh*, and *wa* in SA. Include relevant examples from the sets above where needed.

- What kind of semantic relation do they entail?
- Are there formally different but semantically equivalent linkers in HA and SA?
- The same English translation is given for groups of clause linkers in the examples in Set 2. Do the items in these groups show any difference? If yes, how are they different and what alternative translation would you propose to better highlight the semantic relation they express?
- Within each variety, are there linkers that appear to be semantically identical?
- Return on the examples in Set 1 where *wa* and *teh* are not translated directly into English. How do these clause linkers contribute with their meaning to the expression? How can this be insightful with regards to the function of *wa* and *teh* as clause linkers?





→ Consider this additional information...

Differently from the HA *-pe* and *-(hi)i*, the nominaliser *-hi* is not used in lexical nominalisation in SA – in this Ainu variety zero-nominalisation is used to derive nouns like the ones in (2) and (3) above.

- (5) *lpe.*  
AP.eat(.NMLZ)  
'To eat something (> eating something = food).'

→ Dataset 1 - Types of nominalisation

Consider the following examples. Some sentences in this set contain the nominalisation strategies we have seen above and others have been included for you to deduce the meaning of words. **Note that in Dataset 1 and also in Dataset 2 below nominalisers are given separated from the word they are suffixed to, for more clarity.** What is nominalisation used for in these sentences? What interpretations do the nominalised clauses take? Do you think there are any other elements that, together with the nominaliser, derive these specific interpretations of nominalisation as a whole? Do the predicates in the nominalised clauses differ from sentence to sentence in any way (besides in their core semantics)?

#### Set 1.1 (Hokkaidō Ainu)

1. ... *sekor Pirautur un kamuy ikaspaotte ki p ne korka anu humi ka oararisam.*

'... so the god of Pirautur indeed asked me, but I didn't listen to him at all.' (Tamura 1984, 32)

2. *Hempakiw ne siknuan wa okaan a p rapok ene neiwa ek sion sike wa ek ruwe ne.*

'Various [people] had survived, but at that time, like this, a young man came from somewhere carrying a load.' (Tamura 1985, 50)

3. *Aep pirka hi cep pirka hi ikopunpa.*

'They offered me food of the good kind [and] fish of the good kind.'  
(Tamura 1985, 20)

4. *Somo ka ene yaynuan kunak aramu a p nisapno nea [...] wenkur eun arpaan rusuy.*

'I thought I wouldn't certainly feel like that, but soon I wanted to go to that [...] poor man's [house].'  
(Tamura 1985, 36)

5. *Tu kanpiso re kanpiso ka aenuypa wa oka yakun ...*

'If it has been written on two or three pieces of paper ...' (Tamura 1984, 14)

6. *Kumimaki ani kapu kukar wa ke a.*

'I have peeled it with my teeth and eaten it.' (Tamura 2000, 111)

7. *Ciseka orewsi hita pase kamuy yaynu ...*

'When he landed on top of the house, the great god thought ...'  
(Tamura 1985, 28)

8. *Tasiro ka sak nep ka sak pe ne kusu ...*

'Because in fact he had no sword or anything ...' (Tamura 1985, 34)

9. *Aenina p poka sak.*

'He doesn't even have the means to collect wood.' (adapted from Tamura 1985, 36)

10. *... sekor kuyaynu korka tanto kek ruwe ne.*

'I thought so but today I came.' (Tamura 1984, 12)

11. *Atuseranke hita (aynu) sinen o.*

'When they lowered the net, one (man) got into it.' (Tamura 1984, 22)

12. *Kamuy koonkami etokta ikoonkami.*

'They worshipped me before worshipping the [other] gods.' (Bugueva 2004, 310)

13. *Pon nay etokta [...] pon to neno kane siran uske [an].*

'In front of a small river, [there was] a place like a small pond.'  
(adapted from Tamura 1985, 4)

## Set 1.2 (Sakhalin Ainu)

1. *Kuyee he sunke.*

‘What I say is a lie.’ (Murasaki 1979, 95)

2. *‘Anciw ehe neampe henke tuhse.*

‘When I hit him, the old man jumped.’ (Dal Corso 2021, 383)

3. *‘Anhawehe nuu yahka wante he nee nanko.*

‘Even though he hears our [old] voices, maybe he [will] in fact recognise [us].’ (Dal Corso 2021, 182)

4. *‘Inkarahci hi neampe niskurukaawa [...] hemata ka cokokohse ran.*

‘When they looked, something fell tumbling [...] from the clouds.’ (Dal Corso 2021, 272)

5. *Ōta pahko neampe nakene ka oman ka hankii.*

‘As for the old Ōta she [will] not go anywhere.’ (Dal Corso 2021, 217)

6. *‘Asin kun i ‘anteere.*

‘I waited for it to come out.’ (Dal Corso 2021, 413)

7. *Tani ‘ene ‘an ‘ukoytah tura ‘ankii hi nee.*

‘Eventually I did (=had) a conversation like this with her.’ (Dal Corso 2021, 179)

8. *‘Ekotanta ‘eoman kun ‘ohta ...*

‘When you will go to your village ...’ (Dal Corso 2021, 181)

9. *Kayo ho neampe kosmacihi nee nanko sine mahtekuh ‘asin.*

‘When he called, one young woman, probably his wife, came out.’ (Dal Corso 2021, 330)

10. *Cih ani atuyohta apuohta ikoya ciki ...*

‘If they hunt for seals with boats at sea [or] on the ice ...’ (Pilsudski 1912, 116)

11. *Esin nisahta ekimne etokota anitankihi ehuraye nea?*

‘Earlier this morning, before going in the mountains, did you wash my vessel?’  
(Pilsudski 1912, 158)

12. *Inetokota yuru porono eama.*

‘You have set many traps in front of us.’ (Majewicz 1998, 265)

13. *Wayayse ani kinatumene ahun.*

‘It went into the grass yelping.’ (Majewicz 1998, 307)

**17.2 Research**

Now look at this other dataset and also read the examples from other languages given after it, which you will need for the third and last activity of this lesson.

→ *Dataset 2 - Pragmatic applications of nominalisation*

The following examples illustrate one more use of nominalisation. What is the structural peculiarity of these sentences? How is nominalisation used? Can the nominalised clause in these instances be followed by any other element?

**Set 2.1** (Hokkaidō Ainu)1. *Atuy ruyampe isam yak pirka p!*

‘[I wish] the sea weren’t stormy!’ (Tamura 2000, 164)

**Set 2.2** (Sakhalin Ainu)1. *Poro iso ‘enukara ka hanki hi?*

‘Haven’t you seen the big bear?’ (Dal Corso 2021, 197)

2. *Hemata kusu enan si hura an hi hetaneya?*

‘Why on earth is there such a smell of dung?!’ (Pilsudski 1912, 160)

3. *Hoynu poronno* 'e'ayki hi 'aa?

'You catch a lot of pine martens, don't you?' (Pilsudski 1912, 132)

4. *'Esin nisahta* 'enuma ike hemata 'ekii hi?

'This morning you woke up and what have you done?' (Dal Corso 2021, 167)

## Examples from Other Languages...

Korean (Koreanic, Korea) (example from Yoon 1991 in Yap, Grunow-Hårsta, Wrona 2011, 6)

*Chelswu-ka chayk-ul ppalli ilk-ess-um-i pwunmyengha-ta.*  
Chelswu-NOM book-ACC quickly read-PST-NMLZ-NOM evident-DECL  
'It is evident (the fact) that Chelswu read the book quickly.'

This example from Korean shows nominalisation of **an entire clause**, that spans from *Chelswuka* to the verb *ilkess-*, marked by the nominaliser *-um*. The verb *ilk-* 'read' retains specification for tense, and it is also marked for nominative case via the postposition *-i*. This last fact indicates that the whole clause is nominalised and functions as a nominal. This type of nominalisation, where the predicate in the nominalised clause is still marked for categories such as tense, aspect, and mood, and the clause is compatible with nominal morphology, is called '**clausal nominalisation**'. A clause nominalised this way functions as a subordinate clause, dependent from a main clause (which, in the example above, is *pwunmyenghata* 'it is evident').

Mongsen Ao (Sino-Tibetan, India) (example from Coupe 2007 in Yap, Grunow-Hårsta, Wrona 2011, 8)

*Tsə'hŋi ku hwaŋ-əkə mən-pəʔ i aɯ-əj-ùʔ.*  
sun LOC roast-SIM sit-NMZ PROX be.good-PRES-DEC  
'This sitting [and] bathing in the sun is good.'

The example from Mongsen Ao shows an instance of **embedded nominalisation**. Here the coordinated verbs *hwaŋ* 'roast' and *mən* 'sit' in the nominalised clause do not bear markers of tense, aspect, or mood and the whole nominal constituent functions as an argument of the verb in the main clause (i.e. *aɯ* 'be good'). For this reason the nominalised clause is considered embedded (or 'enclosed') in the main predicate. It is important to note that the (im)possibility for the predicate in the nominalised clause to be marked for tense, aspect, or mood **varies from language to language** (Yap, Grunow-Hårsta, Wrona 2011). Therefore, it may be possible to find one or two of these categories marked on the predicate but not the other(s).

Chhantyal (Sino-Tibetan, Nepal) (example from Grunow-Hårsta, Yap 2009 in Yap, Grunow-Hårsta, Wrona 2011, 8)

*Ram-e Sita-o rŋa sat-cyo.*  
Ram-ERG Sita-GEN goat kill-MIR.NMZ  
'Ram killed Sita's goat!' (to the speaker's surprise)

The example from Chhantyal shows a nominalised clause that is not dependent from nor embedded in any main clause or predicate. The nominalised clause, although being morphosyntactically a nominal, functions as an independent clause. This kind of nominalisation is called 'non-embedded nominalisation' or '**insubordination**' (Evans 2007; 2009). Insubordination usually fulfils **specific semantico-pragmatic functions**. For example, in Chhantyal it is used to mark the speaker's surprised attitude towards the event.

### 17.3 Analysis and Description

In no less than 400 words give an overview of the pragmatic uses of nominalisation you have encountered in Datasets 1 and 2. Cite the relevant examples and also be specific about the kind of nominalisation involved and the morphosyntactic elements that are found together with nominalisation.

- Is there any case where the semantics borne out by nominalisation overlaps with that of other constructions?
- What are the differences between HA and SA?
- Are there any examples difficult to analyse? If yes, why are they so?



Japan annexed four territories: Hokkaidō (1869), the Ogasawara Islands (1872), the Ryukyuan Kingdom (i.e. today's Okinawa province) (1879), Taiwan (1895), and the Korean peninsula (1910). These territories were inhabited by people speaking languages different from Japanese, whom the government made an effort to assimilate among Japanese.

As Morris-Suzuki (1998, 27) notes, imposing Japanese as the national language at all institutional levels during the Meiji period represented the central element of the assimilation process. Especially for the speakers of Ainu and the Ryukyuan languages, who were subjected to assimilation more directly and thoroughly, a forced education imparted only in Japanese slowly resulted in a language shift from the native language to Japanese by the end of the nineteenth century. Importantly, although as a result of this Ainu and Ryukyuan people became in fact bilingual, they were never visibly acknowledged as such. The history of Ainu and Ryukyuan languages illustrates how not recognising bilingualism as a reality has contributed to creating the myth of Japan being a monolingual nation and helps us better understand the difficulties of establishing bilingual education systems in today's Japan.

### 18.3 Bilingual Education in Japan

Post-war attitudes towards bilingual education in Japan can be seen as a direct result of the assimilation policies of the Meiji period. The case of *kikokushijo* or 'returnee children' provides a good example. Starting from the 1960s, an increasing number children began to arrive in Japan from abroad. These were children of Japanese people who had previously moved abroad for business and whose families were then returning to live in Japan. Having been born and raised in a foreign country, these children obviously behaved and spoke differently from Japanese children who were born and raised in Japan, which took the school system by surprise and for the very first time called for a new approach to education. As it concerned exactly the education of *kikokushijo* children, besides other measures the government gave a series of subsidies for opening special entrance quotas in schools and universities that were aimed at giving support to these children who needed to be re-entered in Japanese society. That is, *kokushijo* children were treated as a minority, in need of public support, who had to be somehow re-Japanised after their long absence from Japan (Fujita-Round 2019, 177-8). Again the reality of bilingualism was essentially denied. Only in the 1970s did the attitude towards bilingual education change and the presence of bilingual people, for whom Japanese may have been either a first or second language, started to be acknowledged more openly. Nevertheless, still today Japanese institutions seem to be slower to adjust to this change of perspective, and in most cases the view that second language learning and bilingualism is of a temporary nature persists. As a reason for this, Kanno (2008) points out on the one hand the teachers' perception of Japanese L2 learners as people who at some point will return to their home countries which somehow allows them to be less invested in their bilingual education. On the other hand, parental attitudes towards children's education are also specifically found to negatively influence the perception of the importance of receiving a bilingual education. Also because of a lack of transparency of the Japanese legislation, parents and children tend to underestimate the value of growing up bilingually and of knowing the language of their country of residency. Other than a substantial change on the Japanese government's part, aimed at addressing bilingualism as a primary aspect of Japanese society, individual attitudes can also make a difference in how a new language can and should be acquired.

### 18.4 Counting Ainu and Ainu Speakers

This brief introduction to the history of Ainu language in modern times serves to highlight a number of issues that are central when considering the vitality of the language in today's Japan and the efforts towards the revitalisation of Ainu. First, there is the question of how

many Ainu are there in contemporary Japan. As Okazaki (2019, 355) points out, the answer to this question is not an easy one and estimates of the number of Ainu vary sharply. Among the reasons for variations in counting Ainu people there is the fact that the polls and censuses carried out to date differ in their scope (for instance, Ainu residing outside of Hokkaidō are never or rarely included). However, one main factor that influences the counting and that easily results in a biased perception of the extension of the Ainu community is that many Ainu people still do not feel comfortable with showing their Ainu identity and therefore do not participate in polls and censuses (Kitahara 2011). As it regards language specifically, there is one more layer of difficulty when it comes to counting speakers of Ainu. Although most native speakers of Ainu have passed away and there are now very few people who acquired the language in the family, there still is a significant number of younger Ainu who can use the language at varying levels of proficiency. This means that the actual number of speakers present in Japan is far more than the alarming figure (5 people) released by UNESCO in 2009. This reality calls for a distinction between ‘native’ speakers (i.e. those who have learnt the language from a relative and used it as one of their first languages) and ‘active’ speakers (i.e. those who have a passive and/or active understanding of the language they have learnt as a second language later in their life and can use it to different extents), which is an aspect of language vitality most important for revitalisation (Okuda 2010).

### 18.5 What is There to Revitalise?

When it comes to revitalisation there are contrasting opinions even within the Ainu community. Among those who wish for the Ainu culture to be revitalised the majority (53.1%) believes that language is the most important aspect of the Ainu heritage to be preserved for the future. Nevertheless, Ainu ceremonies and dances were also named as cultural heritage that should be given priority. Furthermore, when asked about their Ainu language proficiency and about whether they would consider taking Ainu language lessons, only the 7.2% has said to be able to speak either well or sufficiently well to have a simple conversation and, even more importantly, only the 9.7% showed an interest in learning the language (Fukazawa 2019, 20).

The marginal interest in the Ainu language as a valuable part of the Ainu cultural heritage that could find its place in modern Japanese society has a lot to do with the general public’s perspective towards it. As Sawai (1998) notes, the firm conviction that Japan is a monolingual nation and that Ainu is a minority language with not many speakers left has propagated the idea of Ainu as a dying language, too small and with too little space (or no space at all) in contemporary Japan for anyone to spend time for its revitalisation. That is, continuously portraying Ainu as a moribund language through the years has turned into a factual reality and has slowly convinced many members of the Ainu community that any revitalisation effort would be made in vain.

### 18.6 The Steps of Language Revitalisation

The following excerpts are taken from Kitahara (2012), a paper where the author, as a member of the Ainu community, touches upon a number of issues to be addressed when thinking of revitalising the Ainu language and provides his point of view. Starting from Kitahara’s considerations discuss each of the following points.

1. Which ‘Ainu language’ should be revitalised? Though the Saru dialect of Southern Hokkaidō is often tacitly taken as some kind of standard language, Ainu has no real standard variety (Fukazawa 2019, 15-16) and dialectal differences can be striking especially between the Hokkaidō and Sakhalin varieties. Moreover, Ainu has never developed the vocabulary to express concepts and denote things that exist in contemporary society.

*Chiba daigaku un Nakagawa Hiroshi nispa yeehe ene an hi. "Kotan pisno itah katu sinnay ciki, nah wa an kotan un itah neyahka okore nuu easkay pahno wantehci anah pirikahaa. Siisam neyahka, Tokyo kotan un kuru, Osaka un itah kii eaykah yahka, nuu easkay tah nee. Taaha neeno an anah pirika nanko" nah yee. Tani neanpe tah yeeruy pirika anpe nee kuni anramu. (279)*

As Nakagawa Hiroshi from Chiba University says: "[Considering] there are dialectal differences, it is good that people learn [the language] enough to understand the variety of whatever village. Even in Japan, a person from Tokyo indeed understands the [Japanese] dialect of Osaka, even if they do not know it. It would be good if [we could] reach this goal". As of today, I believe this would be the best thing.

*Husko ohta isam ike tani aneywanke asiri itah temana anyee kun pe hetaneyya. Siisam utah neanpe sianno wooyaan huuresiisam itah nuhci ike siisam itah ne karahci anpe. Nee wahkayki aynu utah neanpe yeyekota an itah kii ruuhe ka isam kusu, siisam neeno asiriitah kara ka hankii. Nee kusu tane aynu itah wante utah an teh itah kii kusu nah eramuokay yahka, husko itah pateh nee anah, anpene itah hayta anpe. Nee teh itah ankara rusuy koroka, itahkara neanpe sianno itah wante utah nee anah easkay koroka, tani sonno hokampa. (286)*

How is one to express the new words that once did not exist but that are now used? The Japanese heard a lot of words from the Europeans and translated them into their language. However, the Ainu [who] did not even use their mother tongue [could] not create new words like the Japanese. For this reason, even if people now know Ainu and intend to use it, they really lack the terminology [to express themselves] if [they rely] only on the words that already exist. [People have] the will to make up [new] words, but creating neologisms [would] be possible if there were someone who really knew the language, so this is very difficult now.

**2.** As a way to ensure an effective language acquisition, language education is often based on standardised teaching. What language materials (if any) should be used to teach Ainu? How should they be structured? How can the adoption of the same teaching materials and methods for everyone (not) satisfy the needs and motivation of individual learners?

*Etutaani kotan omoto koro pe nee kusu, yaykotan un itah anecaakasnokara rusuy wakayki, nupurukampi neanpe Saru kotan un itah neewa Chitose kotan un itah pateh koro. Itakirenkakampi neyke, Horobetsu un itah naa koro wakayki, taa itah ahkari an itah neanpe itahhunta ponno ponno pateh anihi nee. Nee kusu asinno anecaakasnokara ohta, Hattori Shirō kara "ainugo hōgen jiten" (1964) [...] ohta an yaykotan un itah hunara ike PC onne ahunkehci ike imerukorocinunkekampi karahci. Taa pateh neyke, itah hayta kusu, tutanno, wooyaan husko oruspe annuu ike PC onne anahunke ike, opokinno itah anweekaarirehci. (280-1)*

[The attendants to the courses] were people native of different parts of Hokkaidō, so they wished to learn the dialect of their village, but we had only dictionaries of the Saru and Chitose dialects. As for grammars, there was also one for the Horobetsu dialect but the amount of vocabulary was in fact smaller than that [available] for the other dialects. Therefore, while being taught from the beginning, [the students] looked for the words from their dialect in "A dialect dictionary of Ainu" by Hattori Shirō [...], entered them in a computer and created a database. Only by doing this [some] words were [still] missing, so then many old stories were listened to, [words] were included in the PC [database], and [new] terms were added little by little.

*Yaunkur utar usa usa okay kusu utar yaynu hi ka usinnayno an. Husko itak ponno patek eraman rusuy kur ka oka, kestoankor husko itak ani ukoysoytak rusuy kur ka oka. Kes cup an kor sine to ta patek husko itak seysey orowa aepakasnu rusuy sekor an kur ka oka, kestoankor 3 cikan husko itak eukoysoytak rusuy kur ka okay. Usa utar oka kusu ki rusuy pe ka usa kuni p ne na. (167)*

Ainu people are different so their opinions also vary. There are people who want to learn just a little bit of [their] native language, people who want to converse in Ainu every day, and there are also people who say they want to be taught by an Ainu teacher at least one day a month [and] converse in Ainu for three hours a day. Because there are different people, [their] needs must be diverse too.

*Nah an pe neanpe, ikorouncise neya daigaku ohta sicaakasnoyara utah neanpe easkay wahkayki, oya utah neanpe anpene eaykah anpe nee. 2010paa oro AIEA asinno kampsos kara kusu nah yehci ike, paa pisno “nyūmonshū” “shokyūshū” “chūkyūchū” upis ree kampsos, kotan pisno kara kuni urenkarehci. Neewahkayki, etoko wano ankara anpe ka isam ike, anpene kara koyaykus pe neeno aneramuan. Anoka neyke kunine ani kampsos kara aynu anewtanne koroka, kiyanne itah urenkare kuru utah okore montapihici kusu, sine itah urenkare kuru ka sahno ankara kusu karahci. Tah kusu temana ka ankii koyaykus nah aneramuokay kusu, antokoy ne sukuh itah urenkare kuru aneutehkara ike anahunke ike, temana ankara anah pirika nah an pe aneukoramkorohci. (Kitahara 2012, 281-2)*

This method works for people who learn [Ainu during classes] in a museum or at university, but it is really difficult for other people. [Since] 2010 the Organisation for the Revitalisation of Ainu has decided to release new publications [for each Ainu dialect] and, every year, it has published three [volumes] “absolute beginner level”, “beginner level”, and “intermediate level” [for three different dialects]. However, there was no source already available and this was believed to be an utterly impossible work. I teamed up with the people making the volumes, but older people experienced in Ainu were all busy so it was decided to proceed without a single expert of the language. Because I thought that such project was undoable, I asked a young person I know and included them [in the group] and we discussed how to produce a good publication.

**3. What should be the aim of language revitalisation? How should it be possible to use the language after having learnt it?**

*Tah neanpe yeeruye paase ike yeeruye hokampa oruspe nee kuni anramu. Repunmosiri orun oruspe annuu wahkayki, ramma itah ecaakasnokara easkay yahka, nee itah sahno ukoytah easkay pe nee kusu, kii kun pe isam manu. Nee teh itah wante yahka, okaketa neera ka monrayke ne kii ka eaykah anpe yeeruye wen sirihi nee. (290)*

I think this is a more important and more complex matter. Hearing of [analogous] cases from abroad, studying [a language] is always possible but there seems to be no chance to use it because it is in fact possible to communicate without that language. And even if one knows the language, the fact that it cannot be introduced after [one has learnt it] in the workplace seems even worse.

*Nee teh, eh yahka, hoskino anyee pe ani, oya utara ohta yee ka hankii. Tah kusu aynuitah neanpe aynu utuhta pateh kii. Koroka, cise soyta aynu unukara hi anpene ponno pateh an. (297)*

So even if they join [Ainu language courses], as I said before, they do not tell it to other people and for this reason they use the Ainu language only among members of the community. But the chances of meeting [other] Ainu outside of the household remain slim.

4. When should one start learning Ainu? Is there a recommended age to ensure proper language acquisition?

*Sianno haciko ohta neanpe henke ahci tura ekihi nee koroka, icaakasnocise ohta ahun ohta otuye. Nee teh yaytuymaaste ike, ramurenkayne sinenehpone neera an pe ka kii easkay pahno poro koh, aynu weekaari ohta oman kuru ka an koroka, pookoro koh poo eyaynuachte kusu suy otuye hemaka. Ene teh, neera an yahka eyaycaakasno kuru neanpe sianno yuhke ramu koro kuru nee ike, porosereke poo reske hemaka teh, monrayki hemaka teh eh. (297)*

[Children] come [to Ainu language courses] at a very young age with [their] grandparents, but when they enter school they drop out [of classes]. Then, once the situation changes and they become old enough to decide for themselves, there are also people who re-join Ainu meetings, but as soon as they have children, they look after them and end up leaving again. That is, a person who [commits to] learning [Ainu] despite [their obligations] is a person with a strong will and, when they are done raising [their] children, the majority of them retires and returns [to meetings and courses].

### 18.7 Teaching and Learning Ainu as a Second Language

Read the following quote from Fujita-Round (2019) where the author reasons on some important challenges concerning the future of bilingual education in Japan. In light of these considerations, read the excerpts below taken from Tangiku (2019) who writes about language education for the specific case of Ainu. How should the needs of Ainu speakers and the vitality status of the Ainu language be acknowledged in order to achieve a fruitful revitalisation within an apparently monolingual society?

The difficulty of implementing bilingual education partly comes from the sheer length of time needed to acquire language(s). Moreover, the actual language learning process is individually different, in the context of the society in which the speaker lives. Depending on the speaker's age, bilingual education involves the speaker's language acquisition, language learning, language maintenance and language loss. In some cases, this depends on the position of a language in a society where bilingual education is involved in language endangerment, language death and language revitalisation. Bilingual education cannot be separated from the constant language dynamism of the speaker's life and social reality. Together with the individual difficulty, how to contextualise bilingualism and multilingualism into 'bilingual education' will be a challenge for the twenty-first century. (Fujita-Round 2019, 180)

1. With the intent of revitalising the Ainu language, educators have adopted some teaching methods from other countries where minority and indigenous languages have been or are being revived successfully. Considering what has been said about perspectives and attitudes of the speakers towards the Ainu language (see Lesson 16), do you think these teaching methods are applicable for Ainu? Are there any aspects, specific to the Ainu case, that should be addressed when drawing from experiences of revitalisation in other countries?

*USA otta ka, Canada otta ka, Hawai'i otta ka, teetawanoankur utar, husko itak oyra okere wa easir, kanna suy kor rusuy utar, yayepakasnu wa tane husko itak eukoysoytak kor oka. Husko itak kanna suy asiknure hi "itaksiknure" "itakmososo" sekora aye p ne na. Husko sinrici kor itak kanna suy yaykata ka konrusuy sekora sanihi utar yaynu. Tane makanak itak asiknure yakun, mososo yakun pirka ya ka aeraman ruwe ne wa oya mositta usa usa husko itak asiknure hawean. (166-7)*

In the USA, in Canada, and in Hawai'i, indigenous people forgot [their] native language and really [those] people who want to revive it learn it on their own and eventually [can] converse using it. Bringing back the native language is called "language revitalisation" [or] "language reawakening". The descendants of [Ainu] ancestors wish to bring back the language with their own strength. Today it is known how to revitalise [or] reawaken a language effectively and it seems that in different countries native languages are [being] restored.

*Sonno Aynu itak aeaskay rusuy yakun "sinen or wa sinen eun" ani aeraman kuni p ne na. Kanpinuyekur utar neyakka Aynu itak eraman huci utar orowa "sinen or wa sinen eun" ani ayayepakasnu rok pe ne ruwe tapan. Tane oka kanpinuye utar yaykata "sinen or wa sinen eun" ani Aynu itak eraman a korka, pewreutar epakasnu hi ta "sinen or wa sinen eun" ani somo ki no, ramma kane gakko otta neno, Aynu itak eraman rusuy utar sine uske ta uekarpare hi kuoyamokte kor kuan. Kanpinuye utar yaynu hi ene an hi. [...] "Sinen or wa sinen eun" ani Aynu itak aepakasnu wa tane eraman Yaunkur ka oka. Ponno patek ne yakka oka. (168-9)*

If one really wants to be able to [speak] Ainu, they should learn it through [the method of] "one-to-one". Even linguists have been studying Ainu from elderly ladies who knew the language with this method. However, today's linguists, [who] have learnt Ainu themselves with the "one-to-one" method, when teaching to younger people do not employ the [same] method [and] always [hold lessons] in schools [where] people who want to learn are gathered [all] in one place. I think this is odd. [...] There are also people who have been taught with the "one-to-one" method and now know the language. Though they are a few, there are [some].

**2.** Besides creating a safe space where Ainu speakers can actively use the language they have learnt in everyday life, revitalisation should also think of finding a place for Ainu speakers to apply their knowledge productively and creatively outside the community and within society. Where to start? Who should be involved in this?

*Aynu itak ne yakka itak ne ruwe tapan. Sisam itak Huresisam itak ka uneno itak ne ruwe tapan. Kamuyyukar aye kusu, yukar aye kusu, inomi aye patek kusu akor itak ka somo ne. Kestoankor tan itak eukoysoytakan kuni p ne ruwe ne. Nep ne yakka aye easkay. Anime (moymoykenoka) otta aye itaki ne yakka aynu itak ani aye easkay. (170)*

Ainu is a language. A language equal to Japanese and Western languages. It is not a language just for reciting the *yukars*, traditional folklore, and prayers. It is a language to be spoken every day – one can express anything [with it]. Even dialogues in anime can be said in Ainu.

*Ne wa oka moymoykenoka ta aynu itak utar, haw kar utar, sisam ne yakka arikikino aynu itak hawehe nu wa, ponno ponno yakka aynu itak ka eraman wa kusu ne no pirkano aynu itak ye hi ruwe tapan. (171)*

The people who dubbed [the dialogues and] spoke Ainu were Japanese but they worked hard, listened to the language and [eventually] they even understood a little Ainu. This way they in fact [managed to] dub [the anime] in Ainu well.





- Davydov Gavriilo (1812), Словарь наречий народов обитающих на южной оконечности полуострова Сахалина, собранный на месте покойным Гаврилою Давыдовым *Slovar' narechij narodov obitayushchikh na yuzhnoy okonechnosti poluostrova Sakhalina, sobrannij na meste pokoynym leytenantom Gavriloyu Davydovym* (A Dictionary of Ethnolects of Peoples Inhabiting the Southern Recesses of the Sakhalin Peninsula Collected on Location by the Late Lieutenant Gavriilo Davydov);
- Dobrotvorskij Michail M. (1875), Айнско-русски словарь *Ajnsko-russki slovar'* (An Ainu-Russian Dictionary);
- Pilsudski Bronislaw (1912), *Materials for the Study of the Ainu Language and Folklore*.

For additional sources, also on Kuril Ainu, see Satō, Bugaeva (2019, 69-71).

Attestations of words in historical sources help us trace the path of development of single terms and sometimes of the language in general. Valuable information on adoption of loanwords, creation of toponyms, phonological changes, presently obsolete morphosyntactic structures etc. can surface in historical sources – in the case of Ainu the transcription(s) used represents an insightful tool to investigate language development.

Attestations of *pirka* /piriḱa/ 'be good'; *sirkunne* /ḱiriḱun:e/ 'be dark' (examples from Satō, Bugaeva 2019, 84-6):

びる可	biruka	( <i>Matsumae no kotoba</i> )
ぴる可	piruka	( <i>Ezodan hikki</i> 1710)
	hiruka, et al.	
飛類可	renderings	( <i>Ezo kotoba</i> 1704)
ビルカ	biruka	( <i>Hokkai zuihitsu</i> 1739)
пирука	piruka	(Davydov 1812)
志りく川ね	shirikunne	( <i>Matsumae no kotoba</i> )
志りくん祢	shirikunne	( <i>Ezodan hikki</i> 1710)
ширикунни	shirikunni	(Davydov 1812)

The Japanese (*hentaigana*) and Cyrillic transliterations point to actual different phonological realisations for the segment *r* in *pirka* and *sirkunne*. This phonological difference, lost in modern/contemporary Ainu, can be ascribed to different underlying syllable structures for the two words present in Proto-Ainu (see e.g. Satō 2015 for more).

### 19.3 Internal Reconstruction

Consider again the fourth person prefix *a-* of HA you analysed in Lesson 5 in the function of marker of agent in the impersonal-passive construction. The origin and development of this agreement prefix can be determined through internal reconstructions. Bugaeva (2011, 524-8) traces four stages that led to *a-* being used this way.

The affix *a-* has its origin in the intransitive verb *an* 'exist' in the existential construction, of the type in (1), where this verb takes a noun as its sole argument (S). This is the first, initial, stage.

- (1) *Inne kotan an.*  
be.populous village 3SS/exist.PC  
'There was a populous village.' (Tamura 1985, 48)

The second stage of the development sees an intransitive verb being nominalised (via zero-nominalisation, a process widespread in Ainu) and functioning as the S argument of *an*.

- (2) **[Rok]<sub>s</sub>**            *an*            *yakka*    *pirka*            *ya?*  
**sit.PL.NMLZ** 3SS/exist.PC    though    3SS/be.good INT  
 Lit.: 'Is it good if there is sitting down? = May I sit down?' (KJ in Bugaeva 2011, 525)

The verb *an* begins to function as a clitic and semantically the construction soon develops an impersonal reading.

This impersonal construction that was originally limited to intransitive verbs gets extended to transitive verbs by analogy (3). Here the post-clitic =*an* is placed before the verb, thus becoming a prefix, in line with other personal agreement morphemes of Ainu. Erosion of the segment *n*, most common in Ainu when grammaticalisation happens, follows and the prefix takes the form *a-* (the form *an-* still remains in some fossilised verb forms and in North-Eastern Hokkaidō dialects). This third stage of the development is supported by the prosodic features that the personal affix *a-/an* still retains.

- (3) **A-en-ko-pisi**                            *p*            *anakne*    *opitta*            *ku-ye.*  
**IP-1SOI-APPL-3PO/ask**    thing    TOP            all            1SS-3PO/say  
 'I (will) say everything I am asked.' (Tamura 1984, 12)

In the fourth and final stage (4) the impersonal construction with a transitive verb takes a passive reading and expression of the actant with an oblique is allowed.

- (4) Toan                            **kur-oro-wa**                            a-en-kik.  
 that                            **man-place-from**                            IP-1SO-hit  
 'I was hit by that man.'

#### 19.4 Comparative Reconstruction

Philological studies of historical sources may include comparative reconstruction and vice versa. Two works that attempt to reconstruct Proto-Ainu using this approach are Vovin (1993) and Alonso de la Fuente (2012).

In particular, Vovin (1993) takes into account the phonetic alternations present in many Hokkaidō and Sakhalin Ainu dialects and, on this basis, sketches a provisional phonemic inventory of Proto-Ainu (PA). Secondly, though far more marginally, Vovin discusses a number of morphophonological variations that occurred in Ainu. Starting from the phonemes of PA some lexical items of the language are reconstructed and then compared with other proto-languages belonging to the Austroasiatic language family (AA).

(PA) *ki=raqu* 'horn'

PA \***ki(=)raqu** L(-)LH "horn". Cf. PW \***rʌŋ** "horn (anim.)" (Diffloth 1980, 131); PM \***draŋ**, Proto-Mon \***krɛŋŋ** "horn" (Diffloth 1984, 99).

(PA) \*VqV > (Proto-Wa) +Vŋ

PA \***suma** LH "stone". Cf. PW \***smo?** "stone" (Diffloth 1980, 106); PM \***tmo?** "stone" (Diffloth 1984, 130); Alak *tamō*; Bahnar *tōmō*; Boloven *tamō*; Chrau *thmō*; Halang *mō*; Kaseng *tamō*; Khmer *thmō*; Kontu *tamō*; Kuoi *tamau*; Lavé *tamō*; Phnong *tama*; Por *thmo-*; Prou *tama*; Sedang *hum*; Stieng *tōmāu*; Sué *tamao*; Talaing *tmo?*; Tareng *tamō*; Khasi *māw*; Umpai *samo*; Bo Luang *samo*; Mapā *samo* "stone" (Shafer 1965, 20-21). PAA \***θoma** or \***θamu** ?

(PA) [r] > (PAA, PW, Proto-Monic) [r]

(PA) *suma* 'stone'

PA \***ti=** L "we". Cf. PVM \***toy** "I" (Thompson 1976, 1176); Car Nicobar *cin* "I" (Das 1977, 25).

(PA) [s] > (PW) [s], (PM) [t], (PAA) [θ]

(PA) *ti=* 'we (personal agreement)'

The comparative reconstruction approach adopted by Vovin is rooted in Hoenigswald's (1960) classical comparative method, with which linguists have long tried to determine cognation among languages. The comparative method includes three steps of language comparison: *step 1* - observe the sound correspondences within words that have a comparable meaning in different languages; *step 2* - infer regular sound changes rules which must explain all sound changes attested in the compared words; *step 3* - infer cognation judgements and propose a phylogenesis for the analysed languages.

The comparative method establishes two types of linguistic characters that help define language cognation: lexical characters (similar words with the same meaning in different languages) and phonological characters (similar or identical sound changes that recur in different languages). A special type of lexical characters are morphological characters (grammatical features such as declension, conjugation, agreement in different languages that can be traced back to the same proto-morpheme). Since morphological material resists borrowing, and therefore it is unlikely that a morpheme in a language changes in an unexpected way, looking at morphology when using the comparative method is most insightful.

In the 1990s, Warnow revises the classical comparative method by stating that, in comparing languages, almost all (but not necessarily all) the linguistic characters should be compatible within the evolutionary tree for the analysed languages. This is a way to bypass the inevitable cases of phonological (e.g. natural sound changes) and lexical (e.g. provable cases of borrowing) idiosyncrasies sometimes attested among languages that otherwise exhibit a strong similarity. As a way to optimise his analysis that, otherwise, would produce several possible trees with varied degrees of compatibility, Warnow formulated the following criterion: *find the tree on which it is possible to explain all incompatible character evolution with as simple an explanation as possible, and which matches linguistic scholarship as closely as possible*. The tree that meets this criterion is the best tree to describe the relations and phylogenesis of the analysed languages.

What are the major pitfalls of this approach?

- How many examples are available and so how reliable are our results...
- Possible mismatch of semantic categories among proto-languages and their encoding in the lexicon...
- How advanced is the study on the other proto-languages we use as a term of comparison... Synchronic analysis...
- Historical derivation and development of morphemes and specifically of inflectional morphology... Diachronic analysis...
- Geographical boundaries, historical vicissitudes, language contact, ...
- Arbitrariness in choosing the languages to be compared...
- How much do our assumptions influence the outcome of our analysis...

### 19.5 Loanwords and Areal Linguistics

Language contact between Ainu and Japanese, on the one hand, and Ainu and Nivkh, on the other hand, is well-substantiated (Dougherty 2019, 101-2). Japanese loanwords in Ainu include *tampaku* (Jap. たばこ *tabako* 'tobacco, cigarette'), Nivkh loanwords in Ainu include *tunakay* (Niv. *tlaji* 'reindeer'). The Ainu loanwords that got into Japanese, e.g. ラッコ *rakko* 'sea otter', are rarer.

Grammatical structures or phonological/phonetic features may be shared by languages spoken in a same area (*Sprachbund*). These language features spread among languages through diffusion or contact. One example of diffusion of grammatical structures between HA Ainu and Japanese is e.g. the tentative construction *wa inkar* 'try to', most probably created on calque of the Japanese *-te miru*.

Do loanwords and linguistic features inherited through diffusion and contact tell us something specific about a language genetic affiliation?

### 19.6 Wörter und Sachen

"Words that can be analysed into component parts are believed to be more recent than words which have no internal analysis" (Campbell 2017, 13). Cases where we can apply this approach in Ainu include common words and many toponyms:

*oypep* (HA), *oypeh* (SA) < *'o-ipe-p* (LOC-AP.eat-NMLZ)  
'the thing someone eats in = vessel, plate'

*aop* (HA) < *a-o-p* (IP-get.in-NMLZ)  
'the thing someone gets into = car'

Sapporo < *satporo pet* (HA) < *sat poro pet* (be.dry be.big river)  
'the big dry river'

"Words [that contain non-productive morphology] are assumed to be possibly older than words composed only of productive (regular) morphemes" (Campbell 2017, 14). However, for a language like Ainu...

- How do we determine whether a piece of morphology is no longer productive?
- How about those morphemes that become non-productive in the late stages of the language's history?
- Is this approach informative with regards to the historical development of the language?









<i>hunak</i>	where
<i>husko</i>	to be old
<i>isam</i>	to not be
<i>iso</i>	bear
<i>itak</i>	to speak
<i>kam</i>	meat
<i>kamuy</i>	god, bear, animal
<i>kanto</i>	the heavens
<i>kar</i>	to make, to prepare
<i>kaspa</i>	to be excessive, be left
<i>kaspaotte</i>	to ask, to enquire
<i>katu</i>	looks, sign
<i>kem</i>	needle
<i>keman</i>	to there be a famine
<i>kerā</i>	taste
<i>kerāan</i>	to be delicious
<i>kikir</i>	insect
<i>kikkik</i>	to beat up, to throw
<i>kira</i>	to escape
<i>koyki</i>	to catch
<i>kore</i>	to give
<i>kuca</i>	hunting hut
<i>kunak</i>	that (complementizer)
<i>kuni</i>	that (complementizer)
<i>kunne</i>	to be black, to be dark
<i>kusu</i>	because, in order to
<i>matnepo</i>	young girl
<i>mimak</i>	tooth
<i>ne</i>	that
<i>nea</i>	that
<i>nei/ney</i>	somewhere
<i>nep</i>	any, some
<i>nepki</i>	to work, work
<i>nimah</i>	see <i>mimak</i>
<i>nina</i>	to collect wood
<i>nisapno</i>	soon
<i>nituypa</i>	tree cutting
<i>nonnoitak</i>	to pray
<i>nu</i>	to hear, to listen
<i>nupe</i>	tear
<i>nuwap</i>	to groan
<i>o</i>	to get in sth.
<i>oar-</i>	completely
<i>oka(y)</i>	to exist (PL)
<i>okkaypo</i>	young man
<i>oma</i>	be in
<i>omanan</i>	to travel, to go around
<i>omante</i>	to make go
<i>omap</i>	to love

<i>ona</i>	father
<i>onne</i>	to be old
<i>onuytasa</i>	instead of
<i>opitta</i>	all
<i>oruspe</i>	tale
<i>pakno</i>	until
<i>pas</i>	ash
<i>pas</i>	to leap
<i>pase</i>	to be important, heavy
<i>pasrota</i>	to swear
<i>patek</i>	just, only
<i>paye</i>	to go (PL)
<i>payeka</i>	to walk, to travel (PL)
<i>pet</i>	river
<i>petaru</i>	riverside
<i>pewre</i>	to be young
<i>pirka</i>	to be good
<i>po</i>	child
<i>poka</i>	at least
<i>poronno</i>	a lot
<i>potara</i>	to be worried
<i>poyson</i>	small baby
<i>puni</i>	to lift, to offer
<i>purio</i>	to have a bad temper
<i>ramat</i>	soul
<i>ran</i>	to come down (SG)
<i>ranke</i>	to make fall, drop
<i>rapok</i>	meanwhile
<i>ray</i>	to die
<i>re</i>	three
<i>rer</i>	to sink
<i>rera</i>	wind
<i>reska</i>	to raise
<i>rura</i>	to carry
<i>rusuy</i>	want
<i>ruyampe</i>	storm
<i>san</i>	to descend (SG)
<i>sapo</i>	older sister
<i>sat</i>	to be dry, to become dry
<i>sekor</i>	that (complementizer)
<i>sermaka</i>	protective god
<i>sesek</i>	to be hot
<i>sike</i>	load
<i>sikerura</i>	to move a luggage
<i>sikoan</i>	to have sight
<i>siknu</i>	to survive
<i>sinenne</i>	alone
<i>sinotca</i>	song
<i>sinuma</i>	he, she, they

<i>sirar</i>	rock
<i>sisakpe</i>	delicious food
<i>sisam</i>	Japanese
<i>sone</i>	truly
<i>soy</i>	outside
<i>suwe</i>	cook
<i>suy</i>	again
<i>ta</i>	to collect
<i>taan</i>	this
<i>tamasay</i>	necklace
<i>tan</i>	this, that
<i>tane</i>	now, eventually
<i>tani</i>	see <i>tane</i>
<i>tanne</i>	to be long
<i>tapan</i>	this very
<i>tasiro</i>	sword
<i>tasum</i>	to be sick, sickness
<i>tektaksa</i>	massage
<i>tere</i>	to wait
<i>terke</i>	to jump, to run
<i>toan</i>	that
<i>tokap</i>	noon
<i>toop</i>	there (far away)
<i>toy</i>	earth, ground
<i>tu</i>	two
<i>tukan</i>	to shoot
<i>tunasno</i>	quickly
<i>uk</i>	to take (SG)
<i>ukuran</i>	evening
<i>umurek</i>	to marry, to be a couple
<i>usa</i>	to be many
<i>usey</i>	tea
<i>uwekarpa</i>	to gather
<i>uwepirka</i>	to be happy together
<i>uwerankarap</i>	to greet each other
<i>wen</i>	to be bad
<i>wenkur</i>	poor person
<i>yaanipo</i>	almost
<i>yaykar</i>	to turn oneself into sth.
<i>yup</i>	older brother
<i>yuptek</i>	to be hard working

### Sakhalin Ainu<sup>1</sup>

<i>aare</i>	to make sit
<i>acapo</i>	uncle
<i>ahap*</i>	see <i>ahup*</i>
<i>ahci</i>	old woman
<i>ahun</i>	to enter (SG)
<i>ahunke</i>	to make enter
<i>ahup*</i>	to enter (PL)
<i>ama</i>	to place, put
ampene (an)	at all, really
<i>anihi</i>	(my)self
<i>araka</i>	to hurt
<i>arapesca</i>	opposite bank
<i>ariki</i>	to come (PL)
<i>asin</i>	to come/go out (SG)
<i>asip*</i>	to come/go out (PL)
<i>aspekorō</i>	that has fins
<i>atuy</i>	sea
<i>caa</i>	shore
<i>cas</i>	to run
<i>caytek*</i>	limb
<i>cehkoyki</i>	to catch fish
<i>ciw</i>	to pierce, to hit
<i>cokoko</i>	to fell
<i>ekok*</i>	to get sick from sth.
<i>emus</i>	sword
<i>emuyke</i>	all
<i>ene an</i>	such, like so
<i>eniskurukerotoh</i>	to touch the sky
<i>erum</i>	mouse
<i>esinnisahta</i>	this morning
<i>etunne</i>	not want
<i>eyhok*</i>	to sell, to deal in sth.
<i>eyooko</i>	to lie in wait
<i>he</i>	(focus particle)
<i>hekacita</i>	boys
<i>hekem</i>	to drag, to pull
<i>hemata</i>	what
<i>hemata ka</i>	some (kind)
<i>henke</i>	old man
<i>hokuy</i>	to burn
<i>horak*</i>	to crumble
<i>humpa</i>	to crush
<i>hura</i>	smell
<i>huraye</i>	to wash

<sup>1</sup> In this Sakhalin Ainu Glossary an asterisk is used to signal the underlying form of a word ending in a consonant that is not permitted word-finally (that would be realized as [h]) by the phonotactic rules of the language.

<i>husko</i>	to be old
<i>huu</i>	to be fresh
<i>ihunkep*</i>	placenta
<i>ikoro</i>	short sword
<i>imokakoro</i>	to give as a gift
<i>irukay</i>	a little
<i>isam</i>	to not be
<i>iso</i>	bear
<i>itak*</i>	to speak, to talk, speech
<i>kaamesu</i>	see <i>kasmesu</i>
<i>kanna</i>	again
<i>kannapaake</i>	upper jaw
<i>karakahseka</i>	to make roll
<i>kasmesu</i>	to help
<i>kat*</i>	looks, sign
<i>kaye</i>	to break sth.
<i>kayki</i>	even
<i>kayo</i>	to call
<i>kehke</i>	to break
<i>kem</i>	blood
<i>kema</i>	leg
<i>kipiri</i>	hill
<i>kirupu</i>	fat, grease
<i>kisoro</i>	offspring
<i>koro</i>	to have
<i>koyaykus</i>	to not be able
<i>kuca</i>	hut
<i>kun</i>	(conditional marker)
<i>kusu</i>	because, in order to
<i>maake</i>	to leave
<i>mahpo</i>	daughter
<i>mahtekur*</i>	young woman
<i>makan</i>	to go uphill (SG)
<i>manu(y)</i>	reportative evidential
<i>mat*</i>	woman, wife
<i>mooso</i>	early
<i>na(a)</i>	still, again
<i>naa</i>	too, also
<i>nah</i>	so
<i>nak*</i>	where
<i>nay</i>	river
<i>neampe</i>	that (thing)
<i>neampe</i>	(topic marker)
<i>nean</i>	this, that
<i>neeno</i>	like, as
<i>neeroh</i>	these, those
<i>neh</i>	any, some
<i>netopak*</i>	corpse
<i>neya</i>	this, that

<i>niicauta</i>	tree limbs
<i>nis</i>	sky
<i>niskuru</i>	cloud
<i>nunnun</i>	to suck
<i>nuu</i>	to hear, to listen
<i>okay</i>	to exist (PL)
<i>okore</i>	all
<i>oman</i>	to go (SG)
<i>omay</i>	futon
<i>oniste</i>	to be firm
<i>onnay</i>	inside
<i>onne</i>	to be old
<i>onnew</i>	eagle
<i>onuman</i>	evening
<i>oro'omos</i>	to wake up
<i>oseh</i>	to be wide
<i>osoma</i>	feces
<i>oyasi</i>	monster, evil spirit
<i>ope</i>	dig around
<i>ota</i>	beach, sand
<i>paa</i>	year
<i>pahko</i>	old lady
<i>pakakara</i>	to be/become crazy
<i>patek*</i>	only, just
<i>paye</i>	to go (PL)
<i>pe</i>	thing
<i>peray</i>	to fish
<i>pirika</i>	to be good
<i>pirikano</i>	well
<i>piſi</i>	to ask
<i>pon</i>	to be small
<i>ponno</i>	a little, a while
<i>popo</i>	offering
<i>poro</i>	to be big
<i>poronno</i>	a lot
<i>poso</i>	to stab
<i>puu</i>	storehouse
<i>puy</i>	hole
<i>rap*</i>	feather
<i>rahki</i>	to be hung, to hang
<i>ran</i>	to come down (PL)
<i>rayki</i>	to kill
<i>reekoh</i>	really
<i>reekoro</i>	see <i>reekoh</i>
<i>renkarankoro</i>	to agree
<i>renkayne</i>	a lot
<i>rep*</i>	to go at sea
<i>repun</i>	to be at sea
<i>rikinke</i>	to make ascend

<i>riuka</i>	bridge
<i>rusasoma</i>	straw bundle
<i>ruy</i>	to be powerful
<i>san</i>	to descend (SG)
<i>sap*</i>	to descend (PL)
<i>sianno</i>	really
<i>sihnu</i>	to survive
<i>sikiru</i>	to face sth., to turn
<i>sine</i>	one
<i>sinka</i>	to get tired
<i>sirepa</i>	to arrive
<i>siri</i>	land
<i>situsa</i>	to recover, to be healed
<i>suke</i>	cook
<i>sukup*</i>	to grow up, to be young
<i>taata</i>	there
<i>tani</i>	now, eventually
<i>tanto</i>	today
<i>tataki</i>	to beat, to strike
<i>tawke</i>	to cut
<i>tek*</i>	hand, paw
<i>temana</i>	how
<i>tenkorasi</i>	to hug
<i>tenkoro</i>	to hold in smo.'s arms
<i>tohkori</i>	cup
<i>tohseno</i>	to sleep deeply
<i>too</i>	day
<i>tup*</i>	two
<i>tuhse</i>	to jump
<i>tuhseka</i>	to kick, to launch
<i>tuhso</i>	cave
<i>tumi</i>	war, battle
<i>tura</i>	to accompany, together
<i>tusuu</i>	to perform a ritual
<i>tuyteh</i>	to fall off, to be cut
<i>ukoytak*</i>	conversation
<i>unci</i>	fire
<i>unu</i>	mother
<i>usii</i>	place
<i>utasa</i>	to visit
<i>uwepekere</i>	see <i>wepekere</i>
<i>uyna</i>	to take (PL)
<i>wakayki</i>	although
<i>wante</i>	to know
<i>wepekere</i>	story, tale, to tell
<i>wooneka</i>	to check smo.'s situation
<i>yap*</i>	to come/go ashore (PL)
<i>yaykara</i>	to turn oneself into sth.
<i>yaykotankoro</i>	to have o.self's house in

## List of Glosses

### Notes

The following list summarizes only the glosses used in Ainu language examples. For the glosses used in the examples from other languages please refer to the original work cited. For the sake of consistency and clarity throughout the volume, the glosses for Southern Hokkaidō Ainu examples have been adapted following the conventions employed in Dal Corso (2021). Please refer to Tamura (2000) for the original glosses used by the author, which may differ from the ones reported here.

0	epenthetic vowel
1S	first person singular
1P	first person plural
2S	second person singular
2P	second person plural
3S	third person singular
3P	third person plural
A	subject of transitive verb
ADV	adverb
AP	antipassive
APPL	applicative
CAU.FIN	causal-final linker
CAUS	causative
COLL	collective
COMP	complementizer
COND	conditional
COP	copula
DEI	deictic
DIR.RSN	direct evidential (reasoning)
FOC	focus particle
FUT	future
FP	final particle
INTN	intentional aspect
IO	indirect object
IP	impersonal
IPFV	imperfective aspect
NEG	negative
NMLZ	nominalizer
O	object
P	plural possessor
PC	paucal verb form
PL	plural verb form
POSS	possessive
PRF	perfect aspect
PS	plural subject

CLASS TIME:  
CLASS ROOM:  
PHONE:  
EMAIL:

PSR	possessor
PTV	partitive
REFL	reflexive
S	subject of intransitive verb
SLV	subject in light verb construction
TOP	topic marker
TR	transitivizer
VO	object verb in light verb construction

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