Ainu Evidentiality:
A semantico-pragmatic analysis and a morphosyntactic account

Elia Dal Corso

I have read and understood Regulation 21 of the General and Admissions Regulations for students of the SOAS, University of London concerning plagiarism. I undertake that all the material presented for examination is my own work and has not been written for me, in whole or in part, by any other person. I also undertake that any quotation or paraphrase from the published or unpublished work of another person has been duly acknowledged in the work which I present for examination.

Signed: _____ Date: ___01/10/2019___

Abstract

This thesis explores the pragmatics and semantics of a number of evidential markers in Ainu, a language isolate native to the islands of the Southern Okhotsk sea; specifically, this study focuses on the Hokkaidō and Sakhalin varieties of the language. Furthermore, I provide a morphosyntactic account of the markers in question, that are non-obligatory, sentence-final markers that structurally follow a verbal constituent. The origin of all the evidential markers I take into account can be more or less safely traced back to nominal categories.

In Chapter 1, I give a profile of the Ainu language and introduce the scope and aim of the study, and the methods and language sources I employed. In Chapters 2 and 3, I introduce my theoretical framework for this study and provide a literature review of previous research on evidentiality specifically in Ainu studies. Secondly, in Chapters 4 and 5, I proceed with discussing the morphosyntax of Ainu evidentials, focusing on how they involve processes such as noun incorporation, nominalization, and relativization.

Subsequently, I move to a separate analysis of evidentials in Sakhalin Ainu and Hokkaidō Ainu, and discuss their interaction with epistemic modality and mirativity, as well as their interplay with verbal aspect and mood. Ultimately, I show how separate Ainu evidentials interact with epistemic modality on different levels and how evidential markers secondarily may become indicators of verbal tense, a feature of the Ainu verb long considered to be overtly unmarked. The main outcome of the study is that evidentiality in both Ainu varieties under scrutiny is regulated, in its use and formal encoding, by source reliability. Moreover, the study highlights that only in the Hokkaidō variety evidentiality also responds to the feature of event accessibility, that is the immediateness with which the speaker accesses information.

things of life with me every day; for being a most needed critical voice that helped me focus on what really mattered and at the same time for lifting me up when I was feeling defeated. Thank you to all my uncles, aunts, and cousins, but especially thank you to my grandmothers who always were my biggest supporters and who didn't get to see the end of what they had known all along would have been a fruitful journey – I know they would be proud.

Last but not least, thank you to my mom and dad, for never giving up even when I myself was about to, for never getting tired of pushing me to be at my best and never stopping dreaming with me, and for teaching me what being a family really means. This is for you.

Table of Contents

14

List of Figures

List of Tables

Table 18 – Organization of HA evidentials (§8.7)

List of abbreviations

0	epenthetic vowel or consonant		FIN	final particle
1	first person		FOC	focus particle
2	second person		HA	Hokkaidō Ainu variety
3	third person		IHRC	internally-headed relative clause
4	fourth person		IN	incorporated noun
ADM	admirative		IND.FLT	indirect evidential, physical source
ADV	adverbial		IND.HRN	indirect evidential, auditive source
AP	antipassive			
APPL	applicative		IND.RSN	indirect evidential, reasoning source
CAUS	causative			
CMPL	completive		IND.VIS	indirect evidential, visual source
CNCL	conclusive aspect			
COMP	complementizer		INF.FLT	inferential evidential, physical source
COP	copula			
DEI	deictic			
DHRC	double-headed relative clause		INF.HRN	inferential evidential, auditive source
DIM	diminuitive		INF.RSN	inferential evidential, reasoning source
DIR.FLT	direct evidential, physical source			
DIR.HRN	direct evidential, auditive source		INF.VIS	inferential evidential, visual source
DIR.KNW	traditional knowledge evidential		INST	instantaneous particle
DIR.RSN	direct evidential, reasoning source			
DIR.VIS	direct evidential, visual source		INT	interrogative
			INTJ	interjection
DUB	dubitative particle		INTN.FUT	intentional/future
EPH	emphatic particle		INTS	intensive
			IP	indefinite person

16

ITR	iterative		PSRS	passive resultative
NCLF	numeral classifier		PS	plural subject
ND	narrative deixis		REC	reciprocal
NEG	negative		REF	reflexive
NI	noun incorporation		REP	reportative
NMLZ	nominalizer		RH	relative head
ONOM	onomatopoeic word		RSLT	resultative aspect
PASS	passive		SA	Sakhalin Ainu variety
PC	paucal		SD	social deixis
PIN	pseudo-incorporated noun		SVL	subject in light verb construction
PK	personal knowledge evidential		SO	singular object
			SOI	singular indirect object
PKE	personal knowledge evidentiality		SPC	sensorial perception construction
PL	plural		SPP	sensorial perception predicate
PNI	pseudo-noun incorporation		SS	singular subject
PO	plural object		TI	territory of information
POI	plural indirect object		TR	transitivizer
POSS	possessive		VO	object verb in light verb construction
PRG	progressive aspect			
PRF	perfective aspect			

Chapter 1

Introduction

1.1 Topic of this dissertation

The topic of this dissertation is the linguistic category of evidentiality. Throughout the following chapters, I will consider the properties, limitations, and implications of this category for the case of Ainu, an indigenous language native to the islands of the Southern Okhotsk Sea, that constitutes the target of my study.

In linguistics, evidentiality has to do with source of information or how information is acquired by a speaker (Aikhenvald, 2004). When using evidentiality in a language, a speaker is ideally providing an answer to the two following questions:

- Where has she obtained the information she is transmitting from?
- What was the physical or non-physical channel that allowed the acquisition of this information?

The following example from Foe, a Papua-New-Guinean language unrelated to Ainu, serves as an illustration of how evidentiality can simultaneously encode the answer to these two questions.

(1) *Aiya bare   wa-**boba'ae**.*

    plane   come-EV.VIS

    'An airplane is coming (I can see it).' (Rule, 1977: 71-4 in Aikhenvald, 2004: 62)

The form *boba'ae* in (1) is the linguistic device dedicated in the Foe language to encode direct visual evidentiality. From this form, we understand both that the speaker has direct evidence (which he/she acquired first-hand) for her statement, and that this evidence was acquired through sight.

The specificity with which evidentiality can be said to answer to the aforementioned two questions varies sharply cross-linguistically. Evidential systems in languages, in fact, may provide indications on information source and on the channel of information acquisition more or less thoroughly. The higher or lower specificity is normally mirrored in the wider or narrower range of formal realizations taken by

evidentiality in a language – each separate formal realization encodes a specific conceptual domain of evidentiality, that differs from others exactly in terms of the kind of source and/or the means of acquisition it subsumes (see §2.2).

1.1.1 Scope of the study

In setting the scope of my analysis on Ainu, I selected, from among the varieties and dialects of the language, those to be included as desirable targets for an examination of evidentiality. The parameters for this selection were mostly the vitality status of Ainu varieties and dialects, and the quality and quantity of language documentation that has been conducted in the past. These two issues (that I better address in §1.3) eventually brought me to focus on two of the main varieties of the language – Sakhalin Ainu (henceforth SA) and Hokkaidō Ainu (henceforth HA). Within these two varieties, I selected those sub-varieties, or dialect groups, for which a considerable amount of documentation is presently available – Eastern Sakhalin, Western Sakhalin, and South-Western Hokkaidō.

Evidentials take similar formal realizations among these dialectal groups, with the most striking differences noticeable between the Hokkaidō and Sakhalin varieties. The evidential forms under scrutiny in this dissertation are summarized in the following list. In brackets I specify whether the form(s) is found in the Hokkaidō (HA) or Sakhalin variety (SA). For the morphophonetic allophorms of these forms, some of which appear in examples (2)-(17) below, I refer the reader to Chapter 5.

a) *-hV, -Ø* (SA)
b) *ruwe ne* (HA)
c) *siri ne*, *humi ne*, *hawe ne* (HA)
d) *ruwehe ne*, *ruwehe 'an*, *sirihi 'an*, *humihi 'an*, *hawehe 'an* (SA); *siri 'an*, *siri ki*, *humi as* (HA)
e) *hawe as* (HA); *manu* (SA)

Forms in a) are used when the speaker has direct evidence for her statement coming from prepossessed knowledge (see §7.2).

(2) *Tah   kahkemah   'an-seturi-hi   ka   siru-siru-**hu***.

that   young.woman 1P-back-POSS even   3SS/3SO/rub-rub-DIR

'That young woman rubbed and rubbed my back as well.' (MRA: 70)

(3) *Ećitom óxkajo tarap ekorō!*

*Ecitom   ohkayo,   tarap e-koroo-**Ø**?*

Ecitom   young.man   strap   2SS-3SO/have-DIR

'Young man of Ecitom, have you got a strap?' (PLA: 114)

The form in b) indicates that the speaker has direct evidence for her statement which is based on reasoning or personal knowledge (see §8.3).

(4) *Tane anakne   yuk   cikoykip   kamuy cikoykip*

now TOP   deer   animal   bear   animal

kap-uhu   poronno   cise   esik   kane (ne)

3/skin-POSS a.lot   house be.full ADV

*a-sat-ke   wa   a-kor   **ruwe ne**   korka, ...*

4S-3PO/be.dry-CAUS and   4S-3PO/have DIR.RSN   but

'Now the house is full of many skins of deers and bears, I dried and kept them but…' (NKG: 228)

Point c) includes forms used when the speaker has direct evidence for her statement coming from a sensorial source (see §8.3).

(5) *Sinuma   ka   ko-ray-niwkes   **siri ne***

he   even   APPL-3SS/3SO/die-be.difficult   DIR.VIS

noyne   iki   a.

as.if do   PRF

'It was like he too could not [separate from me].' (KAY: 19-5,13)

(6) *Usa   sisakpe   a-i-y-e-re   **humi ne**   ya…*

be.various   delicious.food 4S-4O-0-eat-CAUS   DIR.FLT   INT

'Whether I was given various delicious foods…' (TMA: 42)

(7) *Sermak-a*   *a-kor*   *haw-as*   **hawe ne**.

protective.god-POSS 4S-3SO/have   IND.HRN   DIR.HRN

'It seems I indeed had a protective god.' (KAY: 2-6,14)

Forms in d) are used when the speaker makes an inference based on a sensorial evidence (see §7.3 and §8.4).

(8) *Pon náj oxta ifuráje rúhe né.*

Pon   *nay*   *ohta*   *i-huraye*   **ruhe ne**.

3SS/be.small river   place+in   1PL.OBJ-3SS/wash   INF.RSN

'She washed me in a small river.' (PLA: 227)

(9) *A-nukara*   *manu*   *ike,*   *sino*   *anahne*   *inumpe*

1PS-3SO/look DIR.KNW   and   really   EMP   silver.colored

ipe   *ne*   **ruwehe 'an**   *manu.*

food   COP   INF.RSN   DIR.KNW

'When I looked, it really was a silverfish.' (PLA: 195)

(10) *Tuhso neeno 'an*   *puy*   *ahun*   **sirihi 'an**   *manu.*

cave   as.if   3SS/exist.PC   hole   3SS/enter.PC   INF.VIS   DIR.KNW

'It seemed a hole like a cave opened [but it could have been something else]' (MRA: 95)

(11) *Útara tēkoro tóxśeno húmhi am manu.*

Utara   *teekoro*   *tohseno*   **humihi 'an**   *manu.*

people   really   3PS/sleep.deeply   INF.FLT   DIR.KNW

'It seemed [those] people were really sleeping deeply.' (PLA: 184)

(12) *Reekoh*   *etooro-hci*   *'ani*   *mokoro*   **hawehe**-*hcin 'an*

really   snore-3PS   while   3PS/sleep   INF.HRN<PL>INF.HRN

manu.

DIR.KNW

'It seemed they were really sleeping while snoring.' (MRA: 45)

(13) *Pet   put   an   noyne **siran**   wa …*
river mouth 3SS/exist.PC   as.if IND.RSN   and
'It seemed like there was the mouth of the river.' (BUG: 319)

(14) *Ukuran   ka   yaanipo   isam   anki   **sirki**.*
be.evening   even   almost   3SS/not.be   about   IND.VIS
'Even in the evening it seemed he was almost about to die.' (TMA: 14)

(15) *Hinak-un   maw-ko-hopunpa-an humi ne   **humi as***.
where-to   wind-APPL-fly.PL-4S   DIR.FLT   IND.FLT
'It seemed indeed we were swept away to somewhere by a wind'
(KAY: 2-4,9)

Evidentials in e) are used when the speaker learns an information from somebody else through verbal report (see §7.4 and §8.4).

(16) *Toop   oyak-ke-ta   ray   pe   aynu   ne*
there.afar   other.place-POSS-in   3PS/die NMLZ   person COP
*sekor **haw-as**   [h]i   a-nu   p   ne   kusu, …*
ADV IND.HRN   NMLZ   4S-3SO/hear   NMLZ   COP   because
'Because I heard that they say that the ones that die [and go] to a far-away place are people, …' (NKB: 87)

(17) *Koro   kun   mah   'isam   **manu**.*
3SS/3SO/have obligation(?) woman 3SS/not.be   REP
'[They say] he has no wife.' (MRA: 84)

Other than setting a limited scope with regards to my approach to Ainu and to the resources on the language, I also take specific stances in my consideration of evidentiality as a linguistic category. These stances eventually shape the framework I adopt in my analysis and are motivated by the characteristics and properties of information source in Ainu. My approach to information source starts from the typological generalization presented in the opening of this section – that is, evidentiality deals with source of information and with how information is acquired by a speaker.

22

In light of the heterogeneity shown by languages with regards to exactly the degree of specificity in which the kind of source and the means of acquisition of information are expressed, Willett (1988) and later Aikhenvald (2004) operate a cross-linguistic comparison and propose a first typological classification of evidential systems. Despite the vast variation range we witness cross-linguistically, there seems to be the typological tendency to clarify the source of information (direct or indirect) more than the channel through which the acquisition happens. The way of information acquisition, in fact, is not necessarily a salient conceptual feature defining evidentiality in all languages. In the evidential system of such languages thus the channel of acquisition is formally left underspecified or completely unspecified (Aikhenvald, 2004: 65).

One other point of variation among languages that display evidentiality is in the grammatical devices employed for its formal realization. Typologically evidentiality shows great differences with regards to its paradigmatic features and, more generally, its unitarity as a category. Along with cases where information source is marked via specialized morphosyntax, Aikhenvald (2004: 80-2) reports several cases where the encoding of evidentiality is "scattered" across the language – that is, evidentiality is encoded by categories or morphosyntactic devices that do not have information source as their primary meaning. In such languages, evidentiality cannot be said to form one unitary grammatical category. Grammaticality and the retrievability of a paradigm have traditionally been adopted in many studies on evidentiality as a divide to discuss the different formal realizations of this category that are present in a language. Studies like Arakaki (2013) follow the grammatical vs. non-grammatical subdivision of evidentiality proposed by Aikhenvald (2004), and focus on a limited number of grammaticalized forms used to mark information source (in Arakaki's case, in Luchuan Ryukyuan). Broader approches like Squartini (2008), on the other hand, advocate for the usefulness of including less- or non-grammaticalized expressions of evidentiality, as these may be beneficial for the correct understanding of the whole category in a language – in his case, French and Italian.

The approach I take in this dissertation resembles Squartini's in that it does not strictly limit itself to considering full grammaticality as a parameter for the analysis of those Ainu forms that express information source. However, I had to narrow the scope of my analysis for the sake of its cohesiveness so that some expressions, which nonetheless are capable to encode source of information, are not included in the present

study. Besides not systematically featuring an evidential meaning, such expressions seem to show hardly any sign of grammaticalization, but rather all morphosyntactic components involved in such expressions retain the grammatical properties they have when employed in a non-evidential function. Most notable examples are expressions like SA *nah ye(e)* 'to say that' employed to mark quotative reportative.

(18) *"Ē, ájnu án" náx jé manu.*

    *"Ee, aynu   an"   **nah**   **ye**   manu.*

    Yes person   3SS/exist.PC COMP 3SS/3SO/say   DIR.KNW

    'Yes, [I] am a human being' said [the demon].' (PLA: 100)

Here the complementizer *nah* 'that' does not have a grammatically different function from the one it has when it is used, for instance, to introduce a clause not governed by a verb of saying (see *nah* followed by *ramu* 'to think' in (19)). Similarly, the verb *ye(e)* 'to say' has the same function of two-place verb when it indicates an action of 'saying' in a non-reportative environment as in (20).

(19) *"Temana   neera'an   'an-kara   'an-kii-hi   nee*

    how   such   1PS-3SO/make 1PS-3SO/do-DIR   COP

    *nanko"   **nah** ramu.*

    maybe   COMP 3SS/3SO/think

    'She thought: "How should I do?"' (MRA: 25)

(20) *Tu pírika áśpe ihékota jé.*

    *Tu   pirika   as[i]   pe   i-hekota   **ye**.*

    two be.good   EPH   thing 1SO-towards 3SS/3SO/say

    'He said to me some good things.' (PLA: 119)

In contrast, the other forms that I do include in this study (listed in points a)-e) above), although they may not encode source of information in all environments where they are used, systematically show signs of grammaticalization. As an example, I take the HA direct evidential *ruwe ne* in (21). This evidential has historically developed from an erstwhile noun+copula construction (see §5.3). Here the nominal constituent of the evidential form (i.e. *ruwe* 'the trace of') is argued to have undergone grammaticalization

in that it does not allow other modifiers (like demonstratives or determiners) in addition to the preceding clause – that is, it does not function as full-fledged noun anymore. This is what distinguishes *ruwe* from non-grammaticalized nouns in the position of head of a relative clause, like *menoko* 'young woman' in (22), which in contrast do allow modifiers, here the modifying qualitative verb *pirka* 'be beautiful' (Bugaeva, 2013: 671).

(21) *Eci-ekanok*   *kusu*   *ek-an*   **ruwe** *ne.*
     1SS>2SO-meet   to   come.PC-4S   DIR.RSN
     'I came to meet you.' (BUG: 126)

(22) *Kamuy*   *ipor*   *cannoyekar*   *pirka*
     god   appearence   have.resemblance   be.good
     menoko…   *ne.*
     young.woman   COP
     'It was a beautiful young woman who looked like a goddess.' (TMA: 38)

Thus I recognize the value of Squartini's approach to evidentiality for the case of Ainu for two main reasons. The first reason is theoretical, in that I argue that a consideration of less or not fully grammaticalized evidential expressions allows me to provide a more exhaustive description of information source in Ainu, and to better capture its characteristics in light of the fact that the reference data for this study have clearly been collected during a period when the process of grammaticalization of evidentials was ongoing. The second reason is practical, in that we can hardly argue for any of the evidential forms of Ainu to be fully grammaticalized (with possibly the only exception of SA *manu*, see §7.4) – this shows how taking grammaticalization as a property of evidential markers according to which to set the scope of my study, like in Aikhenvald (2004) or Arakaki (2013), is not desirable and even pointless for a description of information source in Ainu. Therefore, acknowledging evidentiality as a graded category, with regards to grammaticalization, is crucial in that it allows to consider its expression in a language despite the structural and sometimes (poly)functional characteristics of the linguistic devices used to encode it. Furthermore, it allows to better recognize and address the possible patterns of evolution of evidential

forms from various word classes, which would be hardly captured through the sole consideration of fully grammaticalized forms.

1.1.2 Aim of the study

This study investigates the morphosyntactic characteristics of the Ainu evidential forms given in §1.1.1, but mainly it aims to illustrate their semantico-pragmatic features through a corpus-based approach to separate dialects of the Hokkaidō and Sakhalin varieties of Ainu (see §1.2.2). The aim of the study is two-fold.

Firstly, I give an overall description of evidentiality in Ainu, that highlights and describes the common features of this category in the language as a whole, beyond the boundaries imposed by varieties and dialects. I also address the discrepancies in formal realization and employment of evidentials among different varieties of the language, acknowledging cross-dialectal variations. In doing so, I intend to show that, although evidentiality as a linguistic category can be said to be uniformly present, with similar aspects, in both HA and SA, its structural and semantico-pragmatic characteristics can differ considerably at a dialectal level. Moreover, expanding from the semantico-pragmatic observations I make, I address topics like the grammaticality of evidentiality, the subdivision into conceptual domains of the category, the interaction with epistemic modality, and the interplay with other grammatical categories such as tense, aspect and mood, which are central in our understanding of the category of information source. In doing so, this study aims to be relevant not only for Ainu studies, but also to the ongoing speculation on the category of evidentiality cross-linguistically.

Secondly, I intend to show the value that a corpus-based approach to Ainu has for the description of evidentiality, as a way to bypass the problem represented by the unfeasibility of active linguistic elicitation for this language (see §1.3.1). When outlining the theoretical framework I employ to model my analysis of Ainu evidentiality, I address the issues deriving from using textual corpora as the sole resource for this study. In light of these issues, my study calls for theories and approaches that can guarantee as much a cohesive and systematic analysis of the data as possible. This is in order to face the heterogeneity of tokens of evidentiality in the corpora, which would have been much more limited if I had used active elicitation specifically targeted to a survey of information source. The main tools with which I face these issues are:

- An approach to discourse analysis and parsing that takes into account the specific structure of literary texts of the Ainu tradition, with special attention to the genres of prose and conversation (see §6.2).
- The Theory of Territory of Information (Kamio, 1997), revised in light of the peculiarities of Ainu, to systematize personal relations and speaker's perspective to information, which are pivotal in a description of evidentiality (see §6.5).
- Reichenbach's (1947) Relative Tense Theory, which provides again a systematic way to discuss the interaction of evidential forms with the predicate they take as their scope, and subsequently the interplay of source of information with TAM categories, and especially tense and mood (see §6.6).

Eventually, I propose that the evidential system of both SA and HA is organized in terms of source reliability (see §7.7 and §8.7). That means, the differences in the formal realizations of evidentials we see in these two varieties mirror not only separate conceptual domains of evidentiality, but also the different degrees in which the speaker perceives the source of a certain information to be reliable. Furthermore, I show how, although sharing with SA this underlying overall organization according to source reliability, HA uniquely displays an evidential system whose forms are further differentiated in terms of event accessibility (see §8.7). This means that HA evidentials also formally encode the more or less direct way in which the speaker accesses the event, content of information.

1.2 A profile of the Ainu language

Since the publication of Batchelor's grammar in 1887, descriptive works on Ainu have been quite scant until the 1970s, when Murasaki (1976a) published a sketch grammar for the Rayciska dialect of SA on the basis of the data she had collected during fieldwork. During the dacades that intervene between Batchelor's and Murasaki's works, the only in-depth descriptive publication worthy of attention is possibly Kindaichi's and Chiri's (1936) grammar. In the meantime, language documentation was nevertheless constantly ongoing – most notable examples are Batchelor (1901), Pilsudski (1912), Tamura (1984, 1985, 1986) and Murasaki (1976b), to mention just a few. Although Kindaichi and Chiri can be said to be its forerunners, linguistic analysis

on Ainu systematically began only in the 1950s, with the works of Tamura (and later Murasaki), conducted mainly within the standard theory of the Chomskian generative framework.

1.2.1 Genetic relations and general linguistic features

Ainu is a language isolate for which no clear genetic relation with other languages has been established to date. Figure 1 shows the geographical area where Ainu is believed to have been spoken before the expansion into the Ainu lands, and their subsequent annexation, carried out by Japan and Russia from the XVIII century onwards. According to Harrison (2007: 42), Ainu stretched throughout the whole Hokkaidō island in Japan, spreading north towards Sakhalin, the Kuril Island chain, and reaching the mouth of the Amur river in continental Russia. On the basis of mostly toponymic evidence, Vovin (1993: 1) suggests that Ainus once inhabited also the northernmost part of Honshū island in Japan, but no information about the language spoken in this area is available today.

Although the safest claim we can make is for Ainu to be an isolate, the language has been tentatively classified otherwise as a Paleosiberian language, a very general label often applied to languages spoken in Siberia and in the Russian Far East whose classification is troublesome. A more refined classification is proposed by Street (1962) and Greenberg (2000) who group Ainu with Japanese and Korean. The difference between these two scholars being that the former includes these three languages in the Altaic family while the latter includes them in an alleged Euroasiatic family. The controversial inclusion of Ainu in a Euroasiatic or Indo-European language family is also treated by Refsing (1998). Another preliminary proposal is made by Shafer (1965) and Vovin (1993: 162-163) who notice a possible relation with Austronesian languages and the languages of South-East Asia.

Figure 1 – Historical expansion of the Ainu people and language[1]
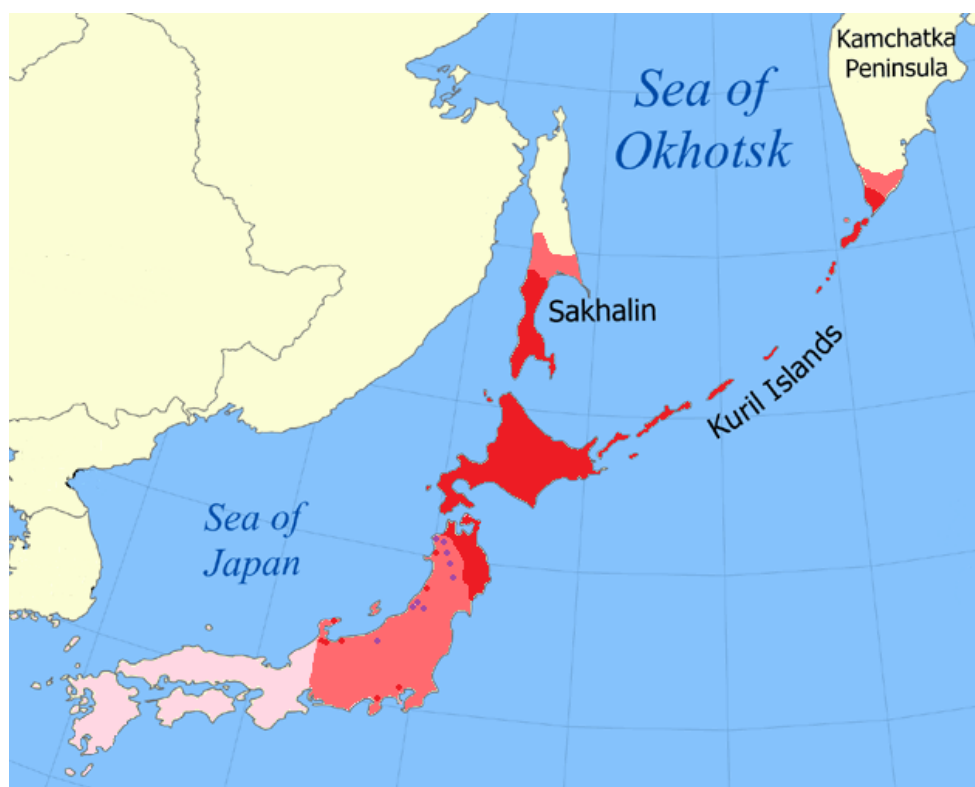
The basic word order of Ainu is SOV. Ainu is a polysynthetic, agglutinating language, it is strongly head-marking and right-headed with a rich but mostly non-productive morphology. There is no grammatical agreement of gender while number may be non-obligatorily distinguished on nouns and verbs by dedicated morphology or morphosyntactic processes (e.g. stem reduplication). Ainu is a pro-drop language. Verb arguments are not case-marked (neutral alignment) and the S, A and O functions (as defined in Dixon, 1994: 6-7) are distinguished on the basis of word order. Non-arguments are marked by postpositions or locative nouns used in what can be recognized as a possessive construction. Bugaeva (2012b) describes morphological personal agreement on verbs as being mixed depending on grammatical person (tripartite, nominative-accusative, and neutral). However, the presence of a direct-inverse alignment (at least for Saru Ainu) has also been proposed (Dal Corso, 2016). Verbal morphology shows a number of applicative, causative and antipassive morphemes which are however non-productive thus being mostly found in lexicalized verb forms. Noun incorporation is recognized as a widespread process in the language

---

[1] Red areas show the historically attested range of the Ainu people and language, pink areas show the suspected former range based on toponymyc evidence (red dots), Matagi villages (purple dots), and Japanese isoglosses. Data from Vovin (1993).

but, as other valency changing operations, it appears to be non-productive. Ainu has a wide range of clause-linking words, whose co-subordinating functions however still remains largely unclear. There is no formal marking for tense, but the language displays some markers for mood, aspect, and evidentiality (Bugaeva, 2004).

Ainu was traditionally a non-written language. Following its first contacts with the Japanese culture, a writing system based on a modified version of the *katakana* Japanese syllabary was adopted, which is still widely used in Ainu publications today. With the birth of Ainu studies in the Western world (that we can date back to the publication of Batchelor's grammar in 1887), a writing system based on the latin alphabet was also adopted. This is at present the preferred writing system in both linguistic and many non-linguistic publications in Japan and abroad. Until the early 1970s, Ainu was also sometimes transliterated with a modified cyrillic alphabet by Russian scholars (e.g. Nevskij, 1972). The writing system is not completely standardized today due to the great dialectal difference and the fact that there is not one dialect that is recognized as the standard variety of the language.

1.2.2 Dialectal subdivision

The Ainu language shows great dialectal variation. Throughout the history of Ainu studies, scholars have made many attempts to divide and classify the language into dialects. However, given that Ainu still today remains largely underdescribed, as research in different areas of linguistics proceeds we find new parameters to be included in the classification of the language's dialects, which may refute the ones previously proposed. Despite this ever-changing scenario, some general subdivisions are conventionally agreed upon and adopted in Ainu studies. Scholars generally agree on the existance, for instance, of a Southern-Hokkaidō dialect group or on assuming a clear-cut distinction bewteen Hokkaidō and Sakhalin Ainu varieties. In other cases where linguistic evidence is less solid, it is however safer to refer separately to different Ainu dialects using the toponym of the place where they are spoken. This is for example the case of Shiranuka and Kushiro Ainu, whose belonging to a larger Eastern-Hokkaidō dialect group is hard to support.

At present, the only safe claim we are able to make is that Hokkaidō Ainu and Sakhalin Ainu represent two separate varieties of the language. This subdivision is supported and discussed by Asai (1974), who also adds Kuril Ainu as a third variety.

Figure 2 – Asai's dialects classification (Asai, 1974: 100)
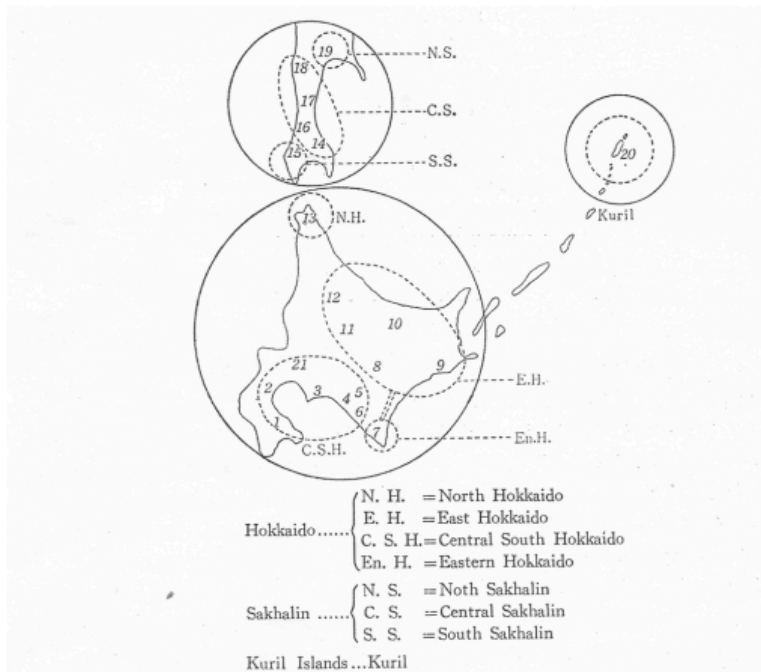
Asai's classification of Ainu dialects is nevertheles merely based on a comparison of lexicon and vocabulary and thus should not be taken as definitive nor as representative of the Ainu language as a whole. Given the current advancement of Ainu studies, it appears that the most sensible way to face the issue of dialectal classification is to tailor it on the basis of individual aspects of the language (i.e. like in the case of Asai). Such focused approach to the matter of dialectal subdivision allows us to avoid incompatibility with other classifications that may easily be at odds with what results from our study and, at the same time, refines the parameters we may eventually use for a definitive classification.

The classification I propose in this study should be taken as pertaining exclusively to evidentiality. Firstly, I assume a subdivision of Ainu into three varieties, following Asai, of which here only Hokkaidō and Sakhalin are taken into account. Then, for the Hokkaidō variety, I consider the South-Western dialect group (Saru, Chitose and Biratori dialects), which can be seen as a sub-group of the aforementioned Southern Hokkaidō dialect group that usually also comprehends Nibutani and Shizunai dialects among others. For the Sakhalin variety, I deviate from Asai's proposal in that I assume a subdivision into Eastern and Western dialect groups, which are comprehensive of smaller dialects that are referred to by separate toponyms (see Figure 4).[2] The reasons

---

[2] Toponyms refer to separate Ainu settlements where data were collected. Pilsudski gives an approximate location of these settlements in a hand-drawn map of Sakhalin (Majewicz, 1998: 219-220). See appx. II fig. A.

31

for such a classification of SA will become clear in light of the analysis of evidential forms in this variety.

Figure 3 – Proposed dialectal subdivision for HA

Figure 4 – Proposed dialectal subdivision for SA

1.3 Reasons for a corpus-based study

In this section I address the issues regarding data collection through active elicitation that follow from the vitality status of Ainu, and I present how I propose to bypass this problem.

1.3.1 Unfeasibility of elicitation

When working on any aspect of the Ainu language one major inescapable issue researchers face is language vitality. As I already introduced above, Ainu is presently in a serious state of endangerment, which concernes all of the living dialects of HA to a greater or lesser extent, while SA dialects are completely extinct. The obstacle that hinders active research on the language is then evident – the lack of informants available for elicitation of linguistic data. Nevertheless, with the obvious exception of SA, it would be incorrect to assert that conducting active elicitation for Ainu is at present altogether impossible. Although there is no official census, even a simple search on the most used social networks reveals a number of users of the Ainu language that is at odds with the figures of many official estimates on the present status of language vitality (e.g. the UNESCO census).

These contemporary Ainu speakers are however either L2 speakers, who prefer the use of Japanese as their first language in everyday life, or, in the best of cases, they can be said to be bilingual of Japanese and Ainu (and as such allegedly fall out of the scope of censuses like UNESCO's). If we wanted to conduct any kind of linguistic study on Ainu based on elicited data, we would have to seek the collaboration of these Ainu speakers. In such an eventuality, we would inevitably have to acknowledge the possibility of having to deal with a situation of language contact (likely, separate Sprachbunds involving Japanese and different Ainu dialects). Furthermore, we would need to consider the broader matter of bilingualism with all the minor issues connected to it (e.g. code switching according to social setting, age, etc.).

From the perspective of the study of information source, these issues are most serious and, if not properly confronted, could likely compromise the outcomes of any study on evidentiality. The fact that the use of evidentality can be easily prone to changes when it exists in a situation of bilingualism and/or language contact is nothing new. Aikhenvald (2004: 297-300) reports some alleged cases where the expression of information source has undergone re-codification or has even been lost under language

contact, while more detailed accounts on evidentials in contact are for example Friedman (1986 and 1997).

Thanks to recent studies on Japanese evidentiality (e.g. Aoki, 1986; Trent, 1990; Tenny, 2006), we can rely on a good description of the expression of information source in this language and, even through preliminary observations on Ainu evidentiality, we can instantly detect striking differences in (clearly enough) the formal coding, the distribution and frequency, and many other aspects of evidential expressions between these two languages. Satō (2013) surveys to a certain extent the subtle and yet important differences in the evidential systems of Japanese and Ainu. Even in the limited scope set for his study, Satō succeeds in giving an idea of what could potentially be the triggering factors of evidential change in a language contact situation.

Furthermore, as it will become clear in Chapters 7 and 8, Ainu evidentiality seems to entail a strong cultural substratum which is rooted in a world view that strictly pertains to the Ainus. As bilingual or L2 speakers of the language, contemporary Ainu informants may or may not possess (independently from their level of proficiency in the actual language) the cultural basis which appears to be so important for the production and use of Ainu evidentiality.

As I clarified in §1.1.2, the aim of this study is to provide an overall, cross-variety account of evidentiality as featured specifically in the Ainu language. In light of the precarious state of language vitality and of all the aforementioned possible issues connected to it, contemporary speakers do not represent a desirable target for my study, so that it is unfeasible to include elicitation among the methods of data collection. At the same time, a study simultaneously based on corpus-analysis and language elicitation would result in too broad of a scope, from the cross-variety perspective at least, and would possibly undermine the cohesiveness of the final analysis of evidentiality. Problems regarding language vitality/proficiency and pre-possessed cultural background of informants can be bypassed by turning to previously elicited language data, which were obtained by first language speakers of Ainu, who grew up and lived most (if not all) of their lives in an exclusively Ainu environment. Nonetheless, a study on evidentiality as it is used by today's bilingual speakers of HA would be most interesting for Ainu studies and for typological studies on information source, and it could complement the analysis contained in this thesis with new data on language contact and diachronic change. All of this is left for future research.

1.3.2 Compensating for the lack of elicitation

Although by preferring a corpus-based analysis we can overcome a number of issues connected to elicitation, which become relevant for the speculation on evidentiality, we must come at terms with one problem which follows naturally from this decision regarding methods – that is, the fact that the available language data we intend to consult are not aimed at the analysis of evidentiality, nor necessarily at any other aspect of the language. As better laid out below in §1.5 and §1.6, the reference corpora I use are made up of traditional folktales and conversations, that were recorded for the purpose of language documentation rather than language description. Along the lines of Himmelmann (1998: 161-162), I understand language documentation as entailing only the collection, transcription and translation of primary data, while language description includes a low-level analysis of these collected data, that leads to statements about that language's morphosyntax, semantics, and such.

Such reference data differ strikingly from the data one may obtain from active elicitation, which result exactly from targeted questions or stimuli tailored for a precise purpose. How can we then bypass this obstacle resulting from the lack of elicitation? As a solution to this, I resort to the largest possible amount of textual resources available, so to be able to rely on the highest possible number of tokens of evidentiality which are contained in said texts. In other words, the more texts consulted, the more examples of evidentiality can be found and analyzed. However, I must obviously operate a careful selection among all the textual resources that have ever been made available through the history of Ainu studies.

In sorting my reference sources I proceeded in two steps. Firstly, I considered which of the larger varieties of the language were worth my consideration for a study on evidentiality. Here the choice fell on Sakhalin Ainu and Hokkaidō Ainu, leaving out Kuril Ainu on which very limited language documentation was done before the language went extinct. The language data we possess for this variety are almost exclusively in the form of glossaries and short phrase lists, whose superficiality does not allow any serious, in-depth linguistic analysis that goes beyond studies on lexicon.[3]

Secondly, I narrowed down the scope to those dialects or subdialects within these varieties for which a considerable amount of documentation has been done. Here I did not set a fixed number of texts available for each dialect or subdialect, under which the inclusion of the relative corpora would have been excluded. Rather, I aimed at finding at

---

[3] Akulov (2016) has attempted some very preliminary morphosyntactic observations.

least a total of 300 tokens of evidentiality for each dialect (and at least 30 for each subdialect) in order to include the relative corpora where there tokens are featured among my reference sources. On the one hand, a minimum of 300 tokens per dialect allows enough of a broad scope to properly discuss the shared characteristics of evidentiality in those subdialects included in that same geographical area; on the other hand, a minimum of 30 tokens per subdialect are sufficient to detect possible peculiarities that may not be shared by all subdialects within the same dialect, but that rather should be considered exactly as a peculiar subdialectal feature. These were the reasons why, for instance, dialects like Northern Hokkaidō or subdialects like the Mukawa subdialect (comprised in the Southern Ainu dialect family) were not included among the reference sources.

In selecting the reference corpora I also looked for consistency in who the informant(s) for the data was or (where a corpus included data from various informants at once) I aimed for consistency in the place of collection. The Saru Ainu corpora have been entirely elicited from the same two Ainu informants, while the corpus for the Eastern Sakhalin dialect, though bringing together data from several informants, includes language data coming from the same Ainu settlements on the Sakhalin Pacific coast (see §1.6).

As summarized in §1.6, the reference corpora have been elicited throughout a time span of roughly one hundred years. If we turn back to the matter of language vitality, the choice of taking into account sources from such varied time periods appers counterproductive. In fact, we expect language vitality to have worsened throughout a century – the reference texts could then not be homogeneous enough to support a cohesive analysis of evidentiality. Although this is a sensible objection, such an approach is necessary for the specific purpose of a cross-variety study. In fact, in light of the sporadicness with which documentation of Ainu has been conducted, we need to accept that the reference sources might come from very different time periods. Extensive documentation on SA was hardly possible after the 1960s with the slow passing away of its last native speakers,[4] while the richest collections of texts and recordings for the HA subdialects have appeared only from the 1950s onwards.

Despite the obvious and previously mentioned issues connected to language vitality, the situation at the different times when the reference sources were collected was sharply different from the one we experience today. All informants for the language

---

[4] With, among few others, the most notable exception of Asai Take, informant for MRB, who died in 1994.

data taken into account here were first language speakers of Ainu (and in some cases did not even speak Japanese or Russian) and either used the language as their sole means of communication in most or all situations, or used Ainu as their preferred language over Japanese or Russian. That is, although the progressive worsening of language vitality over the century to which the reference data date back is undeniable, it did not involve cases of bilingualism or language contact far-reaching enough for us to question the informants' proficiency and thus the linguisitc validity of the data themselves.

1.4 Quantitative and qualitative analysis

The kind of corpus-based approach to evidentiality I described above calls for a quantitative data analysis. Although preferrable for many reasons in the case at hand, a quantitative methodology still fails to overcome a number of limitations imposed by the type of reference data I use. One such limitation is the uneven frequency of evidentials in different domains (see §3.3.2). An equal amount of tokens used in complementary distribution would in fact be ideal for the analysis of some evidentials (e.g. SA personal knowledge evidentials used in assertive and interrogative statements, see §7.2), which however remains necessarily "incomplete".

One more limitation follows from the collection methods employed by the corpora's collectors, especially between 1900s and 1950s. Specifically, the appropriatedness of transcription under dictation as a data collection method is, for today's standards, highly questionable and can be easily thought to affect firstly the quality of the data itself and in turns the outcome of linguistic studies based on these data. Poor collection methods are likely to skew principally my account on the morphophonology of evidential forms. While in some cases I was able to correct transcription mistakes thanks to an audio backup to the transliterated texts, in other instances I could not double-check the data as an audio backup is completely unavailable (e.g. WDA) or presently inaccessible (e.g. PLA) (see §1.6). Here we must rely on the collector's version of the text.

One more pressing issue is context transparency. A corpus-based study obviously enough does not allow us to rely on any kind of speakers' judgement. This way we cannot actively question the reasons why evidentials appear as they do in the reference texts, nor we can test their acceptability in similar contexts through negative judgement. Help from contemporary Ainu speakers in this respect is again ruled out for the

aforementioned reasons (see §1.3.1). As a way to respond to this methodological problem, I resort to context interpretation. The basic assumption is that tokens of the same evidentials are found in similar environments, which share common semantico-pragmatic characteristics – these in turns constitute the parameters that license the correct use of evidentiality. As these characteristics could otherwise be inspected by providing the informants with a preconstructed context and evaluate their use of evidentiality, I here apply the opposite process. That is, I look for contextual similarities in the environments where evidentials are featured: in this respect, I take a philological stance towards Ainu reference corpora.

This decision requires a defined approach to discourse analysis. Although traditionally almost all Ainu oral compositions follow a predetermined structure (see §1.5), the organicness of their content highly depends on the narrator's skills. Repetitions, digressions, mistakes are most common in many of the reference texts, so that the narrative context is not always transparent. To avoid the pitfalls of loose context interpretation, I need to resort to a systematic way of parsing the text into narrative "chunks" that share the same internal discursive features (see §6.2.3). This evetually allows a consistent comparison among evidentials used in different texts, genres and dialects.

Together with a quantitative analysis I also adopt, to a lesser extent, a qualitative data analysis. A qualitative approach shows in that I avoid cases of repetitions (e.g. when passages containing evidentials are repeated due to confusion on the narrator's part), cases of evidentials used in identical contexts (e.g. when evidentials are used in passages describing recurrent events in the narration, as it is common of many of the literary genres taken into account here), or cases where Ainu evidentiality is mixed with Japanese, in those rare episodes seemingly involving code-switching when the narrator turns to using Japanese (sometimes prompted by the collector who communicates in this latter language).

1.5 The reference sources

In selecting my reference sources for the analysis of evidentiality, I further operated a choice based on the texts' genre. Ainu not being a traditionally written language, when speaking of *text* genre here I actually mean the genre of the oral composition which was transposed into written form. Although there is no actual homogeneity among the texts I use here, as they can be said to belong to separate genres, they are brought together by

some common stylistic characteristics which seem to be a significant aspect for the study of information source.

The very first distinction I employ is between literary and non-literary texts. The latter include all texts reporting language production that does not follow any specific stylistic norm (in terms of content, structure, etc.), but that rather present language produced "on the spot", featuring a content that develops organically and is not predetermined. Conversations belong to this kind of texts. On the other hand, literary texts comprise all that language production that follows specific norms and patterns whose differences in turns distinguish separate literary genres.

One second distinction I made within the domain of literary genres is between rhythmic and non-rhythmic genres. Rhythmic genres are characterized by the presence of a metric cadence (not necessarily a rhyme scheme) that is imposed on the whole text and may be supported by the use of a musical instrument (although in most cases the only voice of the narrator suffices and the composition sounds like it is sung). Especially in the case of *oyna* or *yukar*, sentences or longer passages are repeatedly separated by a nonsensical sung refrain, which is meant to emulate the incomprehensible language of the gods and may be practically used by the narrator as a pause to collect his/her thoughts on what is to come in the narration. Non-rhythmic genres, in contrast, do not include any "sung" part and are then sometimes referred to as 'prose'. [5] We can further subcategorize both rhythmic and non-rhythmic genres according to their differences in content, kinds of characters involved, the narrative person used (first or third), the target audience and such. Kubodera (1977: 8) provides an informative and exhaustive categorization of Ainu literary genres that also specifies the differences in the genre names as used in SA and HA, which sometimes do not overlap (see Table A in §III appx.).

The reference corpora for this study mainly include *ucaskuma/upaskuma* (or *uchashkoma/upashkuma* in Kubodera's rendering), *tuytah* (Kub.: *tuitak/tuitax*) and *uwepeker*, and in fewer number *oruspe*, *isoytak* (not included in Kubodera's classification), and some *yukar* exceptionally narrated in prose without their normal rhythmic cadence. The genre classification used here for each text follows directly from the indications given by the editors/collectors of the reference corpora.

---

[5] In Japanese the term 散文 *sanbun* 'prose' is used, as opposed to rhythmic genres which are defined 歌謡 *kayō*, loosely translatable as 'songs'.

As it is clear from the brief summary given here, the reference texts I selected for the analysis of evidentiality do not belong to any of the rhythmic literary genres. The choice of focusing on 'prose' is once again meant to benefit the cohesiveness of the analysis. The rhythmic pattern of 'song' genres seems to affect first and foremost the frequency in the use of evidentials – a rough estimate shows that, textual length being equal, the tokens of evidentiality in rhythmic genre texts are around one third of the ones found in non-rhythmic genre texts. It is most likely that the metrical cadence on the one hand and the fixed content on the other are the reasons for a (forcedly?) limited use of evidential forms. Furthermore, some evidentials (e.g. SA personal knowledge evidentials) are never encountered in the 'song' texts I have surveyed, which may suggest some type of restriction or incompatibility of certain kinds of information source with these literary genres. Since important discrepancies in the evidentials' use according to the literary genre are clearly noticeable, I decided to focus on 'prose' texts as these provide enough data for an appropriate analysis on information source. At a first look, 'songs' seem to call for a quite different approach to evidentiality, which may benefit from previous knowledge on this category as used in less-specialized contexts.

1.6 Metadata

The following tables summarize the metadata for the reference corpora used in this study. A three-letter abreviation is here used for each corpus for short reference and will appear henceforth when the corpora are referenced in the discussion to follow or in examples.

Table 1 – SA reference corpora

Corpus reference	No. of consulted texts	Name of collector	Date of collection	Place(s) of collection	Name of informant(s)	Collection method(s)	Audio backup type and availability	Translation language
MRA	16: 5 conversations, 11 *ucaskuma*	Murasaki Kyōko	1969	Tokoro – Hokkaidō (Japan)	Husko (Fujiyama Haru), Yuku	Open microphone, recorded on tape	Analogic (tape) – available	Jap.
MRB	54: 54 *tuytah*	Murasaki Kyōko	1984-1992	Monbetsu – Hokkaidō (Japan)	Tahkonanna (Asai Take)	Open microphone, recorded on tape	Analogic (tape) – available	Jap.

MRC	2: 2 *ucaskuma*	Murasaki Kyōko	1987-1989	Monbetsu – Hokkaidō (Japan)	Tahkonanna (Asai Take)	Open microphone, recorded on tape	Analogic (tape) – available	Jap.
MRD	3: 2 *tuytah*, 1 *ucaskuma*	Murasaki Kyōko	1993-1994	Sapporo – Hokkaidō (Japan)	Tahkonanna (Asai Take)	Open microphone, recorded on tape	Analogic (tape) – available	Jap.
PLA	27: 27 *ucaskuma*	Bronislaw Pilsudski	1903-1904	Tarayka, Tunayci, Aj, Hunup, Takoye, Sieraroko – Sakhalin (Russia)	Numaru, Sisratoka, Ipohni, Ramante, Poncku, Cipeka, Yorusamma, Yasinoske, Nita	Transcribed under dictation, recorded on wax cylinder	Analogic (wax cylinder) – unavailable	Eng.
PLB	12: 11 *tuytah*, 1 *ucaskuma*	Bronislaw Pilsudski	1903	Tarayka, Takoye, Ocohpoka Otasan – Sakhalin (Russia)	Asin'aynu, Sukoyamma, Kusurikoya, Kutokere, Ramante, Nupausemma, Tehtantuki, Usarosima, Sisratoka	Transcribed under dictation, recorded on wax cylinder	Analogic (wax cylinder) – unavailable	Jap.
TMS	5: 5 *ucaskuma*	Suzuko Tamura	1959-1960	Tokoro – Hokkadiō (Japan)	Husko (Fujiyama Haru)	Open microphone, recorded on tape	Analogic (tape) – available	Jap.
WDA	11: 10 *ucaskuma*, 1 *tuytah*	Bunjirō Wada	1949 c.a.	Ussoro – Sakhalin (Russia)	Ume Numahata, unknown	Transcribed under dictation	None	Jap.
WDB	6: 6 *ucaskuma*	Bunjirō Wada	1949 c.a.	Ussoro – Sakhalin (Russia)	Ume Numahata, unknown	Transcribed under dictation	None	Jap.

Table 2 – HA reference corpora

Corpus reference	*No. of consulted texts*	*Name of collector*	*Date of collection*	*Place(s) of collection*	*Name of informant(s)*	*Collection method(s)*	*Audio backup type and availability*	*Translation language*
BUG	12: 8 *uwepeker*, 3 *yukar* (prose), 1 *isoytak*	Anna Bugaeva	1998-2000	Chitose – Hokkaidō (Japan)	Ito Oda	Open microphone, digital recording	Digital (mp3) – available	Eng.
KAY	54: 48 *uwepeker*, 4 *yukar* (prose), 1 conversation	Kayano Shigeru	1969	Biratori, Nibutani – Hokkaidō (Japan)	Turusino, Sadamo, Nepuki, Yosi, Kimi, Tesime	Open microphone, recorded on tape	Analogic (tape) converted into digital (mp3) – available	Jap.

NK (A-M)	13: 13 *uwepeker*	Hiroshi Nakagawa	1987-1993	Chitose – Hokkaidō (Japan)	Nabe Shirazawa	Open microphone, recorded on tape	Analogic (tape) – unavailable	Jap.
TMA	4: 4 conversations	Suzuko Tamura	1955	Biratori, Fukumitsu – Hokkaidō (Japan)	Sadamo, Wateke	Open microphone, recorded on tape	Analogic (tape) converted into digital (mp3) – available	Jap.
TMB	9: 3 *uwepeker*, 4 *isoytak*, 1 *oruspe*, 1 *upaskuma*	Suzuko Tamura	1955, 1958, 1961	Biratori, Fukumitsu – Hokkaidō (Japan)	Wateke	Open microphone, recorded on tape	Analogic (tape) converted into digital (mp3) – available	Jap.
TMC	7: 5 *uwepeker*, 2 *upaskuma*	Suzuko Tamura	1958, 1969	Biratori, Fukumitsu – Hokkaidō (Japan)	Sadamo	Open microphone, recorded on tape	Analogic (tape) converted into digital (mp3) – available	Jap.

The number of texts consulted for each corpus refers to the number of texts that met the genre requirements set as part of the research scope. This may not equal the total number of texts contained in the published version of the corpus. The places of collections are illustrated here as they are reported in the reference corpora by the collector/editor. With the exception of the locations named for PLA, PLB, WDA and WDB, all other names correspond to present-day places easily retrievable on any updated map of Japan. For a more detailed discussion on the proximate location of collection places on Sakhalin island see Figure A (§II appx.).

All corpora have been consulted in editions that were directly curated by their collectors – these include a transcription of the Ainu texts (either in Japanese *katakana* script or in latin script), a full translation or a word-by-word translation into Japanese or English, a file audio on tape, CD or digital format. Exceptions to this are PLB, WDA and WDB. PLB is a Japanese re-edition of an original publication by Pilsudski, while WDA and WDB are a critical edition of Wada Bunjirō's handwritten fieldnotes. The Japanese translation provided for all three these corpora is not the one curated by the collector. All Ainu examples in the chapters to follow are given in latin script. For language tokens originally transliterated not following the standard transliteration rules for Ainu a first tier with the original rendering is given, followed by a second Ainu text tier showing the transliteration according to conventions (along with a morphemic

subdivision). I then add two more tiers where I newly provide interlinear glossing and an English translation.

1.7 Conventions

When reporting Ainu language examples in this thesis, I use broad transcriptions which follow the transliteration conventions adopted by Tamura (1984, 1985, 1986) in the compilation and editing of her corpus of Saru Ainu. Since the publication of Tamura's corpus these conventions have become increasingly adopted in Ainu studies even for other dialects and varieties of the language. Most of the reference corpora used for this study already follow Tamura's transliteration conventions, so that I here report the tokens extrapolated from them as they originally appear in the edited corpus. Whenever an audio backup was available for an edited corpus, I double-checked the accuracy of the original transliteration and amended possible mistakes or imperfections made by the editor. In these cases, I only cite my own re-transliterated version when reporting the example. Conversely, in those cases where an audio backup was not available for confirming the accuracy of transliteration (i.e. PLA, PLB, WDA, WDB), I report both the editor's version and my own re-transliteration based on modern conventions. Moreover, when transliterating, I do not report phonological processes happening at morpheme boundary such as assimilation (differently from what is present in e.g. MRA) except for historical assimilations present in lexicalized words, nor do I indicate stress on words.

Some important notations on the transliteration conventions are as follows. In round brackets I give the characters used in transliteration in PLA, PLB, WDA and WDB.

[*c*]	for /t͡ʃ/ and /c/ (transliterated as *ć* or *ź*)
[*h*]	for /h/, /ɸ/, /x/, /ɦ/, /ɕ/ and rarely /ʃ/ (transliterated as *h*, *f* or *x*)
[*k*]	for /k/ and /g/ (transliterated as *k* or *ḱ*)
[*p*]	for /p/ and /b/ (transliterated as *p*, *ṕ* or *b́*)
[*s*]	for /s/ and /ʃ/ (transliterated as *s* or *ś*)
[*t*]	for /t/ and /d/ (transliterated as *t* or *d*)
[*w*]	for /w/ (transliterated as *w*, *v* or *u*)
[ʻ]	for /ʔ/

I transliterate vowels with a macron to signal lengthening as a double vowel (e.g. *ē* > *ee*).

1.8 Synopsis of the chapters

The remainder of the thesis is organized as follows. In Chapter 2 and 3 I present the background information on evidentiality as discussed cross-linguistically and in previous studies on the Ainu language. In Chapter 4 I introduce my framework regarding morphosyntax, which will be needed to discuss the structural properties of the evidential forms I survey in this study, in Chapter 5. Chapter 6 is dedicated to presenting the theoretical background on semantics and information theory. Chapters 7 and 8 are the analytical chapters, reserved to the discussion of the semantics and pragmatics of evidentials respectively in SA and HA. Finally, Chapter 9 summarizes the analysis presented in the two previous chapters and highlights some remaining issues of this analysis and the next steps to be taken.

Chapter 2

Evidentiality Cross-linguistically

2.1 Content of the chapter

Chapter 2 is dedicated to giving an introduction to evidentiality as discussed in the general linguistic literature. Here I present my main assumptions on the category of evidentiality, relevant for the following chapters. In §2.2.1, I discuss evidentiality as a linguistic category. Starting from this general definition, I then consider the internal classification of evidentials (§2.2.1.1), the speaker's relation towards information (§2.2.1.2), and the cognitive processes involved in the assimilation of information (§2.2.1.3). In §2.2.2 I take a look at epistemic modality, with special attention to mirativity and first person (§2.2.2.1). In section §2.2.3 I return on the issue of the interaction between evidentiality and other categories which are unrelated to information source, specifically tense, aspect, and mood (TAM), while in §2.2.4 I outline the terminology I employ in this study. Section §2.3 briefly summarizes the main assumptions on evidentiality to be referenced in the remainder of the thesis.

2.2 Evidentiality cross-linguistically

In this first section I outline what I mean by "evidentiality" in this thesis and I present the theoretical framework I adopt to discuss this category for the case of Ainu.

2.2.1 Evidentiality as a linguistic category

Evidentiality is a linguistic category that primarily relates to the source of information – it indicates where the speaker has acquired information from, while also specifying the means through which this acquisition happened. Formal codings of evidentiality are cross-linguistically varied and highly language-dependent, but in all languages evidential forms indicate (to different extents and with different specifications) the means with which information is acquired and the kind of source involved (Aikhenvald, 2004: 3). In this thesis, I intend "linguistic category" as a synonym of "conceptual category", a term that I better define below. As such, my understanding of what is a linguistic category deviates sharply from the one we find in works that take a denotational approach towards the definition of categories, and also from what Aikhenvald (2004) states a grammatical category is.

Already in the IV-VI century B.C., Sanskrit grammarians (and specifically Pāṇini) had recognized the function of some parts of speech and syntactic constructions which express source of information. However, the birth of the studies on evidentiality in modern linguistics is probably best attributed to Boas (1911) and his work on Kwakiutl. The adoption of the term "evidential" to refer to the ways languages express source of information is more recent, and it was first introduced by Jacobson (1971).

Other than establishing a new terminology, one other merit of Jacobson's work is that he first analyzed evidentiality as a separate grammatical category, no different from other categories like person, number and tense. As studies on information source began to appear more and more frequently (especially since the publication of Chafe and Nichols 1986), the issue of whether to consider evidentiality as an independent category has been one main topic of debate. In particular, the discussion has revolved around the question of whether evidentiality represents a subcategory of modality.

This latter view is the one supported exactly by Chafe and Nichols (as also clearly suggested by the subtitle to their publication "the linguistic coding of epistemology"), who discuss evidentiality in a broad and in a narrow sense. In its broad sense, evidentiality includes aspects like the speaker's degree of certainty towards information, a semantic domain normally recognized as belonging to modality, and more specifically to epistemic modality. Conversely, evidentiality in its narrow sense exclusively refers to information source. Although Chafe and Nichols acknowledge some kind of conceptual separation between information source in the strict sense and epistemic evaluation, their use of the term "evidentiality" clearly subsumes a dependency of this latter on the broader domain of modality. The relation between evidentiality and specifically epistemic modality (on which I return in §2.2.2) is further discussed by de Haan (1999) and Aikhenvald (2004), who claim that they should be identified as two separate categories. They argue their claim on the basis of semantics. In their view, evidentiality deals only with information source, while epistemic modality has to do with the speaker's evaluation of, or attitude towards, the information. Aikhenvald then goes one step further by asserting that evidentiality constitutes an independent *grammatical* category. Right from the beginning of her survey, we understand how Aikhenvald's (2004: 6-9) focus is on those linguistic devices whose primary function is to encode evidentiality, whose use is obligatory (failing which communication is judged to be fallacious and language proficiency poor), and that constitute a fixed morphosyntactic paradigm (usually inflectional) which does not allow new additions, much like other

categories expressed via paradigmatic forms, such as person. Therefore, being a grammatical category in Aikhenvald's terms has to do with grammaticality, as an utterance without the appropriate evidential marker would be infelicitous or incorrect, and with representing a cohesive semantic domain that is formally encoded in the language via an exclusive morphosyntactic system or paradigm.

Aikhenvald's statement about the status of the evidential category presents a number of theoretical implications. Here, I want to consider two of them, which are relevant to my approach to evidentiality – how we define what is grammatical and what is not, and whether evidentiality is a closed category.

Aikhenvald (2004: 67) reports that evidentials may be formally expressed via various morphosyntactic devices, but only those morphemes or syntactic constructions that indicate information source as their primary meaning, and do not merely acquire it pragmatically, can be considered grammatical evidentials. This acceptation of evidentials as systematically and primarily encoding source of information follows from Anderson (1986: 274), who lists this characteristic as one of the main ones of prototypical evidentials. On this basis, Aikhenvald then distinguishes grammatical evidentials from evidential strategies and lexical evidentiality – evidential strategies consist of the use of a non-evidential category (e.g. tense, aspect, etc.) to refer to information source; lexical evidentiality refers to lexical words, whose semantics does not entail information source, that can however imply an evidential meaning in certain pragmatic environments. That is, evidentials on the one hand and evidential strategies and lexical evidentiality on the other differ in how they *encode* or just merely *implicate* source of information.

This divide between encoding and implicating evidential meaning has influenced many subsequent studies (e.g. Faller, 2002; Arakaki, 2013) but, most importantly, it entails the idea that the use of the terms "evidential" and "evidentiality" is strictly reserved to the grammatical marking of information source (Aikhenvald, 2004: 392). By comparison with other categories like tense, Aikhenvald (2007) further argues that evidentiality constitutes a closed category whose use is obligatory in the languages where it can be said to be grammatical.

Before I proceed to considering the notion of "closedness" as applied to evidentiality and related issues, I will consider the obligatoriness of the category. As Arakaki (2013: 17) succinctly summarizes, the idea of obligatory marking of evidentiality seems to come from Boas, though several accounts on information source

in different languages show that this possibility is hardly ever countenanced. McCready and Ogata (2007: 152) in fact assert that "although it is true that many languages that have evidentials strongly prefer their use, such use is almost never – and possibly simply never – obligatory". Obligatoriness of evidentials cannot be safely tested in the case of Ainu and it will not be a central issue in my analysis. Nevertheless, from basic observations on the distribution of evidentiality in the reference texts, it appears that also in Ainu expression of information source is not obligatory, although we can indeed infer its preference in specific semantico-pragmatic environments from its recursivity.

About the closedness of the category of evidentiality, Aikhenvald (2007) explains that, like other grammatical categories (e.g. tense), information source indicates a limited set of grammaticalized expressions, as opposed to a set of lexical items that can virtually contain an infinite number of forms. This idea seems to follow from the one archetype of evidentiality by which "morphologically evidentials are inflections, clitics or other free syntactic elements" (Anderson, 1986: 275), which are traditionally regarded as closed grammatical classes. Furthermore, arguing that evidentiality constitutes a closed grammatical class is in line with the paradigmatic nature of information source as discussed in Aikhenvald (2004: 67-82), in that it is hardly ever possible to expand grammatical paradigms with new items. In Aikhenvald's terms, categorial closedness clearly appears to be connected to grammaticalization which, as seen above, is in turn central in her definition of evidentiality itself.

The issue of closedness has been treated in the literature in a limited manner, and it seems to have become a secondary concern in most recent studies on information source. Nevertheless, both closedness and obligatoriness of evidentiality have been questioned in terms of how they seem to be at odds with the idea of a continuum of grammaticalization (Cornillie 2007), as they impose important restrictions to the nonetheless possible synchronic and diachronic developments of evidentials. Squartini (2008) further elaborates this point by claiming that it is indeed necessary to include lexical expressions of evidentiality in our analysis of information source, as they are synchronically and diachronically crucial for our understanding of evidentiality in the broad sense. Similarly, Boye and Harder (2009) advocate for a unitary consideration of grammatical and lexical evidentiality as part of a larger functional-conceptual substance domain. In their words, reconsidering the distinction between the grammatical and lexical status of evidentiality with a functional-based approach allows us to

simultaneously discuss language categories and grammatical status without confusing them.

Following Boye and Harder, I use the term "evidentiality" in this study as referring to a linguistic category of the Ainu language that essentially constitutes a conceptual category. My understanding of the term "conceptual" in this instance follows from Whorf's (1956) work on language and cognition and from later reworking of his theory by Levinson (2003), where the direct equation of semantic representation and conceptual representation advocated by Whorf is rediscussed. What I adopt here is the architectural approach to congitive processes and language production that Levinson (2003: 299-303) presents, made up of a three-level structure that, among other things, aims to account for the cross-linguistic differences we see in how languages pack semantic concepts together and eventually express them formally. Since this approach explicitly draws from the classical Whorfian theory though taking into account also later revisions, Levinson presents it as "neo-whorfianism".

The first level is the one of universal semantic primes – those primitive concepts that are proper of humans and human cognition. The presupposition of this lower level of primitive concepts is shared also by lexical decomposition approaches, such as Jackendoff's (1992). The second level is the one of semantic concepts. Semantic concepts are unitary and cohesive concepts that pack together different primitive concepts that are similar or related in terms of content. How primitive concepts accrue together at this level, or whether some primitive concepts are taken to constitute relevant semantic concepts at all, depends on the human ways of knowing reality. Levinson reports how the ways of knowing reality may differ from people to people, according for instance to the environment and social setting in which those people live, so that concepts such as location, number, time reference, may or may not be relevant concepts to understand and describe the world for some people, or alternatively they may show different levels of complexity. One example Levinson (2003: 302) discusses is English and its system of tenses as opposed to some Papuan and Bantu languages that display six separate absolute tenses. Or again, the case of English where the expression of number is a big issue in contrast to languages like Yucatec where expressing number is not essential. The third level in the architecture is the formal encoding of these semantic concepts and their expression through an output that allows communication – that is, language. Linguistic forms thus can be said to mirror the organization of the semantic conceptual space in the speakers' mind. This way, language diversity, that we

perceive as a series of cross-linguistic discrepancies of forms, comes down to being a difference in the packing of primitive concepts into unitary semantic concepts.

Since linguistic forms in language directly mirror semantic concepts, that in turn are the result of the unique organization of primitive concepts by the people who speak that language, we can say that conceptual categories are language-specific. Here I do not make any specific claims about whether primitive semantic concepts are universals, a conclusion that surfaces in lexical decomposition approaches (see Jackendoff, 1992), but it is sensible to say that, given that the means of human cognition are indeed limited, cross-linguistic resemblance of conceptual categories is expected. However, the kinds of formal devices employed in the language to encode these conceptual categories are purely language-specific. It is possible for these formal devices to show different stages of grammaticalization, to belong to different word categories, to be overtly marked or unmarked in morphosyntax, and to be linguistic forms or whole grammatical structures that are not exclusively dedicated to denote what in typological linguistics we may recognize as one semantico-pragmatic domain. This last possibility is particularly relevant for the discussion of Ainu evidentials that, together with source of information, also encode epistemic modality *in primis* or TAM categories.

Given this definition, we see that my understanding of linguistic category is essentially denotational – in fact, I assume the pairing between a linguistic form and a certain denotation (i.e. to a unitary set of semantic concepts). However, the categorial denotational characteristics I discuss here deviate from the ones of other denotational approaches that are chiefly based on the notion that cross-linguistically analogous grammatical structures or linguistic forms contribute to a certain denotation, that in turn is usually understood as a set of semantico-pragmatic functions proper of a grammatical category. In fact, while I recognize the possibility for cross-linguistic analogous organization of semantic concepts, as said above, I take grammatical structures and linguistic forms to be strictly language-specific, so no cross-linguistic analogy is necessarily expected. Moreover, the denotation to which these formal devices contribute is to be understood as pertaining to conceptual categories, which are not universal (i.e. not common for all languages) but yet may show resemblance among separate languages.

We also notice how Aikhenvald's definition of grammatical category (as discussed above) shares an important point with the understanding of linguistic category coming from denotational approaches. Namely, the direct correlation between a certain

meaning or function and a dedicated linguistic form used to encode it. This theoretical similarity between "grammatical category" and denotation-based "linguistic category" brings my understanding of the Ainu evidential category further away from Aikhenvald's definition.

I defer the discussion on the implications of this theoretical assumption for Ainu studies and for cross-linguistic comparison to Chapter 9.

As I already clarified in Chapter 1, my analysis of Ainu evidentiality does not include many lexical strategies used to mark source of information (e.g. quotative reportative forms) – these are the forms that more than other evidentials display no significant or consistent sign of grammaticalization. Conversely, I include in the present study many other evidentials (e.g. the indirect evidentials in HA), that appear to be in the process of grammaticalization (see §5.3). The functional-based approach of Boye and Harder provides an adequate framework specifically for the study of forms that concurrently show mixed characteristics of grammaticalized markers and lexical items. Moreover, it allows me to overcome the limiting distinction between encoding and implication of evidential meaning, which would be theoretically unfit in light of the behavior of Ainu evidential markers. One more reason to adopt a functional-based approach is that it allows me to discuss epistemic modality as equally influencing the formal encoding of Ainu evidential forms together with evidentiality (see §7.2), while still maintaining the separation of the two domains of information source and epistemicity (as in e.g. de Haan, 1999). Such a consideration of epistemic modality would probably be ruled out in the approach that sees evidentiality as a grammatical category, as here epistemic meaning is considered to be an extension of information source (Aikhenvald, 2004: 6).

2.2.1.1 Classification of evidentials

On the basis of the languages surveyed in her study, Aikhenvald (2004: 65) provides a typological classification of evidentials. This classification rests on a basic tripartite semantico-pragmatic distinction that organizes evidential types as belonging to 1) sensorial parameters, 2) inference, or 3) verbal report. Evidentials within these three domains may be further subcategorized, again on the basis of semantics, respectively into visual and sensory, inference and assumption, and hearsay and quotative. Languages fall into four groups (A, B, C, D) according to how many separate choices in the marking of information source are available. According to Aikhenvald, the simplest

evidential systems feature a two-choice distinction (group A), while more complex ones may include five (group D) or more choices. Each formal marking within a language's evidential system is understood as being representative of one specific semantico-pragmatic domain (or a specific group of parameters) among the ones named above. Variations in the semantico-pragmatic parameters that are encoded in one formal marking of evidentiality help distinguish separate classes within the four groups (e.g. A1, A2, B1, B2, etc.). For instance, in two-choice A3 systems one evidential form subsumes the semantic parameter reported (or 'hearsay') while the other subsumes all other semantic parameters (Aikhenvald, 2004: 25); or in three-choice B3 systems the three formal markings of evidentiality respectively encompass visual, non-visual sensory, and reported (Aikhenvald, 2004: 42).

One more internal subdivision of evidentials that Aikhenvald makes is between direct and indirect evidentials. In her definition (Aikhenvald, 2004: 392), direct evidentiality covers speakers' or participants' own sensory experience of any kind (i.e. comprehensive of any kind of sensorial stimulus like hearing, touch, etc.) and it is often treated as being the same as visual evidentiality. Within the domain of direct evidentiality, a formal separation between visual and non-visual/sensory evidence may not be present for all languages. This is the case for classes B1 or C2, where the semantic parameters of visual and non-visual/sensory are encoded by the same formal device. Conversely, a clear-cut formal distinction seems to be systematically present between direct and indirect evidentiality, which in turn is comprehensive of inference, assumption, hearsay and quotative. [6] This same direct-indirect distinction is also proposed by Willett (1988: 57), who advocates for an essentially two-fold subdivision of evidentials. The category "direct" in Willett's terms corresponds to Aikhenvald's definition of "direct", in that it includes the speaker's sensory experience of an event, may it be visual, auditory, or based on any other sensorial perception. In a more precise way than what we see in Aikhenvald, Willett also understands indirect evidentiality as further subdivided into reported and inferring – the former including hearsay (both second and third hand) and also folklore; the latter including evidence coming from visible results or from a reasoning process.

A crucial aspect of Aikhenvald's and Willett's classifications is that they do not discuss the possibility for a language to display separate formal markings of information

---

[6] The only exception to this seems to be group A2 where the formal marking of non-firsthand evidentials (falling under the domain of indirect evidentiality) also covers direct sensory evidentiality.

source deriving from different sensorial stimuli. Within one same semantico-pragmatic domain separate forms to mark information acquired through reasoning, sight, touch, smell, taste, and the like are not attested. This applies for both the domain of direct evidentiality, where specification does not go beyond the simple visual/non-visual opposition, and indirect evidentiality. This apparent lack of specification is most certainly due to the fact that none of the languages surveyed by Aikhenvald and Willett actually display such characteristics, and it should not be ascribed to any carelessness in the analysis.

In my analysis of Ainu evidentiality, I decided not to rely on Aikhenvald's typological classification specifically. Here I will not try to fit either SA nor HA into one of the evidential classes she outlines. This choice is prompted by some characteristics of Ainu evidential forms (that specifically relate to the entailments and limitations of Aikhenvald's classification I presented above) that makes this typological approach unfit for my purpose. Ainu may indeed display separate formal markings for a kind of evidentiality that pertains to one semantico-pragmatic domain – within the inferential domain of SA, for instance, we find separate forms specifying that information is acquired through reasoning, sight, taste, smell, touch, or hearing (see for example §7.3). In this case, the semantico-pragmatic discriminant that eventually surfaces in the formal realization of evidentials is recognized as being exactly the different sensorial stimuli that constitute the source of information, an option that, as pointed out above, Aikhenvald does not contemplate. Though this internal differentiation would not be at odds with the direct/indirect distinction Aikhenvald operates, there are other characteristics of Ainu evidentials that suggest this distinction is in fact unfit. A clearcut direct/indirect distinction for instance is unfit for SA, where one and the same formal realization of evidentiality seems to encode a kind of information source that is conceptually on the borderline of both these domains. This is the case of SA *ruwehe 'an* form (which I discuss in §7.3) that, depending on the scope verb semantics, may express evidence coming from personal knowledge or inferentiality.

The evidential categorization I propose (to be discussed in Chapter 9) is then language-specific and meant only to cohesively represent the case of Ainu. Whether it could also be beneficial for improving the typological categorization of evidentials is left for future research to determine.

2.2.1.2 Speaker's perspective

There is the possibility of having a diversification in the nature of the source at the basis of information acquisition, especially within the domain of inferentiality. Some scholars have addressed the issue of how this nature of the source of information, as well as the speaker's perspective towards it, can be relevant to the understanding of evidentiality.

Focusing precisely on inferentiality, Squartini (2008) argues for the theoretical value of equally considering the process leading to the acquisition of information (through different direct or indirect sources), which he terms "mode of knowing", and on the other hand the locus where the information is acquired (internal or external source respectfully to the speaker's perspective), which he terms "source of evidence". By differentiating between mode of knowing and source of evidence, Squartini argues that we are able to better discuss the actual process of acquisition of information through a direct or indirect source, while separating this process from possible interferences coming from speaker's involvement or the import of physical or non-physical external evidence. This way, a study on inferential expressions is able to separately address their interpretation as either evidentials or epistemics.

Squartini's (2008) study is based on French and Italian. The following two examples, taken from his analysis, illustrate how inferential expressions do not necessarily entail a same source of evidence, while they may share the same mode of knowing.

(23) *Attento, **deve** essere ancora vivo, perché ho visto che si muove.*
'[Uttered while pointing at a spider] Be careful, it must still be alive, for I saw it moving.' (Squartini, 2008: 922)

(24) ***Sarà** il postino.*
'[Uttered after hearing the doorbell ring] It must be (be:FUT) the postman.' (Squartini, 2008: 923)

Both the modal verb *dovere* 'have to' (conjugated as *deve* in (23)) and the future indicative *sarà* can be used in Italian to express inference – with regards to information source, both forms share the same mode of knowing: an indirect inference based on the speaker's reasoning process. In contrast, *dovere* and the future indicative form differ in terms of the source of evidence. With the modal *dovere* (expressing circumstantial

inference) the speaker's reasoning is supplemented by external sensory evidence, while with the future indicative (expressing conjecture), the speaker is solely responsible for the reasoning process (Squartini, 2008: 925). In this sense, when used in an inferential context, the modal *dovere* subsumes the presence of an external source of evidence while the future indicative subsumes an internal source of evidence. Eventually, Squartini shows how this difference explains the distribution of these (and other) inferential expressions in Italian and French and their co-occurrence with epistemic adverbials expressing certainty or doubt. Such epistemics (like for instance *forse* 'maybe' or *sicuramente* 'certainly' in Italian) may or may not be allowed with inferential expressions because of the external or internal source of evidence these expressions entail.

Based on Squartini's proposal, I include in my analysis of Ainu evidentiality this idea of acquisition of information influenced by the "externality" of the source. However, I deviate from Squartini's conception of the relation between speaker and source in an important way. Squartini (2008: 922-3) conceives the source of inference as being the basis from which the mental process of inference initiates. This source can be either external to the speaker, prompted by physical evidence, as in (23), or internal to speaker, not prompted by any physical evidence, as in (24). In Squartini's view, the source represents a step in the inferential process that *follows* from the speaker's non-mediated observation of a situation. If we take example (23) again, an inference about the spider's being alive is made first, and it is corroborated by a physical source of evidence (the view of the spider moving) only in a second moment.

Conversely, in the case of Ainu, I assume that the source always mediates the speaker's access to information in the inferential process, and that as such it *precedes* whatever kind of observation the speaker may have of a situation. That is, speaker's observation cannot prescind from the source of evidence, may it be physical or internal to the speaker (i.e. coming from reasoning), that therefore becomes the sole means through which she can perceive a certain situation and thus access content of information. In other words, source of evidence in my view is not just a way to corroborate an inference that has already been made, but rather it is the only channel that allows the speaker to make an inference with regards to a certain situation in the first place. The cardinal point thus becomes the source of evidence, with regards to which the speaker may have an internal or external perspective. The external-internal relation between speaker and source that Squartini discusses is maintained, but in the

case of Ainu it is the speaker that engages with an internal or external perspective with the source of evidence, that in turn is taken as a necessary medium to the access to information.

The following two figures are meant to represent the realtion of externality between speaker and source that I assume as opposed to the kind of relation postulated by Squartini. The concept of externality in my case then is applied to the speaker with respect to the source – the speaker has an internal or external perspective of the source of evidence that is the only medium she has to observe a situation and thus have access to content of information. The borderline position of "speaker" in Figure 5 represents this double possibility of her perspective being either internal or external with respect to the source of evidence.

Figure 5 – Externality in Ainu
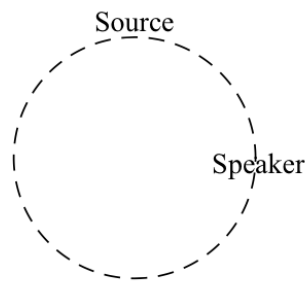
Source

Speaker

In Squartini's theory, "externality" is on the other hand applied to the source with respect to the speaker. We can represent this by switching the position of "speaker" and "source".

Figure 6 – Externality in Squartini's analysis
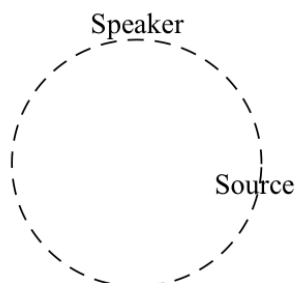
Speaker

Source

In the case at hand, addressing the speaker's internal or external perception of the source is crucial for the analysis of SA inferentiality (see §7.3) and HA evidentiality

(see §8.3 and §8.4). Firstly, it allows us to systematically explain the formal distinctions that appear in the encoding of some evidential forms; secondly, it clarifies the distribution of epistemics of doubt and certainty used along with inferential forms.

2.2.1.3 Assimilation of information and personal knowledge

One other point relevant for the discussion of Ainu evidentiality is the concept of personal knowledge, that is in turn connected to the process of information assimilation. With the term "assimilation", I mean the result of a cognitive process by which information enters the speaker's personal stock of knowledge, and that eventually ends in a given piece of information, originally acquired through an indirect source, to be reiterated and newly shared via direct evidentiality. In other words, assimilation entails a pragmatic shift in which the speaker demonstrates the possession of direct evidence for a piece of information she has previously acquired indirectly.

Aksu-Koç and Slobin (1986) discuss such phenomenon in their psychological account of Turkish evidentials. Throughout the process of assimilation, for the case of Turkish, information becomes part of the speaker's general knowledge, while the indirect source it originally was acquired through usually fades from memory (Aksu-Koç and Slobin, 1986: 162-3). Assimilation of information may be influenced by factors such as an unprepared mind and indirect experience, which then affect the process in terms of immediatedness and pragmatic extensions (e.g. irony) it may entail once the information is re-shared via direct evidentiality. Aksu-Koç and Slobin highlight this latter point with the following examples.

(25) *Nixon   istifa   et-**ti**.*

    Nixon   resignation   make-PAST

    'Nixon resigned.' (Aksu-Koç and Slobin, 1986: 163)

(26) *Ecevit   istifa   et-**miş**.*

    Ecevit   resignation   make-INDIRECT

    '(It is reported that) Ecevit resigned.' (Aksu-Koç and Slobin, 1986: 163)

Example (25) shows the direct evidential *-dI* (realized here as *-ti*) used to report information originally acquired indirectly (i.e. through news media). Aksu-Koç and Slobin explain that, in the case at hand, this was possible in light of the evolving events

57

of the day that increasingly prepared the speaker to expect Nixon's resignation. Once information regarding the actual resignation of Nixon was eventually acquired through the news (i.e. an indirect source), it was then quite natural to use the direct evidential to report it. In contrast, example (26) shows information reported via the indirect evidential *-miş*. Although here the circumstances in which the original acquisition of information happened were the same as in (25) (the speaker had learned about Ecevit's resignation through the news), the event was unexpected and therefore there was no other way to report it if not with the indirect evidential. This shows that the speaker's mind was unprepared for the event in question.

The generalization we can draw from the Turkish case is that the dynamics and result of information assimilation may depend on conditions that lie outside of the actual information transmission, but that rather also relate to the speaker's perspective towards said information (e.g. unpreparedness of mind). Faller (2002: 133-40) and Arakaki (2013: 56, 130-5) take a step further in this direction by differentiating between assimilation that concerns *personal* information (pertaining to events of the speaker's private life) or *encyclopaedic* information (pertaining to knowledge taken for granted within a culture or learned from authorities). In this sense, Faller and Arakaki view assimilation, respectively in Cuzco-Quechua and Luchuan Ryukyuan, from the perspective of the nature of information that is being assimilated. They posit such a distinction in light of the use of the direct evidential in these two languages which can or cannot be used to report assimilated information that has been previously acquired through an indirect source.[7]

(27) *Africa-pi-**n***   *elefante-kuna-qa*   *ka-n.*
     Africa-LOC-mi   elephant-PL-TOP   be-3
     'In Africa, there are elephants.' (Faller, 2002: 133)

(28) *Ken*   *ja*   *gookaku*   *s-a-**N**.*
     Ken   TOP   pass   do-PAST-DIR
     'Ken passed the entrance exam.' (Arakaki, 2013: 130)

Example (27) shows the case of encyclopaedic information assimilation in Cuzco-Quechua. The speaker may have learned that in Africa there are elephants in school or

---

[7] Glossing and translation for the following examples are Faller's and Arakaki's.

via other means, although the speaker does not have direct evidence for this fact (i.e. she has never seen elephants nor been to Africa herself), she can still report this information using direct evidentiality, encoded here by the clitic *-mi* (realized as *-n*). Conversely, example (28) illustrates a case of assimilation of personal information in Luchuan Ryukyuan. Arakaki describes the background to this utterance as a case where Ken's father has heard that Ken passed the exam and, on the following day, he reports this information to a colleague. Here he uses direct evidentiality, encoded by *-N*.

From these examples it seems that both languages allow assimilation of information regardless of the nature of said information (i.e. encyclopaedic or personal). However, we can also see that assimilation of personal information is actually not possible if the person this information pertains to is someone not close to the speaker, in terms of kinship or other personal relations.

(29) # *Hitoshi   ja   Ɂacaa   Tokyo Nkai   Ɂic-u-N.*
　　　Hitoshi TOP   tomorrow   Tokyo to   go-IMPF-DIR
　　　'Hitoshi is going to Tokyo tomorrow.' (Arakaki, 2013: 50)

Arakaki explains that the sentence in (29) would sound awkward if uttered by someone who does not know Hitoshi very well or who is not related to him in some way. Similarly, Faller (2002: 140) provides the case illustrated in (30).

(30) *Tura-y-qa   Italia-pi-**n**   llank'a-sha-n kay   semana-pi.*
　　　brother-1-TOP   Italy-LOC-mi work-PROG-3 this   week-LOC
　　　'My brother is working in Italy this week.' (Faller, 2002: 140)

In (30) the speaker talks about her own brother. Faller states that, if personal information concerned someone who is not a relative or a close acquaintance of the speaker, using the direct evidential *-mi* to report the piece of information in (30) would not be acceptable.

Aside from closeness of relations or personal acquaintance, assimilation may be sensitive to whether the speaker has direct experience for a given piece of information or not. In this respect, Luchuan Ryukyuan appears to be stricter than Cuzco-Quechua since assimilation of encyclopaedic information is not allowed if the speaker has not directly experienced the fact she is talking about.

(31) *Ucinaa   nu sango ja   zikoo ʔikiraku nat-oo-N   **Ndi**.*
     Okinawa GM coral   TOP much reduce   be-CON-DIR REP
     'Coral reefs in Okinawa are dying away.' (Arakaki, 2013: 134)

Arakaki (2013: 134-5) points out that, even if the speaker reads or hears about coral reefs, which Okinawan people are quite familiar with, she cannot report the information unless she has direct evidence for it. The sentence in (31) would not be acceptable if only the direct *-N* were used – here the reportative *-Ndi* needs to follow the direct evidential in order to correctly report this piece of information.

    Conversely, Cuzco-Quechua allows assimilation of encyclopaedic information although the speaker has no direct evidence.

(32) *Yunka-pi-**n**   k'usillu-kuna-qa   ka-n.*
     rainforest-LOC-mi   monkey-PL-TOP   be-3
     'In the rainforest, there are monkeys.' (Faller, 2002: 133)

Even though the speaker has never been in the rainforest nor seen a monkey, she can still utter the sentence in (32) using the direct evidential *-mi*. The presence of monkeys in the rainforest is in fact part of the shared cultural knowledge of Cuzco-Quechua speakers.

    The Ryukyuan and Quechua cases show that the indirect-to-direct pragmatic shift discussed by Aksu-Koç and Slobin may not merely depend on assimilation of information, but also on other factors such as the closeness of relations and direct evidence. In order to account for this, both Faller and Arakaki make reference to Kamio's (1997) theory of territory of information, which sees information shared between the speaker's and hearer's conceptual territories that include knowledge pertaining to themselves as well as to people they have close relations with. Kamio's theory of territory of information is relevant for Ainu too, and I address this more thoroughly in §6.6.

    For the purpose of the argument to follow, the concepts of personal and encyclopaedic information are collated into the general term "personal knowledge" – intended as comprehensive of information stored in the set of knowledge over which the speaker exerts direct control. Nonetheless, the separation assumed by Faller and

Arakaki is relevant to the case of Ainu as well, so I maintain the conceptual division between personal and encyclopaedic information. In fact, I will show in §7.4 and §8.4 how reportative evidentiality subsumes a process of assimilation that involves encyclopaedic information. On the other hand, in §7.2, I illustrate how assimilation of personal information is at the basis of SA personal knowledge evidentials, a feature which is not found in HA. Furthermore, I address the formal shift resulting from assimilation, where the hearsay evidential is substituted by the personal knowledge evidential (as it is the case for the indirect *-miş* substituted by the direct *-dI* in Turkish, *-Ndi* by *-N* in Ryukyuan, and *-si* by *-mi* in Quechua). As I will show in Chapters 7 and 8, the formal shift concerning encyclopaedic information is not consistent in Ainu, as it is attested in the Hokkaidō variety but not in the Sakhalin variety.

2.2.2 Epistemic modality

Beside the actual evidence the speaker has for her statement, many studies on evidentiality include in their definitions the degree of speaker's commitment, her attitude, or the level of certainty of the information. That is, epistemic modality has been often incorporated within the concept and definition of evidentiality.

In a discussion of Makah, Jacobsen (1986) states that when a speaker uses evidentiality, she assumes her statement is true despite not having the possibility of directly corroborating this assumption. In a similar, yet more precise, definition, Mithun (1986) considers evidentials in Northern Iroquoian and proposes that they encode degree of precision, probability and expectation. In another definition of epistemic modality, Palmer (2001) brings together evidentiality and epistemic modality under the domain of propositional modality – the kind of modality that concerns the speaker's judgement of the proposition. Moreover, Palmer asserts that it would be useless to try and separate evidentiality from propositional modality, since judgement of any proposition naturally and logically depends on the kind of evidence available for it.

Other studies on evidentiality, in contrast, are more cautious when describing its relation with epistemic modality. Although acknowledging the similarities between the two categories, de Haan (1999) stresses that they are conceptually very different – evidentiality is concerned with the *evidence* the speaker has for her statement, while epistemic modality has to do with the *evaluation* of the statement. This view is then supported and elaborated by Aikhenvald (2004) who, on the basis of typological observations, highlights how evidentials indeed may or may not subsume an epistemic

meaning. The inclusion of modality in evidential expressions is then not by all means obligatory and this fact contrasts with the one-to-one relation between the two categories suggested by Palmer (2001). Following from de Haan and Aikhenvald, Faller (2002) understands epistemic modality to be a separate grammatical category, which is conceptually different from evidentiality, but may nonetheless overlap with it. The same stance is taken by Arakaki (2013: 23), who recognizes the possibility for the two categories to intersect.

Along the lines of Faller and Arakaki, in my approach to epistemic modality I support de Haan's and Aikhenvald's definition, however with one minor adjustment regarding its categorial status. I define epistemic modality (similarly to evidentiality) as a conceptual category. Albeit the fact that some Ainu evidentials clearly suggest that the expression of epistemicity may be indeed grammaticalized in the language (within evidential contexts), I do not have enough supporting evidence to argue that this is indeed systematic. Furthermore, the limited scope of a study on evidentiality can hardly account for the grammaticalization of a category that semantically goes beyond the domain of information source. I take evidentiality and epistemic modality to be two separate conceptual categories, the former concerning evidence and the latter concerning evaluation. This conceptual separation does not rule out the possibility for the two categories to overlap which, to different extents, is exactly the case for Ainu evidentials. The example that best shows the interaction are SA personal knowledge evidentials (see §7.2).

2.2.2.1 Mirativity and first person

Following from the above discussion on epistemic modality, and specifically on speaker's evaluation, I shall now address mirativity, a concept that deserves some special attention. Mirativity as a linguistic term refers to the "unprepared mind" – that is, to a mode of action that may entail non-volitionality or unexpectedness on the speaker's part. As such, mirativity is usually said to convey unexpectedness and surprise towards a piece of information (Aikhenvald, 2004: 209-15).

There are discordant opinions about the status of mirativity within the grammar. Aikhenvald (2004), for instance, argues for the grammatical status of mirativity, which is expressed in languages via designated markers. This idea of the grammatical status of mirativity follows from DeLancey (1997), who discusses mirativity as a separate category, whose definition as being "grammatical" is compatible with what Aikhenvald

theorizes later (see opening of §2.2.1). There seem to be at least two main points in DeLancey's proposal that are prone to critiques, both of which concern the scope of his analysis on mirativity. Hill (2015) addresses these points, and ultimately challenges the proposal for the categorial status of mirativity advocated by DeLancey, in a study on the *lõ* particle in the Hare language, which is also the language DeLancey presents as providing the evidence for his proposal.

Firstly, Hill rightfully stresses how Hare as a single case language can hardly be used to propose the status of mirativity as a cross-linguistic category, but rather that any kind of evidence coming from the analysis of this particle should be used to make language-specific statements about mirativity. Secondly, Hill points out that the pragmatic environments surveyed by DeLancey as the ground for the use of mirativity appear to not always be consistent in terms of information source or the speaker's prepossessed knowledge about a certain situation. The fact that the kind of information source and speaker's prepossessed knowledge are exactly what DeLancey indicates as the factors that trigger the "surprise" meaning (i.e. mirativity), and that subsequently allow the use of the particle *lõ*, seems to show that the analysis of mirativity, and thus the proposal for its status as an independent category, are inconsistent with the actual Hare data.

Hill's critique to DeLancey's study highlights two important points: 1) no analysis on one single language can possibly provide enough evidence to safely advocate for the status of a category as either independent or grammatical, and 2) an analysis of mirativity requires a thorough consideration not only of the information source involved and its type, but also of the prepossessed knowledge on the speaker's part and other circumstantial factors that may fall outside of the domain of evidentiality proper.

I find Hill's critique quite sensible and, in my analysis, I do not assume that mirativity constitutes an independent category in Ainu. The scope of my research (especially in light of the fact that mirative expressions seem to vary considerably among Ainu dialects) cannot provide the evidence sufficient to advance any safe claim about the independency of mirativity, let alone about its grammatical status. I thus take mirativity to be a subcategory of epistemic modality which, following Aikhenvald (2004), I assume encodes the speaker's unprepared mind or surprise. I recognize the first person's close relation with mirativity (especially in its extention of unawareness) in that first person is known to trigger mirative meanings with some specific evidentials, most of all the ones encompassing an indirect source (Aikhenvald, 2004: 220).

Moreover, following Curnow (2001), I assume that the mirative meaning arising from an intersection between first person and some evidentials is indeed systematic, and that it contrasts with the meaning those same evidential expressions have when a third person is involved. Given the implication of mirative meaning by some evidential forms or evidential constructions (i.e. an evidential used in occurrence with first person) and the present advancements of reasearch on this topic, I take mirativity not to be part of the entailed meaning of evidentials or of other parts of the sentence where an evidential is used. In this sense I can define mirativity in Ainu as *parasitic*, in Peterson's (2015: 345) terms. Furthermore, in light of the environments where a mirative meaning arises in the reference data, it seems that mirativity Ainu is closer to the definition as "*parasitic* on the meaning of other grammatical elements" rather than as "*parasitic* on the structure of the sentence", which are both possibilities discussed in Peterson. Again in order to avoid unwanted conclusions about the grammatical status of evidentiality, for the case of Ainu it is more sensible to state that mirativity is *parasitic* on the meaning of other linguistic categories (i.e., exactly evidentiality and person) more so than grammatical elements.

2.2.3 Evidentiality and TAM categories

Typologically evidentiality may show a close interaction with the categories of tense, aspect and mood (for a definition of these categories for this study see §6.7). Aikhenvald (2004: 261) describes the correlations between information source and these categories as involving two separate issues: the expression of evidentiality within TAM systems (or vice versa), and the time reference of evidentials, which may not overlap with the time reference encoded by the TAM categories.

The first issue has to do with the fact that in many languages, depending on the tense or aspect of the verb, the use of certain evidentials may be ruled out or formally differentiated, giving rise to an evidential system which is not uniformly marked across the TAM system. The second issue concerns the possibility for an evidential to encode a time reference different from the one expressed by the tense category on the verb – this discrepancy signals that the moment when the event referred to happens and the moment of information acquisition do not coincide.

Citing Aoki (1986), Aikhenvald presents Japanese as one such case where the time frame of the evidential might not overlap with the one of the predicate. In (33) the present tense encoded by the *da* form of the copula overlaps with the present time frame

of the moment of acquisition, again signaled via *da* within the hearsay form *sō da*. In contrast, in (34) the past tense of the copular predicate (i.e. *datta*) contrasts with the present time frame encoded by the copula *da* in *sō da*.

(33) *Kare*   *wa*   *daigakusei*   ***da**-sō **da***.

he   TOPIC.MARKER university.student   be-HEARSAY

'They say he is a university student.' (Aoki, 1986: 231)

(34) *Kare*   *wa*   *daigakusei*   ***da**-**tta**-sō **da***.

he   TOPIC.MARKER university.student   be-PAST-HEARSAY

'They say he was a university student.' (Aoki, 1986: 231)

In my analysis, I show that evidentiality actively interacts with TAM categories, and specifically with tense and aspect. However, in the case of Ainu the first issue named by Aikhenvald does not apply. (In)compatibility between evidentials and TAM does not represent an issue for Ainu because, on the one hand, the distribution of evidentiality in correlation with different aspects does not show any clear limitations or systematic recursiveness and, on the other hand, tense as a category is not formally marked in the language (see §1.2), which does not give room to test for correlations with the use of evidentials.

Conversely, we are indeed able to analyze the time reference of evidentials and put it in a temporal relation to the event described by the verb. This is achieved through the consideration of verbal telicity (see §6.7.2) and its combination with the ontological status of the information source. The logical interdependencies between the event, the source stimulus, and the moment of acquisition of information provide us with a temporal frame which eventually clarifies the time reference for the verb.[8] My final assumption for this study of evidentiality and TAM categories is that evidentiality in Ainu actually represents one feature that helps clarify the category of tense, which would otherwise remain obscure to define given its lack of overt marking in the language.

---

[8] Here I use Reichenbach's Reference Tense Theory (RTT) to formalize these temporal relations (see §6.7.3).

2.2.4 Terminology

To conclude the discussion on my approach to evidentiality, I provide here a list of definitions for the terminology I use throughout my analysis of SA and HA. The evidential forms I will be addressing in the remainder of this thesis were prelimirarily listed in §1.1.1. In the list below they are presented again each one under the label with which I will be addrssing them throughout the analysis to follow and that identifies the evidential type they belong to. The subdivision of these forms into the following evidential types is assumed from their use in context (I refer the reader back to §1.1.1 for contextual examples for each one of these evidentials), and corroborating their belonging to these evidential types with empirical facts will be my main concern in Chapters 6, 7, and 8.

a) PERSONAL KNOWLEDGE: *-hV, -Ø*

b) DIRECT EVIDENTIALITY: *ruwe ne, siri ne, humi ne, hawe ne*

c) INDIRECT EVIDENTIALITY: *siri an, siri ki, humi as*

d) INFERENTIALITY: *ruwehe ne, ruwehe 'an, sirihi 'an, humihi 'an, hawehe 'an*

e) REPORTATIVE: *hawe as, manu*

Whenever possible, I decided to use already established terminology concerning the subdivision of evidential types. However, in those cases where the adoption of a specific terminology stems from critiques to Aikhenvald's typological observations, I shall make a comparison with her terminology in order to show how the new terminology I employ compares with other labels widely used in typological studies.

a) PERSONAL KNOWLEDGE (see §7.2): for SA this term indicates information acquired through any kind of sensorial or non-sensorial means which has been assimilated and which is now stored in someone's personal knowledge, thus being directly accessible to them. The term personal knowledge is here reminiscent of Faller's (2002) "best possible ground", in that it presupposes the involvement of different means of access to the information. However, it is even closer to Arakaki's (2013: 31-75) acceptation of "direct" evidentiality, who adopts the concept of "best evidence" and the interplay of information structure in the definition of this type of evidentiality. The major difference

66

with Arakaki is that her definition does not subsume epistemic modality, although from Arakaki's analysis we understand that direct evidentials may indeed have an epistemic extension of certainty. That is, epistemic modality does not regulate the formal use of the direct evidential in Luchuan Ryukyuan (Arakaki, 2013: 60-64). As I discuss in §7.2, this generalization does not hold for SA, where epistemic modality plays a decisive role in the formal expression of personal knowledge. Therefore, in order to avoid confusion with other established acceptations of the term "direct", in this thesis I use the term personal knowledge to indicate information based on a direct evidence (coming from assimilation) that also entails a strong component of the speaker's stance towards the information (i.e. epistemic modality).

b) DIRECT EVIDENTIALITY (see §8.3): for HA this term indicates information acquired through a direct sensorial stimulus (sight, hearing, touch, smell, internal sensation), which is directly perceived. Information can also be directly accessed after assimilation or reasoning on the basis of a sensorial stimulus, which is not limited to sight. The term "direct", as used by Aikhenvald (2004: 159-62), encompasses a strong visual component.[9] This does not comply with the case of HA. The possibility of having different sensorial stimuli at the basis of direct evidentiality appears analogous to what is described by Aikhenvald (2004: 372) for "firsthand" evidentiality. Like "non-firsthand" evidentiality, what is not confirmed in the case of HA are the systematic overtones of speaker participation, control, or volitionality assumed for evidentials of this type. The term "direct" as I use it is then somehow closer to Faller's (2002) or Arakaki's (2013) definitions. These approaches in fact assume the possibility of having direct information accessed through various means, including through internal reasoning following from assimilation of information.

c) INDIRECT EVIDENTIALITY (see §8.4): for HA this term indicates an information source based on conclusions drawn from what the speaker sees, hears, tastes, smells, touches or from what it is reported to her via conversation (i.e. reportative). HA INDIRECT EVIDENTIALITY thus is different from SA INFERENTIALITY in that the latter does not include information acquired through verbal report. As intended here, the term INDIRECT EVIDENTIALITY covers Aikhenvald's (2004: 393-4) "inferred evidential" and "non-firsthand"

---

[9] Especially for C2 and C3 systems, direct evidence is in fact limited to sight (Aikhenvald, 2004: 374).

evidentiality,[10] in that it simultaneously include inference and deduction from verbal report and the presence of a sensorial source accessible to the speaker. The important difference here is the lack of stimulus specification within inferentiality (see §2.2.1.1) and the fact that systematic extensions in meaning (that involve lack of speaker participation, control, or volitionality) are assumed for "non-firsthand" evidentiality – the same cannot be argued for HA indirect evidentiality.

d) INFERENTIALITY (see §7.3): for SA, this term indicates information acquired through a sensorial stimulus (sight, hearing, touch, smell, internal sensation) or logical reasoning on the basis of a tangible evidence. It does not indicate information acquired through conversation or verbal report (i.e. reportative). In this sense, SA inferentiality loosely corresponds to the "inferred" type discussed by Aikhenvald (2004: 373),[11] with some important exceptions. For one thing, Aikhenvald's label does not entail any difference in the sensorial stimulus at the basis of inference (see 2.2.1.1 above). Furthermore, reasoning in the case of SA is inevitably based on sensorial (namely, visual) evidence. The term as used here thus unites characteristics that Aikhenvald (2004: 63) recognizes proper of "inference" and "assumption". The same distinction is also argued for by Willett (1988), who separates "result" from "reasoning" within the domain of inferring evidentials.

e) REPORTATIVE (see §7.4, §8.4): for both SA and HA, this term indicates information acquired through conversation, whose source may or may not be overtly referenced. Overt reference to a source differentiates reportative into QUOTATIVE (when the source is retrievable) and HEARSAY (when the source is unknown or omitted). This terminology is similar to Aikhenvald's (2004: 64, 374), who adopts this same subdivision of reportative evidentiality.

2.3 Summary

In this chapter I presented my framework for evidentiality, deriving my assumptions mainly from typological studies on this category. To summarize, for the case of Ainu, I intend evidentiality as being an independent conceptual category, that is semantically and conceptually distinguished from epistemic modality, and is concerned with the kind

---

[10] As mentioned in relation to A1 and A2 systems in Aikhenvald's categorization.

[11] Specifically for languages falling into her B1, B2 and B4 classes.

of source and the mode of information acquisition. Evidentiality is not obligatory and it is not a closed category. Evidential forms can be classified in terms of the sensory stimuli through which information is acquired and in terms of of the internal or external perception of these stimuli. Furthermore, evidentiality may encompass a cognitive process of information assimilation and it is seen to actively interact with other language categories unrelated to source of information, specifically tense and aspect.

Chapter 3

Evidentiality in Ainu

3.1 Content of the chapter

Chapter 3 is dedicated to an introduction of the basic semantico-pragmatic and morphosyntactic characteristics of Ainu evidentials. In §3.2 I present the assumed subdivision of the evidential forms taken into account in this study (§3.2.1). Moreover, I provide a brief overview on their distribution and frequency (§3.2.2) as well as a profile of what appears to have been their historical development (§3.2.3). In §3.3 I give a review of studies on evidentiality in theoretical linguistics and of some more specific accounts on evidential forms as they are found in the existing literature on Ainu. In a second moment, in §3.4, I provide a brief review of previous studies on those morphosyntactic processes, relevant for the structural analysis that I carry out in Chapter 5, which I also address in §3.5 while giving some preliminary observations on the morphosyntax of Ainu evidential forms, by illustrating them as they are featured in Ainu evidential constructions. Finally, §3.6 summarizes.

3.2 Evidentiality in Ainu

In this section, I discuss evidentiality with reference specifically to Ainu. First, I present the evidential forms that are the target of the present study, including their distribution in the reference corpora and their historical development. In the second subsection, I give a short literature review of previous studies on Ainu evidentiality, addressing both works on evidentiality in the language as a whole as well as those that focus on the formal devices employed in the language to code information source.

3.2.1 Formal devices encoding evidentiality and their subdivision

The following table summarizes the formal devices I address as markers of source of information throughout the analysis of Ainu evidentiality to follow in Chapters 7 and 8. For each form or group of forms in the table, I indicate the Ainu variety they belong to, and the label I use to reference them in the remainder of the thesis. The definitions for the terminology used here were presented in §2.2.4.

Table 3 – Ainu evidential forms

Ainu variety	Form	Label
Sakhalin Ainu (SA)	*-hV* *-Ø*	personal knowledge evidentials
	ruwehe ne(e) *ruwehe 'an* *sirihi 'an* *humihi 'an* *hawehe 'an*	inferentials
	manu	reportative evidential
Hokkaidō Ainu (HA)	*ruwe ne* *siri ne* *humi ne* *hawe ne*	direct evidentials
	siri an *siri ki* *humi as* *hawe as*	indirect evidentials

On the one hand, the subdivision presented in Table 3 groups Ainu evidential forms according to their semantic and pragmatic function, anticipating how they will be later analyzed in Chapters 7 and 8. On the other hand, I separate the SA and HA forms due to the considerable differences in the overall organization of the evidential system found in these two Ainu varieties (see Chapter 9), despite the fact they showcase some analogous evidential forms which clearly share a common origin (e.g. SA inferentials and HA indirect evidentials, see Chapter 5).

3.2.2 Distribution

Table 4 gives a summary of the distribution of evidential forms for both varieties taken into account in my study. For SA, I separate Eastern dialects (ES) from Western dialects (WS) as the frequency of different evidentials can differ sharply between them and because some evidential forms that are found in one group of dialects may be hardly or never attested in the other.

In Table 4, along with the total number of tokens found in the reference corpora, I provide a percentage showing the frequency of each evidential form within the total number of evidentials attested for each variety or group of dialects.

Table 4 – Distribution of evidential forms

Variety	Evidential type	Evidential form	Dialect group	No. of tokens		Frequency[12]
SA	personal knowledge	*-hV*	ES	81	212	3,86%
			WS	131		
		-Ø	ES	39	109	1,98%
			WS	70		
	inferential	*ruwehe ne*	ES	11	11	0,20%
			WS	0		
		ruwehe an	ES	44	78	1,42%
			WS	34		
		sirihi an	ES	0	17	0,31%
			WS	17		
		humihi an	ES	22	31	0,56%
			WS	9		
		hawehe an	ES	13	43	0,78%
			WS	32		
	reportative	*manu*	ES	1474	4998	90,89%
			WS	3524		
HA	direct	*ruwe ne*	-	1508		67,56%
		siri ne	-	149		6,68%
		humi ne	-	45		2,02%
		hawe ne	-	298		13,35%
	indirect	*siri an*	-	59		2,64%
		siri ki	-	42		1,88%
		humi as	-	37		1,66%
		hawe as	-	94		4,21%

[12] Percentage of the tokens for each evidential form within the total tokens of evidentiality.

3.2.3 Historical development

Bugaeva (2012a) rightfully states that Ainu represents an example of those rare languages whose evidential forms have developed from nouns. Typologically, in fact, evidentials are seen to originate mostly from verbs and rarely from nouns (Aikhenvald, 2004: 271, 284). Although Bugaeva's statement refers to evidential forms of the Saru and Chitose dialects of Hokkaidō, the same generalization holds for the other South-Western dialects and the Sakhalin dialects I consider here. Nominal categories seem to be systematically involved in the historical development of Ainu evidentials, though there are some relevant differences.

3.2.3.1 The origin of SA personal knowledge evidentials *-hV* and *-Ø*

Bugaeva (2016: 104) notices the peculiarity of SA in that this variety has developed a non-finite possessive-style marking on verbs, which is not found elsewhere in Ainu. As the examples below illustrate, the verb marker under scrutiny here (35) is formally identical to the possessive morpheme that appears on nouns (36). I delay the discussion of possessive morphosyntax to §3.4.

(35) *Ku-yee-**he***   *sunke.*
     1SS-3SO/say-NMLZ   3SS/be.false
     'What I say is a lie.' [lit.: 'The fact that I say (this) is false.'] (MRA: 95)

(36) *Ku-cise-**he**.*
     1S-house-POSS
     'My house.' (Murasaki, 1976a: 83)

Based on the evidence that the *-hV* marker of SA occurs mostly in the same environments of nominalizing words in HA, Bugaeva argues that *-hV* fully represents a case of nominalization.

The SA strategy of adding a possessive-like agreement to the clause with a nominalizing function, however, allegedly represents an advanced stage in the development of nominalization in the Ainu language. Again through a cross-dialectal comparison, Bugaeva (2016: 113) postulates that clause nominalization in Ainu may

have witnessed a first stage involving zero-nominalization, which is only attested in HA. Example (37) is provided by Bugaeva (2016: 99) and comes from Chitose Ainu.

(37) *[Apunno   a-reska,   pirka a-reska]*
   safely   4S-3PO/bring.up   good   4S-3PO/bring.up
ki   wa…
SLV/VO/do   and
'We brought them up safely, we brought them up good indeed and…'
(BUG: 285)

The strategy of adding a nominalizing word is regarded as the next stage, shown in (38), which would have then given rise to the possessive-like agreement marker we witness in SA (see (35) above).

(38) *[Opompaki nah   an-ramu   an-**pe**]   ota'as   nee.*
   frog   COMP 1PS-3SO/think PRF-NMLZ   sculpin   COP
'What [lit.: the things] I thought [were] frogs were sculpins.' (MRA: 106)

Bugaeva proposes that the emergence of such nominalizing construction might have started from adverbial constructions that contain, either synchronically or diachronically, the copula *ne(e)* (i.e. *neeno* 'as if'). In these environments, the construction [verb]-*hV* would have then begun to be used as a non-finite structure headed by the copula.

(39) *['E-ramu-**hu**]   **neeno**   pirikano   kii   wa.*
   2SS-3SO/think-NMLZ   as.if   well   2SS/3SO/do   FIN
'Do it well as you think.' (Murasaki, 1976a: 141)

In a later stage of its historical development, the *-hV* nominalization allegedly started to be used also in non-adverbial clauses that lacked the copula *ne(e)*, which was then added.

(40) *[Sasagoya onnay-ke ta ama-hci-**hi**]* **nee**.

     hut   3S/inside-POSS   in   3SO/put-3PS-PK   COP

     'They put [the bear] inside the hut.' (MRA: 76)

Finally, the use of the bare nominalized clause with no copula was fixed in a number of contexts with a specific pragmatic function, which gave rise to the use of the construction as a non-embedded (i.e. finite) structure.

(41) *[Poro 'iso 'e-nukara ka hanki-**hii**?]*

     3SS/be.big   bear   2SS-3SO/see   even   NEG-PK

     'Haven't you seen the big bear?' ['Is it the case that you have not seen it such that now you say so?'] (MRA: 75)

Sentences like (41), and the development that resulted in such constructions, strikingly resembles a case of insubordination. In my analysis of SA evidentials I do consider the possibility for personal knowledge evidentials to actually represent a case of insubordination, as described in Evans (2007, 2009) (see §4.5 for a definition of this term). This is left for the discussion in §5.2.2 of the morphosyntax of evidential forms.

3.2.3.2 Sensorial nouns as the basis of evidentiality

Indirect evidentials of HA and inferentials of SA are a clear case of a noun+verb compound that developed into a marker of evidentiality. The pragmatic function of markers of information source is most likely to have arisen thanks to the original semantics of the noun involved in the compound – this is better discussed in Chapters 7 and 8.

     The formal devices that I regard as expressing indirect evidentiality in HA have been discussed often (even in non-evidential studies) as involving a process of noun incorporation (see §3.5). Indeed evidence for the sensibleness of such an analysis comes from the use of suprasegmentals (i.e. stress patterns), morphology (e.g. underspecification of the incorporated noun), and prosody. Although similar clear statements on their morphosyntactic characteristics cannot be found in the literature (see §3.3.3), we might postulate the same process of noun incorporation for inferentials of SA. However, the morphological variation we witness in these noun-verb compounds,

both between varieties and within the same dialect, are clear, and they need to be addressed separately (see §5.4 and §5.5).

An underlying noun+verb compound, similar to the one featured in the domains of indirect and inferential evidentiality in HA and SA, is recognized for the direct evidentials of HA *ruwe ne*, *siri ne*, *humi ne* and *hawe ne*. What we notice here is that in the case of HA direct evidentiality and SA inferentiality we find the same verb involved in compounding (i.e. *ne* and *'an* respectively), while in the case of HA indirect evidentiality we cannot see such cohesiveness. The forms *siri an*, *siri ki*, *humi as* and *hawe as*, in fact, display different verbs with different original semantics – *an* 'be, exist', *ki* 'do' and *as* 'stand'. The pragmatic reasons behind this are not straightforward (see §8.4).

Some scholars have considered the evolution of noun+verb evidentials from elements involved in a biclausal structure into parts of a monoclausal structure. This idea is first introduced in Bugaeva (2012a: 8), who proposes a new analysis for the construction *ruwe ne*, which due to its advanced stage of grammaticalization, is on the verge of turning into an auxiliary and thus forming a mono-clausal expression. Evidence which supports and denies the grammaticalization of the sensorial noun in direct evidential expressions is given in Bugaeva (2013: 671-2) regarding the ongoing transition process from noun+verb compound to auxiliaries in the *ruwe ne* construction. The main evidence that testifies the status of direct evidentials as noun+verb compound comes from prosody, the compatibility of the nominal element with nominal restrictive particles like *ka* 'even', their formal function as arguments of a main clause predicate (i.e. *ne* or *an*), the alternation of the verbal element within the noun+verb compound itself, and the potential to fall under the scope of separate negation or TAM. On the other hand, evidence in support of the status of direct evidentials as auxiliaries comes from the fact that the sensorial nouns do not allow modifiers, which is in contrast to other non-grammaticalized nouns in the head position of relative clauses. We cannot find any similar claims about the indirect evidentials *siri an*, *siri ki*, *humi as* and *hawe as*, despite their structural analogies with the forms treated by Bugaeva. The evolution of evidentials that include a sensorial noun appears to be complex, and the picture we obtain from the reference corpora clearly suggests that an intricate process of grammaticalization must have been ongoing in the language at the moment the tokens were collected. I discuss this in §5.5.

3.2.3.3 Possible origins of *manu*

The origins of the reportative *manu* of SA are dubious. *Manu* appears to be the most grammaticalized evidential form among the ones found in SA (see §5.6). This form shows no internal morphophonological variations across the tokens found in the reference corpora which might serve as a hint to its origins. That is, we can make no safe claim on the historical development of SA reportative form. Some scholars speculate that it might have developed from an original *hum 'an* 'there is the sound' form (Bugaeva, p.c.), but more historical data would be needed to confirm this.

3.3 Previous research on Ainu evidentiality and evidential forms

In this subsection I present a literature review of previous studies on Ainu evidentiality. Subsection §3.3.1 is dedicated to proposals and theories on evidentiality in general, while sections §3.3.2 to §3.3.5 deal with previous studies on the single forms that are used to encode information source in Ainu.

3.3.1 Evidentiality in Ainu studies

The emergence of monothematic studies on Ainu evidentiality is quite recent and consistent descriptions of this category of the language have started to appear only from the 2000s. It is commonly acknowledged that the first attempt to describe the linguistic means by which source of information is coded in Ainu was made by Nakagawa (1995) in his dictionary of the Chitose dialect (Southern Hokkaidō). While sporadic identification of the function of coding source of information (or epistemic modality) borne by specific parts of speech is retrievable from a number of linguistic descriptions predating Nakagawa's dictionary (e.g. Murasaki, 1976a), there is no direct mention of this specific function in terms of "evidentiality". This is easily ascribable to the fact that systematic speculation on this category has started fairly late in the field of general linguistics, mainly after Chafe and Nichols (1986), and thus after many of the accounts on Ainu had already been published. To be precise, not even Nakagawa (1995) overtly uses the term "evidentiality" – nevertheless, this is the first case where several separate forms are addressed together as equally fulfilling the same pragmatic function.

To the best of my knowledge, Izutsu (2004) and Bugaeva (2012a) are the only two attempts to provide an overall account of evidentiality in the Ainu language. These works respectively focus on the Asahikawa dialect and on the Saru-Chitose dialect of Hokkaidō Ainu. In contrast, no similar study is available to date for any of the Sakhalin

Ainu dialects. As for the works following these two publications, we see a more focused approach to Ainu evidentiality, with works usually concentrating on one single evidential form by describing its characteristics, or focusing on one specific feature of evidentiality displayed by more than one form simultaneously.

Although to date the most attention is given to Hokkaidō dialects, relevant reports on Sakhalin Ainu evidentiality (e.g. Takahashi 2013, 2014) have also begun to appear. The only overt attempt to discuss Ainu evidentiality in a typological perspective is Bugaeva (2012a), as she develops her report on Saru-Chitose Ainu evidentials with reference to Aikhenvald's (2004) categorization of evidential systems.[13] She also makes direct reference to typology here with reference to the origin of evidential forms, and their use in respect to subordination, sentence polarity and interrogativeness. Already from these preliminary observations, Bugaeva successfully highlights how Ainu evidentials do not seem to fit in many of the typological characteristics described for evidentiality (e.g. they have developed from nouns and not from verbs, they can be used in conditional clauses), being thus possibly the first scholar to point out the need for a more in-depth study of this category in Ainu.

While Bugaeva (2012a) limits herself to evidential forms ending with the copula *ne* (e.g. *ruwe ne*), a broader approach is taken in Izutsu (2004) who, following from Nakagawa (1995), includes in the picture also evidential forms ending with verbs like *as* or *an* (e.g. *humas*, *hawan*). Moreover, differently from the more syntax-based approach of Bugaeva, Izutsu gives attention to the semantic-pragmatic features of evidentiality in Asahikawa Ainu, by highlighting the employment of nouns encoding a sensorial stimulus in the formation of evidential forms (e.g. *hum* 'sound') and the possible double pragmatic function of evidentials. Here, he specifically underlines the use of *hawe as* to mark both inferentiality and hearsay. Izutsu also mentions those separate forms or "linguistic evidentials" (Izutsu, 2004: 44) that appear to function as evidentials nonetheless (e.g. *kotom an* 'as if' or *yakaye* 'like'), though they did not developed from a sensorial noun.

Further insights on the pragmatics of Ainu evidentiality come from Takahashi (2009, 2013). By focusing on the semantics of the sensorial nouns contained in evidential forms of the Tokachi dialect (HA), Takahashi (2013) indirectly introduces the concept of stimulus ontology following from a brief argumentation on the different

---

[13] Her conclusions are that Saru-Chitose Ainu displays a four-term evidential system (C1 in Aikhenvald's categorization).

existential semantics borne out by the copula *ne* and the intransitive *an* 'exist', which are used to form evidentials. He differentiates evidential forms in terms of the "individual level" or "situation level"[14] on which the speaker accesses content of information. More on the pragmatics of evidentiality (although in this case of Sakhalin Ainu) is discussed in Takahashi (2009). Takahashi is here the first to discuss deixis in conjunction with information source, focusing on the use of the hearsay *manu* in narrative contexts – important observations are made here on the perspective taken by the speaker in respect to the information.

With regards to the structural properties of evidentials, Bugaeva (2012a) and Takahashi (2014) represent two very valuable contributions. Bugaeva underlines the morphological features of Saru-Chitose Ainu evidentials with only brief mention of their syntactic status, while Takahashi directly addresses the issue of syntax by discussing the insubordination properties of indirect evidentials in the Tokachi dialect (and again, though only secondarily, in Takahashi 2013). In particular, he stresses how this phenomenon appears to fulfill the pragmatic function of indicating mirativity and polarity (in accord with Aikhenvald 2004). A comparison with Sakhalin Ainu is also present, which suggests that a systematic connection between insubordination and evidentiality may be found in Ainu dialects outside of the Hokkaidō variety too. Recent speculation (i.e. Bugaeva 2013) has proposed that Hokkaidō Ainu evidentials represent a case of "mermaid" constructions (Tsunoda, 2013), shedding more light on the syntactic status of these forms.

The interaction of evidentiality with TAM categories has been investigated to a certain extent by Satō (2011, 2013), while Izutsu (2004) limits himself to some general remarks. In his 2011 publication, Satō discusses the use of the modal *nankor* 'maybe' in indirect connection to evidentiality – via a comparison with the Japanese counterpart *darō* 'maybe', Satō notices the restrictions in the use of *nankor* with past time reference, but also its acceptability with "direct expressions" which differentiates it from *darō*. More specific discussion on aspect and tense is found in Satō (2013), where *siri ki* and *siri an* (analyzed here in its alloform *siran*) are considered in light of their difference in referencing a completed or continuous event. The peculiarity of *siran* was already singled out in Kindaichi (1931) and Chiri (1936), but Satō is the first one to look at *siran* as a polyfunctional form simultaneously expressing aspect, mood and evidentiality. On a more semantic-pragmatic note, Satō also notices the correlation

---

[14] My translations from Japanese of the terms 個体レベル *kotai reberu* and 場面レベル *bamen reberu.*

between *siran* and *ruwe ne*, despite the fact these two forms originate from two different sensorial nouns (i.e. *sir* 'view' and *ru* 'trace'), addressing as a possible reason for this the different ways of information acquisition involved.

Though this is a highly debated issue in cross-linguistic speculation on evidentiality, we cannot find any overt statement discussing the interplay of evidentiality with epistemic modality. This latter is nonetheless mentioned in works on Ainu evidentials (e.g. Bugaeva, 2012a; Takahashi, 2014) in a way that seemingly suggests it can be considered related to source of information, and yet conceptually separate from it.[15]

3.3.2 Accounts of personal knowledge evidential forms

Before Bugaeva (2016), we can find no clear discussion of the *-hV* form in terms of evidentiality. Rather, researchers put the most attention into describing its structural properties.

Problems regarding a desirable unitary definition of the *-hV* form are not only restricted to morphophonology, but also concern morphosyntax. This latter aspect of the *-hV* form has been treated to some extent in Furukawa (1967) and in deeper detail in Murasaki (1976a). Murasaki mentions *-hV* in two separate sections. It is listed in the chapter about noun phrases, specifically among "formal nouns",[16] where it is said to be a suffix that derives a verbal noun (Murasaki, 1976: 95). No further information on the syntactic use of said suffix is given, nor is the term "nominalization" explicitly mentioned. However, from the examples provided, it appears that the constituent obtained from this derivational process functions as a full-fledged noun. For instance, it may become the argument of a verb.

(42) ***Ku-yee-he*** *sunke.*
    1SS-3SO/say-NMLZ   3SS/be.false
    'What I say is a lie.' [lit.: 'The fact that I say (this) is false.'] (Murasaki, 1976a :95)

---

[15] Although Takahashi (2013: 153) is not very clear on the assumed separtion/overlapping of evidentiality and epistemic modality.

[16] Translation of the Japanese term 形式名詞 *keishiki meishi*.

The author also discusses cases where the copula *ne(e)* takes the nominalized constituent as its argument, and here Murasaki (1976: 95) asserts that in this case the verbal noun loses its meaning of "the fact that" and the whole construction is better seen as a single "auxiliary compound phrase".[17] The construction *-hV nee nanko* (to which she refers here) is just one example of a number of clearly poly-morphemic constructions listed under "final particles".

The form *-hV* is in fact otherwise discussed as a component of some sentence-final constructions that reportedly conclude a sentence with no possibility of further syntactic expansions, if not with the complementizer *nah* (Murasaki, 1976: 64-74). There is hardly any insight into the internal composition of these sentence-final constructions. Moreover, confusion regarding the surface forms and the differentiation of said constructions throughout the paragraph suggests that the analysis is highly tentative. Among the total 29 final particles listed, seven of them include *-hV*. More importantly, this seems to be the only part of the particle that can be omitted, since it is reported in brackets. The only exception is *-hVV* (distinguished into two variants on the basis of the rising or falling intonation). There is no overt mention of the noun-derivation process discussed later on in the same work, but rather *-hV* appears as a non-mandatory element of the particles. Likewise, no direct connection is made for *-hVV* either, which seems to distinguish itself from the nominalizing *-hV* only for the lengthened vowel.

Murasaki (1976a) represents a development from Furukawa (1967: 109), where the form *-hV* is reported, but falls under the discussion on the zero suffix. Here *-Ø* does not refer to a separate morpheme with no overt surface realization, but rather it indicates the application of a transformational rule, by which intonation is imparted on the predicate.[18] This verb bare stem, in turn, may be comprehensive of *-hV*. In this instance too, we find a distinction for *-Ø* according to the rising or falling intonation that applies over the predicate, as it is the case for *-hVV* in Murasaki (1976a). We can see then that, although the notation '-Ø' is used in Furukawa, this is meant neither as representative of a morpheme with no surface realization, nor does it stand to indicate the result of a syntactic process. That is, we find no clear mentions to the presence of a zero-nominalization in past works on SA.

---

[17] Translation of the Japanese 助動詞連語 *jodōshi rengo.*

[18] Murasaki discusses the syntax of SA in this work within the Chomskian framework of generative grammar.

3.3.3 Accounts on inferential forms of SA

Looking at previous literature on SA, we see that the four constructions I address as inferentials have not been given equal attention. The most exhaustive account on SA (i.e. Murasaki, 1976a) discusses only *ruwehe 'an* and *sirihi 'an* with no mention of the other two inferential forms. Despite this apparent descriptive fault, Murasaki's report is not careless in any way. In fact, in the limited amount of collected texts used as the main reference for Murasaki's descriptive account (among which MRA), *hawehe 'an* never appears and *humihi 'an* is rarely encountered. Moreover, due to the noun-like features it displays and to the context it is used in, *humihi 'an* is regarded as an independent predication in the sentence – that is, a simple possessive noun form that does not function as a marker of evidentiality (Murasaki, p.c.). The form *hawehe 'an* appears more frequently in a later corpus collected by Murasaki herself (i.e. MRB), and a high number of *humihi 'an* tokens are featured in corpora from East Sakhalin (e.g. PLA). However, despite the considerable number of tokens available, no descriptive account has been produced on these particular forms.

As far as *ruwehe 'an* and *sirihi 'an* are concerned, Murasaki makes clear mention of their function as markers of information source (though not quite in terms of "evidentiality"). She describes *sirihi 'an* as a form indicating "an hypothesis like 'it seems that…' based on judgement from the surrounding situation"[19] (Murasaki, 1976a: 97). In turns, *ruwehe 'an* seems to contrast *sirihi 'an* in terms of epistemic force, as we deduce from Murasaki's definition of the form's function:

"*Ruwehe an* is almost the same of *sirihi an*, but its degree of certainty is higher."[20] (Murasaki, 1976a: 98)

Furthermore, Murasaki adds that the use of *ruwehe 'an* may also be licensed by the presence of evident proof, necessary for an 'it's-like-this' kind of judgement. This last specification, together with the more general definitions quoted above, suggests that, at least to a certain extent, both the evidential and the epistemic functions of *ruwehe 'an* and *sirihi 'an* have been recognized and openly addressed. The lack of a theoretical background to source of information has most likely hindered further discussion on this topic.

---

[19] My translation from Japanese.

[20] My translation from Japanese.

Morphosyntactic description of *ruwehe 'an* and *sirihi 'an* is also quite scant in the literature. Murasaki calls both *ruwehe* and *sirihi* "formal nouns" and inserts them in the homonymous section of her grammar, as nouns that structurally need the support of a preceding verb and formally turn this verb into a noun phrase (Murasaki, 1976a: 94). This resulting noun phrase is then completed by the addition of the verb *'an* 'exist', that seemingly takes the formal noun *ruwehe/sirihi* as its argument. Such structural analysis of inferential forms is not actually spelled out in Murasaki's account, but it is rather a fruit of the deduction we can make on the basis of her description. As a matter of fact, all that is said about the syntax of these forms is reduced to a graphic scheme that tries to illustrate the structural relation of the "notional noun" *ruwehe/sirihi* with the main clause (Murasaki, 1976a: 97). What is more, this visual representation is mentioned expressly for *sirihi 'an*, while no particular claim is made for *ruwehe 'an*, so that the applicability to this latter case is derived only by analogy. The use of inferentials as an independent predication is only briefly hinted at, and again only for *sirihi 'an*. Murasaki in fact mentions that this form can be used as a single predicate, while the same seems not to be possible for *ruwehe 'an*.

3.3.4 Accounts on direct and indirect evidentials of HA

The use of the sensorial nouns *ru* 'trace', *sir* 'appearance, situation', *hum* 'sound' and *haw* 'voice' to encode source of information in HA dialects has long been recognized, either directly or indirectly, and reported in literature on Ainu, although not always in terms of "evidentiality" (see opening of §3.3). From previous literature, it is interesting to note how researchers have focused their attention mainly on what I treat here as direct evidentials, while the description of indirect evidentials of HA (especially of their morphosyntactic properties) remains to date largely overlooked.

The first relevant account on the morphosyntax of HA's direct and indirect evidentials is found in Refsing (1986), who describes those forms as they appear in the Shizunai dialect, that I here analyze as direct evidentials. In her report, the form *humi ne* is the only "evidential" to not be mentioned. All other direct evidential forms are not discussed as connected to "information source" as such, though their pragmatic application has been clearly acknowledged. Refsing (1986: 261-2) separates *ruwe* and *hawe* from *siri*, as the former are "semantically weak" while the latter makes overt reference to a situation. These forms are nevertheless brought together by their syntactic function, said to be nominalizers. As nominalizers, Refsing states that *ruwe*, *hawe* and

siri form embedded clauses – on the basis of this syntactic function she further analyzes them as "relational adjuncts" (Refsing, 1986: 259) which may be followed by case pospositions. In Refsing's framework, "relational adjuncts" have the pragmatic function to indicate case ralationships (Refsing, 1986: 273). She provides the basic syntactic structures of such "adjuncts", failing however to explain the structural constraints that do or do not allow for the presence of specific syntactic material.

Sensorial nouns involved in the encoding of direct evidentiality are defined as nominalizers also by Tamura (2000: 92). She stresses how the copula *ne* is added here as to syntactically complete the phrase (Tamura, 2000: 227). From her analysis, we infer that the clause, nominalized via the sensorial noun, syntactically functions as a complement of the copula *ne*, but this point is not developed further in Tamura's account. In contrast, Bugaeva (2004: 70) underlines the syntactic function of the copular argument covered by the nominalized clause, following from the observations in Tamura (2000). Furthermore, Bugaeva is the first scholar to reason on the alternation of the copula *ne* and the one-place *an* as following the nominalized clause, concluding that such an alternation is due to pragmatic reasons.

Bugaeva (2012a, 2013) further expands from these preliminary remarks on the syntactic structure of direct evidentials by considering the possible process of grammaticalization of these forms that may have led to the emergence of a mono-clausal construction. This idea is first introduced in Bugaeva (2012a: 8), where she proposes a new analysis for the construction *ruwe ne* which, due to its advanced stage of grammaticalization, is on the verge of turning into an auxiliary and thus forming a mono-clausal expression. Evidence in support of and against the grammaticalization of the sensorial noun in direct evidential expressions is given in Bugaeva (2013: 671-2), where she underlines the ongoing transition process from noun+verb compound to auxiliaries that concerns *ruwe ne* in particular.

3.3.5 Accounts on the reportative *manu*

The only vaguely morphosyntactic account on reportative *manu* available from previous literature is to be found in Murasaki (1976a: 58). In her sketch grammar of Rayciska Ainu, Murasaki includes *manu* among auxiliaries but, apart from some semantico-pragmatic information on its use as a reportative marker, there is no exhaustive insight on its structural properties. Among the evidentials I analyze in this study, *manu* represents the only highly underdescribed form.

3.4 Morphosyntactic processes and evidentiality – previous research on Ainu

In this section, I provide an overview of previous accounts for the morphosyntactic processes that I will address later in §3.5 while presenting my preliminary observations on the structure of Ainu evidentials and evidential expressions.

3.4.1 Possessive constructions

To formally mark possession of nouns, Ainu resorts to either a morphological or an analytic construction. In the morphological construction, the noun referring to the possessee is the one that bears the formal marking that indicates possession. The possessive morpheme takes the shape of *-hV* (where *V* stands for "any vowel") when it attaches to a noun ending in a vowel, while it appears in its alloform *-VhV* when the host noun ends in a consonant. The vowel (or vowels) in this morpheme are copied from the preceding stem-final vowel, or the pre-consonantal vowel for those stems ending in a consonant.

Kampi	>	*kampi-hi*
letter		letter-POSS

Kisar	>	*kisar-aha*
ear		ear-POSS

Especially in fast speech, the final *-hV* may be dropped, so that for nouns ending in a consonant, the possessive form is only recognizable from the first vowel of the possessive morpheme (i.e. *kisar-a*), while for nouns ending in a vowel the possessive form results in a surface word identical to the non-possessive one (Tamura, 2000: 85).

In HA, consonant-ending nouns are on average more common than they are in SA. Moreover, the possessive form of a considerable number of these HA nouns that end in a consonant represent exceptions to the copying rule illustrated above, in that the vowels of the possessive morpheme do not correspond to the last one present in the noun stem, nor do they necessarily correspond to any of the other stem vowels (Tamura, 2000: 84-85).

Par		*par-oho*	(not **par-aha*)
mouth	>	mouth-POSS	

Analogous exceptions are also featured in SA, though they are less common.

Teh		*tek-ihi*	(not **tek-ehe*)[21]
hand	>	hand-POSS	

The possessor formally appears in the shape of a personal agreement prefix and forms one single morphophonological word with the possessed noun. These personal prefixes are the same ones used to mark the subject on two-place verbs when the object is a third person (Tamura, 2000: 51; Murasaki, 1976a: 49). In this respect, possessive constructions represent a rare case of verbal morphology employed on nominals.

(43) ***Ku****-kisar-aha*.

    1S-ear-POSS

    'My ear.'

The paradigm for SA and HA possessive forms is outlined below. The noun *sik* (HA), *sih* (SA) 'eye' is used here as a model.

<div align="center">Hokkaidō Ainu</div>

	1st	*ku-sik-ihi*
	2nd	*e-sik-ihi*
sg.	3rd	*sik-ihi*
	4th	*a-sik-ihi*
	1st	*ci-sik-ihi*
	2nd	*eci-sik-ihi*
pl.	3rd	*sik-ihi*
	4th	*a-sik-ihi*

---

[21] The underlying root of *teh* 'hand' is **tek*, whose *k* undergoes aspiration when word-final. The final consonant in the root is realized as non-aspirated when in an intervocalic environment (Murasaki, 1976a: 1-7), which is derived in this instance from the addition of the possessive morpheme.

Sakhalin Ainu		
	1st	*ku-sik-ihi*
sg.	2nd	*'e-sik-ihi*
	3rd	*sik-ihi*
	1st	*'an-sik-ihi*
pl.	2nd	*'eci-sik-ihi*
	3rd	*sik-ihi*[22]

The analytical way to express possession involves the use of the transitive verb *kor* (HA) / *koro* (SA) 'have' in what can be formally recognized as a relative construction (Bugaeva, 2015: 87). In the analytical construction, *kor* 'have' bears the subject agreement marker that references the possessor. The possessee, on the other hand, structurally heads the relative clause, cross-referencing the object of *kor*.

(44) *[Ku-**kor**]*   ***tennep**.*
   1SS-3SO/have   baby
   'My baby.' [lit.: 'The baby that I have.'] (Tamura, 2000: 87)

In SA dialects, all nouns have the morphological possessive form (Murasaki, 1976a: 83), while in HA dialects a considerable number of nouns, including many kinship nouns, may only be marked for possession in the analytical way (Tamura, 2000: 87). Furthermore, Murasaki (1967a: 81-82) underlines the fact that in SA, the morphological possessive form is not only compatible with bare noun roots, but that it also combines with noun stems and larger nominal constituents. Although there is no clear indication as to the maximum complexity allowed for these nominal constituents in order to feature the morphological possessive form, it is seemingly possible for a bare noun to take up to two modifiers (in Murasaki's examples these include numerals and qualitative verbs) and still be compatible with the morphological possessive.

---

[22] Sometimes the plural suffix *-hcin* is added to third person possessive forms (e.g. *'eci-seta-ha-hcin* 'your dogs'). Murasaki (1976a: 85) explains that the suffix does not necessarily refer to physical plurality of the possessed noun, but that it refers to a conceptual plurality subjectively perceived by the speaker. Looking at the cases of *-hcin* used with possessive forms, however, it appears that it is most often compatible with a plurality of the possessor. This requires further study.

(45) *E-**kurasno-poro-seta**-ha.*

    2S-be.black-be.big-dog-POSS

    'Your big black dog.' (Murasaki, 1976a: 82)

Similar constructions are reported for HA, at least for the Saru dialect, though they seem to be not as common as in SA and are seemingly used within a limited range of situations (Tamura, 1970: 602-3).

(46) *Ku-**wen-matak**-ihi.*

    1S-be.bad-younger.sister-POSS

    'My bad younger sister.' (Tamura, 1970: 602)

Semantically, in both HA and SA, we distinguish alienable from inalienable possession. The morphological possessive form is mainly used in HA (at least in Southern-Hokkaidō dialects) for inalienable possession, which includes body parts/excretions, part-whole relations and some kinship terms among others, leaving in turns the analytical possessive form to express alienable possession (Bugaeva, 2015: 78). Important exceptions are attested in Southern Hokkaidō dialects and specifically in the Saru dialect where some kinship terms only have an analytical possessive form (e.g. *huci* 'grandmother' > *kor huci* and not *huci-hi* 'his/her/their grandmother').

(47) *E-**nupe**-he.*

    2S-tear-POSS

    'Your tears.' (Tamura, 2000: 86)

(48) *Yup-ihi.*

    3S/older.brother-POSS

    'His/her older brother' (Tamura, 2000: 88)

Tamura (2000: 83) suggests that the choice bewteen the morphological and analytical possessive form has to do with definitiveness of possessor, while Satō (1997) controversially proposes that this choice is based on possessor's topicality. As for SA,

Murasaki (1976a: 83) asserts that the morphological possessive form may alternate with the non-possessive form of a noun[23] to indicate different closeness of possession.

3.4.2 Relative clauses and noun-complement constructions

Ainu is said to only display headed RCs (Bugaeva, 2004: 94) and, with the exception of the alienable possessor and standard of comparison, all positions named in Keenan and Comrie's (1977) accessibility hierarchy can be relativized via the zero-anaphora strategy (i.e. gap strategy) (Bugaeva, 2015: 80).

A basic distinction present in Ainu is the one between relativization of arguments (49) and non-arguments (50).

(49) *A-kotan-u-ta*   *[ikotuypa]*$_{RC}$ **okkaypo-umurek**$_{RH.}$
4-village-POSS-in   3PS/have.goods   young.person-be.couple
okay.
3PS/exist.PL
'In my village lives a young couple who has no possessions.' (TMB: 40)

(50) *[**Ani** ku-yup-o*   *kamuy tukan]*   ***teppo**.*
 with 1S-elder.brother.POSS   bear   3SS/3SO/shoot   gun
'The gun with which my elder brother shot the bear.' (Bugaeva, 2004: 95)

If the relativized noun is an argument of the verb in the relative clause, its function is marked via the gap strategy as in (49). If, in contrast, the relativized noun is a non-argument of the verb, its original function in the relative clause is signaled via the retention of overt morphosyntax (as in (50) the postposition *ani* 'with'). The morphosyntactic markers must appear for a correct recoverability. As a non-argument, the inalienable possessor's relativization shows retention of the possessive form in the RC.

---

[23] Traditionally called in descriptions of Ainu 概念形 *gainenkei* 'conceptual form'.

(51) *[Ene   an   i   ene   asur-**u***

    like.this   3SS/exist.PC   NMLZ   like.this   3S/rumor-POSS

    as   a]   ***kamuy****.*

    3SS/stand   PRF   god

    'Such a famous god.' [lit.: 'The god whose rumor was standing like this.'] (Bugaeva, 2004: 96)

Since they are recognizable as adnominal constructions, Ainu RCs look very similar to noun-complement constructions (Matsumoto, 1997), in that they attach a modifying clause to a head noun with no specific expression of the relation between the two. This kind of construction is referred to by Comrie (1998: 76) as the general noun-modifying clause construction (GNMCC). However, GNMCCs are also said to lack extraction, so that the head noun cannot be seen as formerly included in the modifying clause. As proven by the strategies for relativization of arguments and, even more clearly, non-arguments (where retention of overt morphological material is present), RCs in Ainu do not fit the model of prototypical GNMCCs.

Bugaeva (2015) departs from these observations and takes into account RCs and nominalization proper in Southern-Hokkaidō Ainu, comparing them with non-prototypical GNMCCs that involve head nouns with specific grammatical functions and semantics. In particular, Bugaeva addresses Ainu noun-complement constructions that exhibit a possessive noun as the head noun. According to her analysis, the possessive morpheme on the head noun cross-references the whole preceding clause (i.e. the clause is the possessor of the head noun).

(52) *[Kamuy-utar   nuwap   kor okay]$_i$ **haw-e**$_i$ a-nu.*

    god-PL   3PS/groan   PRG   3S/voice-POSS 4S-3SO/hear

    'I heard the voices of gods' groaning.' [lit.: 'I heard the voice (that) gods were groaning.'] (Bugaeva, 2015: 79)

When words like *hawe* 'the voice of' and other perception nouns are used as heads of noun-complement clauses, it is difficult to categorize them as complementizers due to the morphosyntactic properties they retain. In fact, perception nouns in these constructions can be followed by nominal particles (Bugaeva, 2015: 92).

Bugaeva concludes her discussion of perception nouns employed as heads of noun-complement clauses with some remarks on grammaticalization, by saying that the possibility of having the head noun in the non-possessive form (e.g. [clause] + *hum as*) is the actual signal of an emerging GNMCC.

(53) *[Pirka   aynu   a-ne]   **hum   as**.*
    be.good   person   4S-COP   sound 3SS/stand
    'I felt like a good person.' [lit.: '(There) stood the sound (such as) me being a good person.'] (Bugaeva, 2015: 100)

In contrast, Bugaeva (2015: 96-7) considers perception noun-complement clauses followed by the copula *ne* separately from similar constructions that feature a non-copular predicate, like those given in (52) and (53). Consider example (54).

(54) *[Sekor   ku-yaynu   korka, tanto k-ek]   **ruw-e**   **ne**.*
    ADV   1SS-think   but   today 1SS-come.PC trace-POSS   COP
    'So I thought, but today I came.' [lit.: 'It is the trace of me coming today.'] (TMA: 12)

Noun-complement clauses followed by the copula *ne* are in fact said to show a more advanced stage of grammaticalization, which results in these clauses being re-analyzed as monoclausal constructions. Copular noun-complement clauses include the forms *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne* which Bugaeva (2012b, 2013) expressely discusses as evidentials. This peculiar case of Ainu noun-complement clauses is discussed as a case of "mermaid construction" (Tsunoda, 2013) in light of the fact that evidential forms featured in this environment showcase both nominal and verbal properties (i.e. they represent a case of mixed categories). Within the alleged process of grammaticalization of noun-complement clauses into monoclausal constructions, these evidential forms would be on the path of specialization as auxiliaries (Bugaeva, 2013: 672-3).

3.4.3 Noun incorporation – arguments and functions

Early accounts on Ainu NI appear in descriptions of the language such as Tamura (1973c), Murasaki (1976a), Narita (1986), or Refsing (1986). In their observations

regarding incorporation, scholars have often spoken of "complete verbs",[24] in light of their morphosyntactic characteristics. Tamura, Murasaki, and Narita all single out Ainu verbs such as *sirpirka* 'be good weather' as having the morphological property of not allowing the use of personal affixes as a formal way of referencing syntactic arguments. The morphological unacceptability of personal affixes is assumed to signal that these verbs do not require a subject or object syntactically – this is the foundation for the adoption of the term "complete verbs".

(55) *Tanto*   **sirpirka**.
       today   be.good.weather
       'Today the weather is good.'

(56) **Tanto*   *aynu   mosir   sirpirka*.
        today   Ainu   land   3SS/be.good.weather
        Intended meaning: 'Today the weather is good on the land of Ainus.'

In later reports on NI, for instance Bugaeva (2004), the theoretically more consistent term "zero-valency verbs" has come to substitute the more language-specific "complete verbs" term.

   Both Tamura (1973c) and Murasaki (1976a) discuss the process behind the formation of these zero-valency verbs as a case of compounding, where a formerly intransitive verb combines with a noun which was originally its subject.

(57) *Sirpirka*.
       be.good.weather

(58) *Sir*   *pirka*.
       condition   3SS/be.good
       'The weather is good.' (Tamura, 1973c: 119)[25]

---

[24] Translation of the Japanese term *kanzen dōshi* 完全動詞 commonly used in reference grammars. In Refsing (1986) the term "closed verbs" is used instead.

[25] Glosses addedd for clarity.

Tamura further expands on this point by saying that, although it loses its original syntactic function, the noun within these compounds retains its subject role semantically and morphologically. That is, in the case illustrated in (57), the noun *sir* 'condition' would still function as the semantic and morphological subject of the verb *pirka* 'be good'. Tamura, however, does not provide any clear syntactic evidence in support of this claim.

Discussion on noun+verb combination expressly in terms of NI began only in the 2000s, and it directly departed from the remarks on morphosyntax and semantics previously made by Tamura. Bugaeva (2004) takes into account NI of subjects and objects into intransitive and transitive verbs for the Chitose dialect of Hokkaidō Ainu and recognizes zero-valency verbs as involving NI of a noun with the syntactic function of subject into an intransitive verb. We find this analysis also in Satō (1992). As one piece of evidence in support to the presence of NI, Bugaeva (2004: 29) points at the stress pattern of zero-valency verbs. In cases like (57), where NI has happened, only the first component of the complete verb (i.e. *sir*) bears the stress, while in cases like (58) both constituents are stressed.

While Bugaeva addresses suprasegmental features as evidence for NI, Kobayashi (2008) returns to morphology and semantics by considering the incorporated noun of zero-valency verbs in terms of its semantic role, case marking, and grammatical function. Following from Satō's (1992) considerations on subject animacy, Kobayashi addresses the changes in the semantic properties of the incorporated noun exactly as a requirement for incorporation. Moreover, like in Nakagawa (2001), Kobayashi operates an unergative/unaccusative distinction among intransitive verbs, which specifically accounts for the variations in the semantic role of the noun involved in NI.

In particular, Kobayashi (2008: 212) singles out those zero-valency verbs which involve incorporation of a noun that formerly has the semantic role of possessee. Before NI occurs, the noun is recognized as the subject of the intransitive verb, and it is marked as nominative at the case level.[26] The following schemes are taken from Kobayashi and exemplify how the functions of the noun are different before (59) and after (60) NI happens.

---

[26] The label 'nominative' however does not appear under the correspective *kema* 'the legs of' in the scheme provided by Kobayashi (given here in (60)).

(59) *A-**kem-a*** *pase.*

    4-leg-POSS   3PS/be.heavy

    'My legs are heavy.'

	a-	*kem-a*	*pase*
semantic role	possessor (of theme)	theme	
case level	genitive		
grammatical funct.		subject	

(60) ***Kema**-pase-an.*

    leg.POSS-be.heavy-4S

    'My legs are heavy.'

	kema-	*pase*	*-an*
semantic role	theme		possessor (of theme)
case level			nominative
grammatical funct.			subject

The most relevant outcome of Kobayashi's report on zero-valency verbs is that NI seems to systematically affect the grammatical function of the noun that undergoes incorporation (*kema* is not SUBJECT anymore after NI occurs), while the semantic role of this noun remains unchanged (*kema* is always THEME). Again, any explicit claim about the syntactic properties of the incorporated noun is lacking from the analysis.

3.4.4 Clause nominalization

Previous works on Ainu systematically discuss clause nominalization in conjunction with a number of nouns that appear in a post-clausal position. Analyzes like Murasaki's (1976a) or Tamura's (2010) refer to these nouns as "formal nouns" that are brought together by their strong pragmatic and syntactic dependency on the clause of which they are head, that makes them better defined as light nouns. This dependency does not allow for most formal nouns to be used alone, though some (e.g. *pe/p* 'thing') may also be used independently.

    The nominalizing nature of words like *pe/p* 'thing', *(h)i* 'fact' or *(h)ike(he)* 'part of' is widely acknowledged for the dialects of both HA and SA (see Refsing, 1986:

259;[27] Bugaeva, 2004: 77; Izutsu, 2004: 28). However, it is Tamura (2010) who stresses the intermediate status of some "formal nouns" between independent words and proper nominalizers in light of their use as dependent or independent predication. Apart from the various semantic-pragmatic applications of these nominalizing words, their category-changing syntactic function by which they turn a verb into a noun is also expressly addressed in the literature (Refsing, 1986: 259; Izutsu, 2004: 28; Tamura, 2010: 144) – in such accounts formal nouns are treated as nominalizers. Conversely, other studies do not linger on the structural properties of formal nouns or do not directly mention nominalization per se (see for instance Murasaki, 1976a: 94).

In the section of his sketch grammar dedicated to nominalizers, Tamura (2000: 92) names the four perception nouns *ruwe* 'the trace of', *siri* 'the sight of', *humi* 'the sound of', and *hawe* 'the voice of' in this category. These are also the nouns Bugaeva (2015) takes into account when she discusses noun-complement clauses (see §3.4.2). Following from her 2015 work, Bugaeva (2016) returns to the structural distinction existing between relative and noun-complement clauses. She directly addresses the constructions involving a clause headed by a perception noun like *ruwe*, *siri*, *humi*, or *hawe* as not representing a case of nominalization (see example (52) above). This argument is based on the fact that the predicate in these clauses may feature agreement and TAM markings, which indicates that the clause itself is embedded but not non-finite (Bugaeva, 2016: 99). The most important part of Bugaeva's claim in this work, is that she implies that perception nouns are in fact not proper nominalizers, thus departing from Tamura's (2010) analysis. Furthermore, Bugaeva is the first scholar to introduce the issue of embedding regarding noun-complement clauses, that however (at least to the best of my knowledge) has not been pursued further in recent studies.

Elaborating on the uses of nominalizers and light nouns, Bugaeva (2016) gives special attention to SA, since nominalization of clauses in this Ainu variety happens via the possessive morpheme *-hV*, which appears suffixed to the verb of said clause. This construction is not encountered in any of the dialects of HA.

---

[27] Refsing includes among nominalizers elements like *kotom* 'as if' and *pekor* 'just like' which many other scholars (see for instance Tamura, 2000: 170-1) consider s as adverbializers.

(61) *[Ku-yee]-**he***[28]

    1SS-3SO/say-POSS

    'What [lit.: the fact that] I say [it].' (MRA: 95)

Starting from zero-nominalization as found namely in HA, Bugaeva draws a proposed path of development for nominalization, of which zero-nominalization represents the initial stage. Although not expressly mentioned for Sakhalin Ainu, zero-nominalization appears to be included in the process that has led to the emergence of nominalized clauses used as non-embedded, finite structures (62), which represents the final stage of nominalization leading to insubordination (see §4.5).

(62) *Poro*   *'iso*   *'e-Ø-nukara*   *ka*   *hanki-**hii**?*

    3SS/be.big   bear   2SS-3SO/see   even   NEG-NMLZ

    'Haven't you seen the big bear?' (MRA: 75)

The strategy of adding a nominalizing element that is common in HA and the use of non-finite verb forms featuring possessive style agreement we see in SA respectively represent the two intermediate stages of the process of insubordination. The reason for the emergence of the finite use of bare nominalization follows from pragmatics and information structure, as these constructions are found in contexts implying assertion, content questions, polar questions, and exclamation (Bugaeva, 2016: 110-2).

3.5 Observations on Ainu evidentials' structure

In this section I present some preliminary observations on the structure of Ainu evidential expressions, that I later address in deeper detail in the morphosyntactic analysis in Chapter 5. The aim of this overview is to show how some structural features of Ainu evidentials seem to involve morphosyntactic processes that have never been discussed or accounted for in previous Ainu literature (see §3.4). Through a number of illustrative examples, I highlight these particular structural features that call for a revised approach to the processes of relativization, incorporation, and nominalization, which eventually support the need for the theoretical assumptions on morphosyntax that I present in Chapter 4.

---

[28] In this example *–hV* is glossed as POSS for the sake of clarity, while in the following examples the gloss NMLZ is used.

3.5.1 Noun incorporation – inconsistency within the evidential domain

Addressing noun incorporation is necessary in light of the structural properties of HA indirect forms and SA inferentials that suggest this phenomenon is chiefly involved in the morphosyntax of Ainu evidentiality. While we have quite consistent evidence coming from phonology and in particular from stress pattern of these evidential forms that supports the hypothesis of incorporation (see §3.4.3), morphosyntactic evidence is in contrast far more incoherent. Alleged incorporated nouns within evidential forms often retain overt morphological features as in (63), or may be even separated from their incorporating verb by full syntactic constituents as in (64), though this is less common. In the following two examples indirect evidentials are glossed to individually highlight the elements involved in incorporation.

(63) *Nea   nispa   orarpare   **haw-e-as**.*
    that   man   3SS/breathe   voice-POSS-stand.PC(IND.HRN)
    'That man seemed to breathe.' (KAY, 6-3,15)

(64) *Aynu   ek   **hum**   i-os   **as**.*
    person 3SS/come.PC sound(IND.FLT)   4O-behind   stand.PC(IND.FLT)
    'It seemed a man came behind us.' (KAY, 24-3,2)

In (63), the allegedly incorporated noun *hawe* 'the voice of' retains overt possessive morphology, while in (64), *hum* 'sound' is separated from its incorporating verb by the locative *ios* 'behind us'. At this point of our observation, there is little to no evidence for us to argue that sensorial nouns such as *hawe* 'the voice of' or *hum* 'sound' in these particular constructions are incorporated, if we base our understanding of Ainu incorporation on previous studies (see §3.4.3). For the time being, I delay any other argument in favor of incorporation for these cases to Chapter 5, after I will have introduced my background assumptions on this process, and simply notice how evidentials of HA and SA allow for morphological complexity and syntactic freedom of the noun that constitutes them.

     Even cases that seem to raise no such doubts about incorporation, due to the morphosyntactic features of the sensorial noun involved in the formation of evidential forms, do not entirely comply with what has been said on this process in past Ainu

literature. The picture gets even more complicated. Cases like the one depicted in (65) are reminescent of an analogous structure, reported for languages like Mohawk, where a noun stem is incorporated into a verb and is also semantically and pragmatically coreferenced by an external, syntactically unbounded nominal that is used to specify it.

(65) *E-siknu* **haw-e** *ene* **haw**-*as* *[h]i* *ka* *an* *kor…*
2SS-be.safe voice-POSS like.this REP NMLZ even 3SS/exist.PC while
'While they indeed even say that you have survived like this…' (KAY: 19-5,32)

Mithun (1984) calls such cases of noun incorporation 'classificatory noun incorporation'. As better explained in §4.3, in prototypical classificatory noun incorporation, the incorporated nominal is usually semantically less specified than the external coreferenced noun. What we see in Ainu appears to contrast with this generalization. In fact, from (65) we see that what we would call the external noun (i.e. *hawe*) differs from its incorporated counterpart in terms of morphological complexity, as *hawe* retains the possessive morphology which does not appear on *haw* 'voice' within the reportative *hawas*. However, as far as their semantic specificity is concerned, the incorporated noun and its external counterpart are equal.

One more characteristic of the Ainu evidential constructions under scrutiny is how they appear to involve a case of modifier stranding (see §4.3). Since the alleged incorporated noun in HA indirect evidentials and SA inferentials is recognized as the possessee in an erstwhile possessive construction, one can propose that the clause containing the scope predicate of the evidential is the element covering the function of possessor. In §5.5, I will further argument in favor of this assumed structure but, for the time being, here in example (66) I illustrate this proposal by indexing the possessor (*psr*) and the possessee (*pss*).

(66) *[Aynu* *iwak]$_{psr}$* **hum**$_{pss}$-*as* *hine…*
person 3SS/return sound-stand.PC(IND.FLT) then
'It seemed a person was returning and…' [lit.: 'There stood the sound of the returning of a person and…'] (TMA: 20)

The incorporation of *hum* 'sound' into the verb *as* 'to stand' in (66) would leave a modifier stranded, here a possessor. If this were really the case, such behavior would be again at odds with the assumed properties of noun incorporation in Ainu. In fact, noun incorporation as discussed in the literature is never reported to permit stranding of any type of modifier (e.g. determiners, numerals, relative clauses). Consider (67) and (68).

(67) **Tu**   *cep*   *a-koyki.*
     two   fish   4S-3PO/catch
     'I caught two fish.'

(68) ***Tu** *cepkoyki-an.*
     two fish.catch-4S
     'I caught two fish.'

In (68) the otherwise grammatical *cepkoyki* 'to catch fish' makes the sentence ill-formed. Here incorporation of *cep* 'fish' into the transitive *koyki* 'to catch' is not possible as the former is modified by the numeral *tu* 'two'. If the modifier *tu* 'two' is left stranded as a result of incorporation, the sentence is unacceptable.

     Assumed that Ainu evidentials involve noun incorporation, the peculiar case at hand calls for a revised approach to this process. Specifically, the pivotal questions seem to be whether the phenomenon we witness here is actually a case of noun incorporation; if so, is it sensible to argue that evidentials display classificatory noun incorporation when we do not encounter it anywhere else in the language? Moreover, is modifier stranding an aspect of incorporation we need to take into account? These questions are addressed in §5.4 and §5.5.

3.5.2 Indirect evidentials and relativization

Indirect forms of HA (i.e. *siri an*, *siri ki*, *humi as* and *hawe as*) are sometimes found in a syntactic environment that suggests that relativization has taken place. The nature of this process of relativization seems to be synchronic since non-relativized structures are also accounted for in same-period corpora of same Ainu dialects. The peculiarity of this alleged case of relativization is that it seemingly concerns the sensorial noun included within the indirect forms (i.e. *sir* 'appearence' in *siri an* and *siri ki*, *hum* 'sound' in *humi as*, and *haw* 'voice' in *hawe as*). Here the sensorial noun appears "reduplicated" after

the evidential, covering a relative-head-like function for the clause where the evidential itself is found. The indirect evidential form retains the sensorial noun, so that what I term the relative head seems to be a displaced "copy" of the sensorial noun itself. Example (69) illustrates one such case.

(69) *Aynu*   *opitta* *hotke*   *utari*   *oka*   *sekor*
person   all   3PS/lie.down people   3PS/exist.PL ADV
haw-as   ***haw-e***,   *a-nu*   *kor an-an.*
REP   voice-POSS   4S-3SO/hear   PRG-4S
'They said everybody was lying down [sick], I was hearing so.' (TMA: 32)

Pragmatically speaking, this repetition of *hawe* 'the voice of' after the evidential can be seen as a case of lexical reinforcement (Aikhenvald: 2004: 393) by which the speaker adds justification to his/her reportative statement (see §8.5).

However, the particularity of constructions like the one in (69) surfaces on the morphosyntactic side and presents us with a number of problems. Firstly, since we have prosodic evidence supporting the fact that HA indirect evidentials constitute a case of noun incorporation (see §3.4.3), we would not expect a sensorial noun like *haw* 'voice' to be relativized. This prediction is sensible if we base our understanding of noun incorporation on syntactic approaches to this phenomenon like, for example, Baker (1988) – relativization of an incorporated noun would violate lexical integrity. Secondly, the alleged relative head appears often to be morphologically more specified than its incorporated counterpart – note the possessive morpheme on *hawe*, which is not found on *haw* within the evidential form *hawas*. Even admitting *ad absurdum* that it is indeed the incorporated noun that undergoes relativization, we have no specific reason to expect it to bear a higher morphological specification for possession when used as the relative head. Alternatively, we could consider *hawe* in (69) as the head of the relative clause, with no need for it to be a relativized noun.

Although we can already put forward solid counterarguments to the hypothesis of relativization, there is one more aspect of indirect evidential constructions of HA that otherwise seems to support it. The "copy" of the sensorial noun that we see in (69) in the relative-head-like function may seldom be found within the same clause as the

inferential itself (i.e. in a non-relative construction). Here the "copy" is again co-referential semantically with the sensorial noun within the evidential.

(70) *E-siknu* **haw-e** *ene* **haw**-*as [h]i ka an kor…*
2SS-be.safe voice-POSS like.this REP NMLZ even 3SS/exist.PC while
'While they indeed even say that you have survived like this…' (KAY: 19-5,32)

A structure like the one in (70) shows that a syntactic "copy" of the incorporated noun may indeed be allowed within the same clause where the evidential is used, suggesting that, in cases like (69) above, it could be actually not the incorporated noun to be relativized but rather its "copy". This would solve the impasse by which relativization would otherwise violate lexical integrity.

At this point we face two important issues. Firstly, if (69) really represents a case of relativization, the resulting structure would have two relative heads – this is a conclusion that would be at odds with previous studies that argue that Ainu only displays (single-)headed relative clauses (e.g. Bugaeva, 2004: 94) obtained via the gap strategy (see §3.4.2). Secondly, proposing that a noun like *haw* 'voice' in (69), which is argued to have undergone incorporation, may have a semantically coreferential, morphosyntactically independent "copy" within the same clause possibly calls for a redefinition of the process of noun incorporation in Ainu or, at any rate, within the domain of evidentiality. In fact, traditionally in Ainu studies, such cases of reduplication of an incorporated noun have never been discussed (see §3.4.3).

3.5.3 Nominalization

When looking at HA direct evidentials, SA personal knowledge, and SA inferentiality, I will address the process of nominalization, as a process that leads to the syntactic employment of an originally non-nominal constituent exactly as a noun. As I pointed out in §3.2.3.2, a first structural observation we can make is that direct forms of HA (*ruwe ne*, *siri ne*, *humi ne*, and *hawe ne*) on the one hand, and inferentials of SA (*ruwehe 'an/ne(e)*, *sirihi 'an*, *humihi 'an*, and *hawehe 'an*) on the other hand consist of a nominal constituent (i.e. *ruwe(he)* 'the trace of', *siri(hi)* 'the appearance of', *humi(hi)* 'the sound of', and *hawe(he)* 'the voice of') and of a verbal constituent (i.e. the copula *ne(e)* or the intransitive *'an* 'exist'). In light of this observation, a first proposal for our

analysis could be that the nominal constituent has the function of nominalizer for the clause containing the verb scope of evidentiality.[29]

(71) *[Sekor   ku-yaynu   korka, tanto k-ek]   **ruw-e***
     ADV   1SS-think   but   today 1SS-come.PC   trace-POSS(NMLZ)

ne.
COP

'So I thought, but today I came.' [lit.: 'It is the trace of me coming today.']
(TMA: 12)

Looking at morphosyntax, we indeed have evidence supporting the nounhood of *ruwe* 'the trace of' in a construction such as in (71). For instance, *ruwe*, *siri*, *humi*, and *hawe* are compatible with nominal morphology in the same way as other nominalizing words found in Ainu (see §3.4.4), like the focus particle *he* in (72), that here intervenes before the verbal constituent.

(72) *[I-y-erampokiwen   a   nispa poka,   sone   siknu*
     4O-0-3SS/feel.pity   PRF   man   at.least   truly   3SS/be.safe

*wa an]   haw-e   **he**   an?*
RSLT   voice-POSS   FOC   exist.PC(DIR.HRN-<FOC>-PK.HRN)

'Truly at least the man who has had pity for me has survived?' (TMB: 12)

Now let us consider embedding. On the one hand, sentences like (72) suggest that nominalization does not entail embedding, since the nominalized clause retains verbal features such as TAM specifications, here the resultative *wa an* (see §4.4). Such a construction would then be biclausal, with a main clause (containing either the copula or the intransitive *'an* 'exist') and a nominalized (dependent) clause. Nonetheless, we do encounter cases suggesting that nominalization results in the embedding of the nominalized clause which functions as an argument of the following verb (i.e. a complement clause).

---

[29] In the examples of this subsection, evidentials are glossed in order to highlight their internal morphemic composition.

(73) ... *nah*   *taa*   *cis-a-hci*   **haw-ehe**   *'an*

       COMP   INTJ   cry-0-3PS   voice-POSS(NMLZ)   exist.PC

       kusu 'an   *manu.*

       PRG   DIR.KNW

       '… so, now, it seemed they were crying.' (MRB: 268)

Example (73) from SA shows the inferential *hawehe 'an* followed by an aspectual (the progressive *kusu 'an*), which has its semantic scope over the predicate *cis* 'to cry' within the nominalized clause. Nominalization via *hawehe* 'the voice of' appears then to cause embedding of the clause, which syntactically functions as the single argument of the intransitive *'an* 'exist'. This gives rise to a monoclausal construction.

    The issue of embedding and nominalization returns when we consider personal knowledge evidentials of SA. Nominalization, obtained through the morphemes *-hV* and *-Ø* (pragmatically reanalyzed as personal knowledge forms, see Chapter 7), is often found in main clauses, like in (74).

(74) *Poro*   *'iso*   *'e-nukara*   *ka*   *hanki-**hii**?*

       3SS/be.big   bear   2SS-3SO/see   even   NEG-NMZL

       Haven't you seen the big bear?' (MRA: 75)

In this case nominalization clearly does not result in embedding, but rather the clause can function as an independent main clause, though it has the morphosyntactic properties of a noun.

    In light of the data presented here, nominalization within Ainu evidentials turns out to be closely connected to the issue of embedding. In Chapter 5, I will focus on this point and consider two main issues: 1) the process that gave rise to nominalized clauses used as main clauses, and 2) what the discrepancies related to embedding tell us about the categorial status of evidential forms.

3.6 Summary

Following from my assumptions regarding evidentiality as a linguistic category discussed in Chapter 2, in this chapter I presented the evidential forms that are the focus of this study, providing a preliminary classification which will be expanded and explained in Chapters 7 and 8. In §3.3, I gave a detailed overview of previous studies on Ainu evidentiality, as a category of the language, and on the separate forms that have

been singled out by previous researchers as markes of information source. These studies represent the ground from where to start my morphosyntactic and semantico-pragmatic analysis of Ainu evidentials, which will be presented in Chapters 5, 7 and 8. Furthermore, in §3.4, I discussed past accounts on those morphosyntactic processes that will be relevant specifically to develop my analysis of the structural features of Ainu evidentials, whose peculiarities I preliminarily outlined in §3.5. In light of these peculiarities, in Chapter 4 I introduce my theoretical framework concerning morphosyntax.

Chapter 4

Background Assumptions on Morphosyntax

4.1 Content of the chapter

In this chapter I introduce the background assumptions regarding morphosyntax that will be relevant to expand the discussion on Ainu evidentials' structure from the preliminary observations given in §3.5, in order to move to the description of Ainu evidentials in Chapter 5. In Chapter 5, on the basis of Bugaeva's (2016) observations on insubordination (see §3.4.4), I will further elaborate her analysis to eventually propose that this is the main process involved in the emergence of personal knowledge forms of SA. Then, I will consider indirect evidentials of HA and inferentials of SA from the perspective of NI and relativization. Specifically, the outcomes of this analysis show the possibly synchronic change in the morphosyntax of indirect evidentials in HA Ainu variety, and highlight types of NI and relativization previously never discussed in Ainu studies. Finally, I will move to looking at the morphosyntax of the reportative evidential of SA, whose grammatical status has long been overlooked in previous literature on Ainu.

Therefore, the present chapter is divided into four sections that deal with the four morphosyntactic processes I will mainly address in the following chapter – relativization (§4.2), noun incorporation and pseudo-noun incorporation (§4.3), nominalization and mixed categories (§4.4), and insubordination (§4.5). Finally, §4.6 summarizes the theoretical background.

4.2 Relative clauses – internally-headed and double-headed

My survey of relative clauses (RCs) relevant for the analysis of Ainu evidentiality is syntactically and semantically limited. I focus on internally-headed (IHRCs) and double-headed relative clauses (DHRCs), with just brief mention given to correlatives, while I leave out externally-headed relative clauses because they will play no role in my analysis. From a semantic perspective, I concentrate exclusively on restrictive relative clauses.

4.2.1 Internally-headed relative clauses (IHRCs)

In my consideration of IHRCs, I refer to Basilico (1996) and Modena and Muro (2009), departing from a more general definition of this type of RCs given in Culy (1990).

Basilico's syntactico-semantic approach to IHRCs, developed within the minimalist framework, is summarized without going into deep detail regarding the framework used, since a theoretical discussion of IHRCs will not be my concern in this thesis. Nevertheless, I highlight some pivotal aspects of Basilico's theory which I take to be relevant to the discussion of IHRCs' syntax, though applied to a theory-independent analysis. I also briefly make reference to Modena and Muro (2009) to respond to otherwise troublesome passages in Basilico's proposal. I take a limited scope on IHRCs to suffice for the purpose of the syntactic analysis to come, in that the syntactico-semantic properties of these RCs that I highlight here allow us to consistently describe IHRCs within the restricted domain of Ainu evidentiality.

In speaking of IHRCs, which are sometimes also called headless relative clauses in the literature (Basilico, 1996: 499), I start from the following definition adopted from Culy (1990: 27).

"A (restrictive) internally headed relative clause is a nominalized sentence which modifies a nominal, overt or not, internal to the sentence."

That is, in IHRCs the relative head noun (RH) still appears inside the subordinate relative clause and not in the matrix clause, as is the case for externally-headed relative clauses. The following Navajo example (taken from Modena and Muro, 2009) exemplifies a canonical IHRC construction.[30]

[NAVAJO]

(75) *[Ashkii   łééchąąʔi$_{RH}$ yiztal-ę́ę]$_{RC}$ nahałʔin.*
     boy   dog   3S.PFV.kick-REL   IMPF.3S.bark
     'The dog that the boy kicked is barking' (Platero, 1974 in Modena and Muro, 2009: 53)

As Culy (1990: 27-8) clarifies, for the IHRC to be a nominalized sentence means that it can occur with the morphosyntactic markings of a common noun, like case markers or determiners. Sentence nominalization in this instance should not be confused with the nominalization of a verb with arguments, which might result in this nominalized predicate to be used as a verbal argument.

---

[30] My indexing.

Studies like Culy (1990) and Basilico (1996), argue that the status of the subordinate clause of the IHRC is signaled by overt morphology (like the relativizer -ęę in Navajo shown in (75)), appearing on the verb of the RC. Quite commonly, subordination is marked via expressly nominal morphology, supporting the idea that IHRCs are in fact nominalized sentences. Example (76) from Diegueño shows nominal morphology (here the demonstrative -*pu*) suffixed to the IHRC's verb.

[DIEGUEÑO]

(76) *I:pac 'wu:w-**pu**-c*   *ciyaw.*

     man   I.saw-DEM-SUBJ   sing

     'The man I saw sang.' (Gorbet, 1976 in Basilico, 1996: 500)

As the Navajo and the Diegueño examples already (though very generally) illustrate, the morphology which signals the subordinated status of the IHRC varies from language to language, although it is seen to be consistently nominal in nature.

     Cole (1987) puts forward the idea that sentence nominalization for IHRCs can be obtained via a phonetically null external head. Modena and Muro (2009: 54) summarize Cole's proposal by referencing the following example from Ancash Quechua.

[ANCASH QUECHUA]

(77) *Nuna-Ø*   *bestya-ta*   *ranti-shqa-n*   *alli*   *bestya-m.*

     man-NOM   horse-ACC   buy-PST-3SG.S   good   horse-EVID

     'The horse that the man bought (is) a good horse.' (Cole and Hermon, 1994 in Modena and Muro, 2009: 54)

According to Cole, the presence of a null external head results from syntactic movement of the RH and, in a second moment, of the remaining IP, which leaves a null complementizer stranded. This null complementizer (which in (77) would be located in between *rantishqan* 'bought' and *alli* 'good') is the phonetically null external head, and is said to provide the evidence for the argument that IHRCs of the Quechua type are indeed (zero) marked morphologically as nominalized sentences.

     Modena and Muro (2009: 55) rightfully address one problem that follows from Cole's proposal – that is, the difficulty of testing for the actual presence of null complementizers. In order to avoid this cumbersome task, instead of assuming any complex constituent movement, they simply argue for the nominalization of whole

sentences whose constituents show up in their basic order. In the next step of their argument, Modena and Muro turn to typology and specifically to the consideration that IHRCs appear to be a peculiarity of OV languages. Given that in these languages subordinates precede their main clause and modifiers generally precede their heads, internal-headedness as a process of nominalization becomes a way to make a RC a modifier of a clause and not just a constituent, thus bringing IHRC formation in line with other forms of subordination.

This conclusion is compatible with Culy's definition of nominalization for IHRCs presented above, in which IRHCs are modifiers and not merely nominalizations that can function as verbal arguments. In their approach, Modena and Muro avoid resorting to complex syntactic rules in order to account for the relevant constructions, like the Ancash Quechua one, that are clearly IHRCs but do not display any overt "relativizing" morphology. Their main argument is that we do not need to take morphological markedness as a necessary aspect diagnostic of internal-headedness.

With regards to the position of the RH, Basilico (1996) detects two possible behaviors. Either the position of the RH is consistent with its role within the RC, or the RH is displaced while still remaining within the RC. RH displacement in these instances has the pragmatic function of helping to disambiguate syntactically (Basilico, 1996: 502). The Navajo sentence in (75) above shows an example of the former possibility. Example (78), on the other hand, illustrates a case of RH displacement. In this case the RH *'wĭ*ʸ* 'rock'* has undergone fronting, and it now appears first in the RC, with its original position being signaled by a resumptive pronoun (here *nĭ*ʸ*i*).

[DIEGUEÑO]

(78) **'Wĭ*ʸ** xat(-Ø)   **nĭ*ʸ*i-m**   'tu:-pu-c   *n*ʸ*iL*ʸ*cis.*
     rock dog(-OBJ)   that-COMIT   I.hit-DEM-SUBJ   black.indeed
     The rock that I hit the dog with was black.' (Gorbet, 1976 in Basilico, 1996: 501)

In Basilico's account, displacement of the RH can otherwise happen outside of the VP. Here, not only is the RH position not consistent with its role within the RC, but also it is found to have exited the VP – in this instance the NP which is the RH is argued to have joined the VP at a higher syntactic level. In surface representation, evidence for such a radical displacement comes from word order (that is, the non-canonical syntax of

nominal constituents), while Basilico (1996: 513) provides no specific account of how displacement may be retrieved from morphology.

In his semantico-syntactic account, Basilico explains RH movement as a requirement for binding. Adopting Diesing's (1992) mapping hypothesis, he takes IHRCs to be cases of quantification semantically,[31] where binding forms associations with a relative operator that projects a number of variable(s) (e.g. definiteness). These variable(s) entailed by the operator must come to bind the ones associated with the RH (Basilico, 1996: 509). As cases of quantification, IHRCs represent the scope of this binding, so that we expect one specific NP (i.e. the RH) within the RCs to meet the requirements set by the relative operator. In light of this, movement outside of the VP may be a necessity if the variables entailed by the operator are met by more than one NP or by none of the NPs within the RC. RH displacement becomes here a pragmatic strategy for either disambiguation or to avoid existential closure (Basilico, 1996: 499).

The main characteristics of IHRCs outlined throughout the short survey in this subsection, and that will be referenced in Chapter 5, can be summarized as follows:

1) IHRCs are nominalized sentences.

2) Semantically, IHRCs are cases of quantification.

3) Overt morphology may or may not appear on the RC verb to signal that the clause is a subordinate.

4) If present, this overt morphology is nominal, signaling the nominalized status of the IHRC.

5) The RH position may or may not be consistent with its original role within the RC.

6) If at all possible, movement of the RH happens either as VP-internal fronting or as VP-external displacement. Pragmatically, RH movement helps disambiguation or helps avoid existential closure.

7) IHRCs are associated with an operator that binds variables that need to be met by the RH.

---

[31] In this respect, Basilico seems to deviate from Culy's (1990) definition of IHRCs, as this latter does not assume them to be a case of quantification (differently from correlatives), but simply a case of semantic restriction. Nevertheless, Basilico overtly cites Culy among those studies advocating for the quantificational properties of IHRCs.

4.2.2 Double-headed relative clauses (DHRCs) and correlatives

Syntactically speaking, DHRCs are essentially IHRCs. What differentiates between DHRCs and IHRCs is that the former ones display two heads – one internal to the RC and the other external to it (Cinque, 2008: 223). Cross-linguistically, the external RH appears to be an exact copy of the internal RH, as shown in the Kombai example in (79) where the RH *doü* 'sago' appears identical inside and outside the RC.

[KOMBAI]

(79) *[[Doü   adiyano-no]   doü]   deyalukhe.*
      sago   give.3PL.NONFUT-CONN   sago   finished.ADJ
      'The sago that they gave is finished.' (Vries, 1993 in Cinque 2008: 223)

The external RH can otherwise be semantically more generic than the internal one. In (80) the internal RH *gana* 'bush knife' is coreferenced by *ro* 'thing' as the external RH.

[KOMBAI]

(80) *[[Gana   gu   fali-kha]   ro]*
      bush.knife 2SG   carry-go.2SG.NONFUT   thing
      na-gana-y-a.
      my-bush.knife-TR-PRED
      'The bush knife that you took away, is my bush knife.' (Vries, 1993 in Cinque, 2008: 223)

The possibility of spelling out the nominal head both inside and outside the relative clause (Lipták, 2009: 2) is the one characteristic that DHRCs share with correlatives. For this reason, as Cinque (2008) points out, a careful distinction needs to be made between these two constructions. In his introduction to correlatives, Lipták further states that correlatives require the presence of a demonstrative on the "external head", that is then better defined as an anaphoric noun that has the function of reference to the left-dislocated RC (Cinque, 2008: 224).

[HINDI]

(81) *[Jo laRkii khaRii   hai]   vo   laRkii lambii hai.*
      REL girl   standing   is   that girl   tall   is
      'The girl who is standing is tall.' (Lipták, 2009: 3)

110

Conversely, the absence of demonstratives or other determiners on the external head provides evidence for a DHRC construction. In such cases, there can be nominal morphology appearing on the RC before the dislocated external noun, which we then understand as a RH modified by the preceding RC and not as an anaphoric noun (Cinque, 2008: 224-5). The modifying nature of the RC in DHRC constructions is in line with the same property discussed by Culy and Basilico for IHRCs (see §4.2.1), supporting the idea that structurally DHRCs are essentially IHRCs.

Following from the accounts of Cinque and Lipták, I take the two following characteristics to be crucial in distinguishing DHRCs and correlatives:

1) A demonstrative is required (correlatives) or it is not accepted (DHRCs) on the right-dislocated noun in the construction.

2) Nominal morphology is never found (correlatives) or may be found (DHRCs) on the RC, either in dismissal or in support of the modifier function of this latter for the right-dislocated noun.

4.3 Noun incorporation and pseudo-noun incorporation

When treating the phenomenon of incorporation, I separately address noun incorporation proper (NI) and pseudo-noun incorporation (PNI). Starting from the definition of NI in Modena and Muro (2009), I then consider PNI, as defined in Borik and Gehrke (2015), to eventually highlight how these two processes are indeed different in their morphosyntactic characteristics.

4.3.1 Noun incorporation proper (NI)

In defining NI for the purpose of my analysis, I start from the following interpretation of the phenomenon borrowed from Modena and Muro (2009: 31).

"Noun incorporation is any kind of morphosyntactic combining of nominal and verbal morphemes (be they stem, roots, or lexical affixes), which are morphologically fully integrated as to form one single stem."

Modena and Muro's approach to NI, revised and argumented in Muro (2009), expressly focuses on morphology. Following from functional-lexical accounts on NI, *in primis*

Mithun (1984), both Modena and Muro (2009) and Muro (2009) consider NI as an essentially morphological process and, in this respect, they depart from explicitly syntactic analyzes such as Baker's (1988; 1996).

By addressing primarily Modena and Muro's and Muro's accounts in this subsection, I do not mean to endorse their morphological approach to NI and to adopt it as a way to account for this process in Ainu. Rather, their survey is merely taken as illustrative of the morphosyntactic properties subsumed by the noun and the verb undergoing incorporation, and it provides the basis to felicitously capture the characteristics of NI within the limited domain of Ainu evidentiality. Moreover, addressing the following morphosyntactic issues, as specifically presented by Modena and Muro, allows me to differentiate NI from other cases of "non canonical" NI that I discuss as pseudo-noun incorporation in §4.3.2.

One piece of evidence that Muro (2009) discusses in support of a morphological approach to NI follows from Mithun's (1984: 875-7) observations on the suprasegmental and formal characteristics of the incorporated noun (IN). When fused with the verb, the IN is often subjected to vowel harmony, insertion of an epenthetic vowel before the verb, or suppletion (either strong or weak). Mithun (1984) regards these phenomena as typically morphological, so that the nature of NI appears evident.

One important implication of Mithun's morphological perspective on NI, that is also advocated for both in Modena and Muro (2009) and Muro (2009), is that NI allows for INs to function not as unbounded nominals but as bound nominals. This aspect of the theory is particularly relevant for those cases of suppletion where the IN is slightly (i.e. weak suppletion) or radically (i.e. strong suppletion) different from its free-standing counterpart. The Sora examples in (82)-(83) and the ones from Columbian in (84)-(85) respectively illustrate a case of weak and strong suppletion of the IN.

[SORA]

(82) *Bɔŋtɛl-ən-ədɔŋ*   *jom-t-ɛ-ji*   *pɔ?*

buffalo-/ən/-ACC   eat-NPST-3S-PL.S   Q

'Will they eat the buffalo?' or 'Do they eat the buffalo?' (David Stampe, p.c. in Muro, 2009: 10)

112

(83) *Jom-**bɔŋ**-t-ɛ-n-ji*   *pɔ?*

eat-buffalo-NPST-3S-INST-PL.S   Q

‘Will they eat the buffalo?’ or ‘Do they eat the buffalo?’ (David Stampe, p.c. in Muro, 2009: 10)

The free noun *bɔŋtɛl* ‘buffalo’ in (82) is reduced to *-bɔŋ* when incorporated to a verb – this latter form cannot be used independently.

[COLUMBIAN]

(84) *Tə́x*ʷ-əx*ʷ*   *wa*   *ʔa-**ʔásq*ʷsaʔ**-s*   *ʔací*   *s-mʔámm-l.*

die-OC   /wa/   DIM-son-3SG.F.P   DET   NMLZ-woman-POSS

‘The woman’s little son died.’ (Czaykowska-Higgins, 1998 in Muro, 2009: 10)

(85) *Tə́x*ʷ-əx*ʷ-**ált** ʔací*   *s-mʔámm.*

die-OC-child DET   NMLZ-woman

‘The woman’s son died.’ (Czaykowska-Higgins, 1998 in Muro, 2009: 10)

The incorporated *-ált* ‘child’ in (85) is totally different from the free-standing counterpart *ʔásq*ʷsaʔ* ‘son’ in (84). Most importantly, Muro (2009: 11) notes that in most cases, strong suppletion of the IN involves a difference in meaning with respect to the non-incorporated noun – a case plainly illustrated in the last couple of examples.

Although making no consistent reference to it throughout his work, Muro (2009: 35) discusses Mithun’s (1984) typological classification of the types of NI. Mithun’s classification is similar to an implicational hierarchy, where the presence of one type of NI in a language is assumed to subsume all lower types. If we start from the less specific, the first three types of NI in the hierarchy that Mithun detects are 1) “lexical compounding”, where the IN is generic, non-referential, and the resulting verb indicates a conventional and istitutionalized activity, 2) “manipulation of case”, where the IN loses its argument status and another noun takes the grammatical function left vacant, and 3) “manipulation of discourse”, where NI is used for discourse purposes to background old or given information.

For the purpose at hand, I concentrate here on the final and allegedly most specific type of NI, which Mithun (1984: 863-72) calls “classificatory NI” (CNI). In CNI, the IN is supplemented by an unbound and semantically more specific nominal that is external

to the verbal constituent. Although it is usually semantically more general, the IN in CNI may seldom be identical to its external copy.

(86) *Shakoti-**ya'ť-**í:sak-s*   *ne*   ***ronú:kwe***.

     they/them-body-seek-ing   the   they(M.PL).person

     'They were looking for the men.' (Mithun, 1984: 864)

In (86), we see the semantically general IN -*ya'ť*- 'body' that is echoed by the external and more specified nominal *ronú:kwe* 'person'.

NI may otherwise concern complex noun stems, which importantly are not recognizable as noun phrases (Muro, 2009: 108-17). For instance, languages like Chukchi can incorporate nouns to which one or more adjectival modifiers have previously been incorporated. In example (87), the nominal compound root *pəlwəntə-pojgə* 'metal spear' has incorporated the adjectival roots *tor*- 'new' and *taŋ*- 'good' together, forming a complex IN.

(87) *Tə-tor-taŋ-**pəlwəntə-pojgə**-pela-rkən.*

     1SG.S-new-good-metal-spear-leave-IPFV

     'I am leaving a good, new, metal spear.' (Spencer, 1961 in Muro, 2009: 111)

Regarding modifiers of the IN, Muro (2009: 108-25) discusses the possibility of having them left out of the verbal constituent that is the result of incorporation, while still being coreferential with the IN. These cases of NI are said to involve modifier stranding. Languages allow for stranding with more or less restrictions both in terms of the syntactic complexity and the category of the stranded modifier. Among strandable modifiers, the most attested categories are adjectives, quantity expressions, demonstratives, and relative clauses. Example (88) from Mohawk shows the stranded demonstrative *thíkʌ* 'that' that coreferences the IN *nakt* 'bed'.

(88) ***Thíkʌ***   ʌ-ye-**nakt**-a-núhweʔ-neʔ.

      that   FUT-3F.SG.S/3N.O-bed-LNK-like-PUNC

      'She will like this bed.' (Baker, 1996 in Muro, 2009: 118)

Among the cases of stranding, the stranding of a possessor raises some issues regarding the grammatical function of the stranded element. Differently from Baker (1988), Muro (2009: 123-6) argues that stranding of possessors does not result in a genitival modifier being syntactically stranded, but rather that incorporation of the possessee instantiates the re-analysis of the stranded possessor as an argument in its own right. The grammatical function of this argument is morphologically assigned throughout the incorporation process by postulating the presence of a thematic projection called the affectedness phrase (Muro, 2009: 81). Evidence for the re-analysis of the grammatical function comes from morphology, as the erstwhile possessor can be marked with either direct or indirect case (see the absolutive ending *-ən* in (89)).

(89) *ənan*   *pojge-mcatko-nen*   *remkəlʔ-**ən***.

      they.ERG   spear-break-3SG.S/3SG.O   guest-ABS

      'They broke the guest's spear.' (Spencer, 1995 in Muro, 2009: 126)

Without pursuing this issue further, what we understand from the case of possessor stranding is that this is the only instance of stranding where the stranded modifier ceases to coreference the IN, exactly as a result of incorporation – that is, the modifier is re-analyzed as an argument in its own right.

Furthermore, the assumption that thematic functions (not only of stranded elements but also, and primarily, of INs) are assigned in the morphological derivation of incorporated stems and that are not inherently projected by the semantics of the incorporating verb opens quite a wide range of possibilities for the outcomes of NI in terms of syntactic valency. In fact, depending on the case, NI may or may not result in the syntactic saturation of the relevant verb. I leave this issue here for now, as an explanation of the dynamics of this process falls out of the scope of this chapter and is not directly relevant for the discussion to come.

Before I move on to outlining the differences we see in pseudo-noun incorporation, I shall briefly summarize the properties on NI illustrated in this subsection.

1) NI is the morphosyntactic combination of a noun and a verb morpheme that form together one single stem.

2) NI may exhibit related phonological phenomena such as vowel harmony or epenthesis, or morphological suppletion.

3) Suppletion may entail a change in the semantics of the IN.

4) The IN may be coreferenced by a syntactically unbounded, semantically compatible external nominal (in CNI).

5) Complex nominal stems may also be subjected to NI.

6) NI may cause modifier stranding.

7) Stranded possessors are not coreferential with the IN. They are assigned a thematic role and function as arguments of the incorporating verb.

8) NI may or may not result in the syntactic saturation of the verb.

4.3.2 Pseudo-noun incorporation (PNI)

Broadly defined, PNI is a kind of incorporation where the noun retains a certain degree of syntactic freedom, although it is incorporated into a verb as signaled by its general morphological bareness (Borik and Gehrke, 2015: 10). That is, PNI does not involve morphological combination but rather syntactic adjacency.

The syntactic freedom possessed by the noun in PNI is shown in instances where constituents are found to intervene between the PIN and the incorporating verb. Example (90) illustrates this point – the pseudo-incorporated *habitación* 'room' is separated from the verb by the adverb *siempre* 'always'. In this respect, PNI differs strikingly from NI in that in NI, the noun forms one single stem with the incorporating verb and no syntactic constituent is allowed to intervene.

[SPANISH]

(90) *Aquí tendrás siempre **habitación**.*
    here have.FUT always room
    'Here you will always have a room.' (Dobrovie-Sorin et al., 2006 in Borik and Gehrke, 2015: 12)

A clarification is in order with regards to syntactic freedom and the morphological bareness of the PIN. Firstly, although the syntactic position of the PIN is indeed less restricted than the one of the incorporated item in NI proper, it is still subjected to

limitations. Since in some languages syntax may be a diagnostic of PNI, the position of the PIN cannot be arbitrary. Secondly, the PIN systematically shows a higher degree of morphological bareness, but morphological specification is nonetheless attested in a number of languages. The level of morphological complexity allowed for PINs, in contrast to the one of non-incorporated nouns, is strictly language dependent. The following Hungarian examples illustrate both these points.

[HUNGARIAN]

(91) *Mari* **olvas** *egy* **verset**.
 Mari read a poem.ACC
 'Mari is reading a poem.' (Farkas and de Swart, 2003: 5)

(92) *Mari* **verset** **olvas**.
 Mari poem.ACC read
 'Mari is reading a poem/poems.' (Farkas and de Swart, 2003: 5)

As shown in (92), in Hungarian the PIN must be in preverbal position – the reversed OV syntax here contrasts with the canonical VO pattern of non-incorporated constructions depicted in (91). The reversal signals that PNI has taken place. Meanwhile, morphological specification for the PIN seems to be acceptable to some degree in this language, since the PIN in (92) retains its accusative morphology.

 PNI can involve not just bare nouns but also larger constituents that should be treated as phrases (Borik and Gehrke, 2015: 11). The phrasal status of the pseudo-incorporated constituent may be flagged by the presence of modifiers, which is the case for the noun *kofe* 'coffee' modified by *kono* 'bitter' in (93).

[NIUEAN]

(93) *Ne* *inu* **kofe kono** *a* *Mele*.
 PAST drink coffee bitter ABS Mele
 'Mary drank bitter coffee.' (Massam, 2001 in Borik and Gehrke, 2015: 11)

This behavior contrasts with what we see in NI. In NI, the incorporated word may indeed be not just a simple noun root but also a complex noun stem inclusive of modifiers, which are however bounded roots or stems combined with the noun

previously to NI (see §4.3.1). That is, differently from PNI, NI concerns noun roots/stems but not noun phrases.

Similarly to NI, PNI imposes limitations on the kind of syntactic modifiers that are allowed to occur with the relevant incorporated item. In languages like Hindi, not all adjectives can serve as modifiers of a PIN. If we were to substitute *puraanii* 'old' with *bhaarii* 'heavy' in (94), the PNI would not be felicitous.

<p style="text-align:right">[HINDI]</p>

(94) *Anu sirf **puraanii** kitaab becegli.*
Anu only old book sell.FUT
'Anu will only sell old books.' (Dayal, 2011 in Borik and Gehrke, 2015: 20)

As this single example suggests, there is here a substantial difference between NI and PNI in how the two phenomena impose restrictions on the incorporee's syntactic modifiers. In NI, noun modifiers are left out of the verbal constituent that results from incorporation – they are syntactically independent constituents coreferential with the IN (i.e. stranded modifiers, see §4.3.1). As long as a language allows a kind of modifier (e.g. determiner, numeral, relative clause, etc.) to be stranded, the semantics of this modifier is irrelevant.

In PNI, modifiers are included in incorporation since they form one single phrase with their noun that undergoes the process as a whole – that is, PNI does not result in any kind of modifier stranding. In this instance, it appears that it is not the kind of the modifier to undergo restrictions. If this were the case, we would not expect the substitution of *puraanii* 'old' with *bhaarii* 'heavy' in (94) to give rise to an unacceptable sentence. Rather, with PNI restrictions are imposed on the semantics of modifiers. Only modifiers that semantically comply with both the noun and the event described by the incorporating verb are allowed to co-occurr with the PIN. This follows from the fact that PNI is usually pragmatically reserved for expressing well-established situations, commonly associated within a culture with stereotypical activities (Borik and Gehrke, 2015: 13). This explains why in (94) *puraanii* 'old' cannot be substituted with *bhaarii* 'heavy' – selling heavy books is not recognized as a stereotypical activity by Hindi speakers, while selling old books is. A final generalization can be that, while the

restriction on modifiers for NI is essentially syntactic, for PNI it is essentially semantic.[32]

There is a further comment to be made on the morphosyntactic properties of PNI relating to the outcomes of incorporation, namely with reference to verbal syntactic valency. As Borik and Gehrke (2015: 21-6) argue, PNI does not syntactically saturate the verb but rather it merely restricts the syntactic and thematic functions of one of its arguments. Again, the process through which the PIN gets assigned its syntactic and thematic functions is not an issue under debate here. For the purpose of the analysis to come, it suffices to note that, while NI may or may not result in the syntactic saturation of the verb, PNI is systematically found to leave verb valency unchanged.

In the list below I summarize the main morphosyntactic characteristics of PNI highlighted in this subsection.

1) The PIN retains a certain syntactic freedom.
2) The PIN may bear morphological specification, though it systematically displays a higher degree of bareness than free-standing nominals.
3) PNI may involve noun phrases and not just simple noun roots/stems.
4) Modifiers of the PIN are semantically limited.
5) PNI does not cause syntactic saturation of the incorporating verb.

4.4 Nominalization and mixed categories

With the term "nominalization", I refer to the category-changing process that leads to the syntactic employment of an originally non-nominal constituent as a noun (Comrie and Thompson, 1985). The nominal function of this derived constituent here may be overtly signaled morphosyntactically or it may be pragmatically implicated.

In this survey of nominalization I focus on the nominalization of clauses. For a definition of the process, I refer to Yap et al. (2011) and to the classification of nominalization types outlined in their work. Secondarily, slightly departing from Yap et al.'s classification, I separately refer to zero-derivation and mixed categories.

---

[32] Borik and Gehrke (2015: 20) do discuss some restrictions of modifiers in PNI that appear to be unmistakably syntactic, like the impossibility of having a relative clause as a modifier.

4.4.1 Types of nominalization

Yap et al. (2011: 3-8) outline six separate types of nominalization, of which I consider the following three:

1) Clausal nominalization: the kind of nominalization that concerns a whole predicate or clause that retains verbal features like tense, aspect, or mood.

2) Embedded nominalization: a kind of nominalization that concerns a whole clause which is embedded as an argument of a matrix verb.

3) Non-embedded nominalization: a kind of nominalization that concerns a whole clause which, although having the morphosyntactic properties of a noun, can function as an independent clause.

These types of nominalization are by no means mutually exclusive, and as such they may co-occur within the same language. Example (95) shows a case of clausal nominalization. Here, the verb of the nominalized sentence *ilk* 'read' retains overt specification for tense, but it is also marked for nominative case as to show its unmistakable nominal function.

[KOREAN]

(95) *Chelswu-ka*   *chayk-ul*   *ppalli*   ***ilk**-ess-um-i*

     Chelswu-NOM   book-ACC   quickly   read-PST-NMZ-NOM

     pwunmyengha-ta.

     evident-DECL

     'It is evident that Chelwsu read the book quickly.' (Yoon 1991 in Yap et al. 2011: 6)

In example (96), we see an instance of embedded nominalization. Here the coordinated verbs in the nominalized clause do not bear markers of TAM and are embedded as an argument of the matrix clause verb. It is important to note that the embedding of this kind of nominalized clause is not consistent cross-linguistically (Yap et al., 2011: 7).

(96) *Tsə̀ŋi   ku   hwaŋ-əkə   mən-**pà?**   **i**   aлu-ə̀ʌ̀-ù?.*
     sun   LOC   roast-SIM   sit-NMZ   PROX   be.good-PRES-DEC

'This sitting [and] bathing in the sun is good.' (Coupe, 2007 in Yap et al., 2011: 8)

Finally, in (97) the nominalized clause is not embedded in any matrix clause and it here functions as a complete and independent sentence. This is a case of non-embedded clause nominalization.

(97) *Ram-e   Sita-o   rha   sat-**cyo**.*
     Ram-ERG   Sita-GEN   goat   kill-MIR.NMZ

'Ram killed Sita's goat!' (to the speaker's surprise) (Grunow-Hårsta and Yap, 2009 in Yap et al., 2011: 8)

The semantics of the last type of nominalization is worth noting. Non-embedded nominalization often fullfils the special semantico-pragmatic function of marking speaker attitude, as Watters (2008) notes and Yap et al. (2011: 8) reports (e.g. the mirative meaning shown in (97)). Elaborating on this apparently systematic semantic function of independent-clause nominalizations cross-linguistically, Evans (2007, 2009) focuses on on the syntax of these constructions and eventually proposes the label "insubordination" for this kind of independent use of nominalized clauses. Following Evans's analysis, I will refer to non-embedded nominalization as insubordination, a term which I discuss further in §4.5 below.

4.4.2 Markedness of nominalization

Each one of the types of nominalization singled out by Yap et al. may or may not be overtly marked morphosyntactically via the use of nominalizers, plural markers, or demontratives among other possible strategies. The formal characteristics and variations are also noted by the authors to be strictly language-dependent (Yap et al., 2011: 2).

When the transition from a verbal into a nominal constituent is formally unmarked in morphosyntax, the derivational process gives rise to two separate lexemes with the same surface form, but belonging to different categories. As an example, consider (98) below where the clause *makan lewat* 'eating late' has been turned into a nominal

constituent that here fullfils an argument function for the main verb *bagus* 'be good'. Although *makan lewat* functions as a nominal constituent, there is no formal indication of its status as a noun and also the syntax of the clause remains unvaried, giving no overt indication of the derivation.

[MALAY]

(98) **Makan   lewat** *tak   bagus.*

     eat   late   not   good

     'Eating late is not good.' (Yap et al., 2011: 13)

Given its morphological unmarkedness, this kind of word-class-changing process is defined in the literature "zero-derivation" (e.g. Lieber, 2005) or also "conversion" (e.g. Bauer and Valera, 2005). Theoretical approaches to zero-derivation are varied, but one general divide among different theories is between those advocating for the morphological nature of this process and those arguing that it involves a lexical re-analysis of a verbal linguistic form as a nominal one. In my approach, I follow Spencer (2010, 2013) who discusses what is otherwise called "zero-derivation" in terms of "asemantic transposition", that stands to indicate a kind of lexical relatedness that results in a change of word class and that, at the same time, does not subsume any morphological change. Since the lexeme that results from this process changes its word class but maintains the morphological properties of the base lexeme from which it originates, the process is said to be morphology-inert (or m-inert).

Throughout Chapter 7 I will discuss SA personal knowledge evidentials making reference to a zero suffix *-Ø*. By doing so I do not assume the presence of a morphological zero, but rather I intend to indicate that asemantic transposition of a clausal constituent into a nominal one has taken place. Furthermore, the zero marker is descriptively necessary to contrast this kind of personal knowledge forms from others that are morphologically formally marked (see §7.2).

4.4.3 Mixed categories

"Non-embedded" is not the only term employed by Yap et al. (2011) which differs from other studies on nominalization. The structural characteristics Yap et al. discuss for clausal nominalization are in fact parallel to the same morphosyntactic clausal properties that Malouf (2000) singles out for mixed categories. A certain constituent is said to pertain to a mixed category when it simultaneously possesses some

morphosyntactic properties of two separate lexical categories, most commonly of nouns and verbs (Malouf, 2000: 91). Example (95) in §4.4.1 above perfectly illustrates this point, as the verb of the nominalized clause retains both verbal morphology (i.e. the tense marker *-ess*) and nominal morphology (the nominative case marker *-i*).

Here and henceforth I will discuss Yap et al.'s clausal nominalization in terms of mixed categories. Malouf's perspective on this type of nominalization is more effective in light of the kind of Ainu constructions I will be examining, which clearly retains verbal and nominal features at the same time (see §3.5.3).

4.5 Insubordination

In defining insubordination, I mainly refer to Evans (2007: 367), who understands this process to be one involving the conventionalized main clause use of what appear to be formally subordinate clauses, at least at a first glance. That is, an insubordinated clause retains overt formal markings that signal syntactic dependency and/or non-finiteness of the predicate included in the clause itself. Nevertheless, this clause is used independently as a finite main clause. Example (99) shows a case of insubordination in Polish.

[POLISH]

(99) ***Żeby***   *ciocia teraz może*   *zadzwoni-ła.*
     COMP   auntie now   perhaps   telephone-PST.F
     'If you (auntie) could perhaps make a phone call for me?' (Evans, 2007: 381)

The predicate in this clause is finite, but there overtly appears subordinating morphosyntax (here the complementizer *żeby*) as to formally signal that this clause is actually not independent. Nevertheless, such a free-standing formally dependent clause is perfectly acceptable in Polish, where it is pragmatically used to convey an implied request.

In his study, Evans looks at the historical trajectory that cross-linguistically appears to lead to the birth of insubordination in a language. Four separate stages constitute the steps of this trajectory:

- Presence of a subordinate construction
- Ellipsis of the main clause

- Application of restrictions on the interpretation of ellipsed material
- Conventionalized main clause use of the formally subordinate clause

The first step assumes the normal situation where a subordinate clause is used as a dependent of a main finite clause. The following German example is from Evans.

[GERMAN]

(100) *Ich   erinner-e   mich   nicht, **ob**   sie*
I   remember-1SG   REFL   not   whether   she

eine   Karte gekauft   hatte.
INDF.F.NOM ticket bought   had

'I don't remember whether she bought a ticket.' (Evans, 2007: 371)

The second step in the trajectory is ellipsis of the main clause. Evans argues that ellipsis of the main clause is possible if the ellipted material is a grammatically acceptable element in the construction which is also more or less uniquely recoverable from the context. Once the main clause undergoes ellipsis, certain reconstructions of the sentence, via a restoration of the main clause, become excluded by convention on a pragmatic basis, which is also syntactically acceptable. That is, the interpretation of the original semantic content of the main clause which underwent ellipsis is not arbitrary but rather semantically restricted (Evans, 2007: 372). This encompasses the third stage in Evans trajectory. Example (101) illustrates a case where reconstruction of a main clause containing a predicate with negative polarity would be unacceptable.

[GERMAN]

(101) ***Wenn***   *Sie*   *sich*   *vielleicht*   *die*   *Hände wasch-en*
if   you   self   perhaps   the   hands wash-INF

möchten [,   *wäre*   *das*   **nicht sehr*   *nett*   *von*   *Ihnen].*
might   were   that   not   very   nice   of   you

'If you would maybe like to wash your hands [, that would not be very nice of you].' (Evans, 2007: 737)

The final stage leading to the rise of insubordination is the conventionalization of the construction, occurring after ellipsis of the main clause has happened. At this stage,

the construction is usually assigned a specific pragmatic function, which eventually licenses the use of a formally subordinate clause as a main clause.

In his analysis, Evans (2007) does not attempt to discuss insubordination as an instance of grammaticalization nor as one of reanalysis – the main definitions of both these processes, he notices, hardly comply to what insubordination shows. Specifically, when considering the reanalysis approach, he argues that a non-morphologically-derived change affecting the subordinated clause would be hard to support in light of its structural properties (Evans, 2007: 376 fn.12).

4.6 Summary

In this chapter I introduced the theoretical background concerning morphosyntax that I will be referencing throughout the structural analysis of Ainu evidentials in Chapter 5. My main focus was on relativization, noun incorporation, nominalization, and insubordination. As for relative clauses, I distinguished internally-headed from double-headed (IHRCs and DHRCs), providing a separate approach for these kinds of relative clauses never before discussed in Ainu studies. Similarly, as it concerns noun incorporation, I distinguished noun incorporation proper from pseudo-noun incorporation, in order to take an approach that allows me to analyze some evidential forms that are characterized by a certain morphosyntactic boundedness of a nominal constituent that does not comply with the properties assumed for noun incorporation proper (see §5.4). Finally, I considered separate cases of clause nominalization, with special mention to insubordination as I intend to apply Evans' approach to this process to the case of SA personal knowledge evidentials (see §5.2.2).

Chapter 5

Morphosyntax of Ainu Evidential Forms

5.1 Content of the chapter

In Chapter 5, I discuss the morphosyntax of Ainu evidentials. In §5.2, I discuss SA personal knowledge forms, focusing on their development from nominalizers to markers of evidentiality. Throughout sections §5.3, §5.4 and §5.5, I look at the structural properties of those evidentials in both SA and HA that have developed from nouns that semantically refer to a sensorial perception. I first consider SA inferentials, followed by a consideration of HA direct evidentials and concluding with HA indirect evidentials. Section §5.6 discusses the SA reportative *manu*, where I propose that it is a final particle. Section §5.7 summarizes the outcomes of this analysis to show that, though belonging to the same conceptual category, Ainu evidentials can differ strikingly with regards to morphosyntax.

5.2 Personal knowledge evidentials of SA

Personal knowledge in SA is encoded via two separate morphosyntactic strategies, resulting from one same grammatical process (i.e. nominalization), that however has quite different formal outcomes. One of the encodings of personal knowledge exhibits an overt morphological realization, while the other does not have any formal surface marking. In this section, I firstly look at the morphophonology of these evidential forms separately, to then move to discussing their morphosyntactic features jointly.

5.2.1 Morphophonology of personal knowledge evidentials

In this subsection I present the morphophonology of the forms *-hV* and *-Ø*.

5.2.1.1 The *-hV* form

The one formally overt marker of personal knowledge is the morpheme *-hV*. Phonologically, this morpheme is made up by an aspirated consonant (rendered in transcription as *h*) and a vowel (rendered here as *V* standing for 'any vowel'). When appended to a vowel-final stem, the suffix consonant is followed by a copy of this stem-final vowel, as shown in the below example.

(102) *Koro* 'to have' > *koro-**ho***

When the verb stem ends in a consonant, an epenthetic vowel *i* is inserted before the personal knowledge morpheme, and it is this epenthetic vowel which is copied.

(103) *An* 'to be/exist' > *an-**i-hi***

At times, especially in fast speech, the epenthetic vowel *i* tends to be dropped, but its original presence is nevertheless echoed by the reduplicated vowel in the morpheme (e.g. *an* 'exist' > *an-hi*). We see how, though we are not in the presence of a nominal stem, the morphophonological features of the personal knowledge *-hV* are the same as those of the possessive morpheme introduced in §3.4.1. As a matter of fact, Bugaeva (2016) argues that the *-hV* morpheme we see on verbs is indeed a cognate of the possessive morpheme featured on nouns.

It should be noticed that, unless it is a copy of the epenthetic vowel *i*, the *V* in the morpheme is always copied from the last vowel of the verb stem, and not of the verb root. In other words, this suffix may copy a vowel from another preceding suffix. This is especially relevant when the verb is accompanied by morphosyntactic elements following it, like for instance personal suffixes (104) or the negative auxiliary (105).

(104) *Koro-hci* 'they have' > *koro-hci-**hi***

(105) *'E-nukara ka hanki* 'you did not see' > *'e-nukara ka hanki-**hii***

That is, the *V* in the morpheme corresponds to the last vowel of the verb root only when this latter is also recognized as the stem and no other suffixes are present.

It must also be noted that the *V* in the morpheme is sometimes lengthened (see (105) above from MRA: 75). A proper surface representation of such morphophonological feature would be *-hV(V)*, where the *V* in brackets indicates a lengthening of the preceding vowel, that may or may not happen. Vowel lengthening within this morpheme is widespread in all the dialects of SA taken into account here, and tends to occur in interrogative sentences (see §7.2). However, the occurence of this phenomenon, even in closed domains (e.g. interrogative sentences), is not consistent. The fluctuating vowel lengthening is one example of seemingly morphophonological processes that affect this morpheme. An analogous phenomenon is the elision of *h*. The

aspirated sound graphically corresponding to *h* in transliteration tends infact to be dropped, especially when in an intervocalic position.[33]

The apparent interchangeability of long and short vowel forms, and forms with or without *h* suggest that these processes are possibly ascribable to fast speech or careless pronunciation on the informants' part; otherwise they could be ascribed to collector's misinterpretations transferred into the final transliteration of the corpora. In my argumentation I treat these fluctuations in the shape of the *-hV* morpheme as allomorphs of the underlying morpheme. The choice of referring to this kind of nominalization with the form *-hV* (implicitly taking it as the "main" form) follows from the tendency found in previous literature (namely, Murasaki 1976: 95) to speak about this morpheme without omitting '*h*' and with a short vowel. In examining the literature and corpora of SA, I must note that further claims on these aspects of the personal knowledge suffix's morphophonology are hindered by the lack of audio recordings for most corpora available for SA.

5.2.1.2 The *-Ø* form

In addition to the above strategy, SA personal knowledge is otherwise encoded in a way that has no overt formal realization as a suffix. What I call here the personal knowledge form of the verb then is not different in any way from its counterpart that lacks the expression of personal knowledge with regards to morphophonology.

(106) *Koro* 'to have' > *koro-**Ø***

For the sake of clarity, and to overtly show its distribution with respect to the *-hV* form throughout the analysis in Chapter 7, I mark this kind of personal knowledge, here and in the remainder of this thesis, with the null suffix *-Ø*. By using a null marker I do not assume any empty morphological position in the structure of the verb (i.e. the formalization is not representative of a morphological zero), but rather I merely signal that a process of m-inert asemantic transposition (see §5.2.2) has occurred and that, as a result, the verb form is now pragmatically used with a personal-knowledge-evidential meaning.

---

[33] In transliteration *h* can correspond to different phonemes depending on the vocalic contour (Murasaki, 1976a: 2). The original *-hV* form can nevertheless be straightforwardly deduced in some cases even after the elision of '*h*'. This happens especially when the epenthetic vowel is the reduplicated vowel since, with a verbal stem ending in a consonant, the suffixed *-i* is unmistakably part of the morpheme marking personal knowledge (e.g. *an-i-hi* > *an-i-i*).

5.2.2 Syntax of personal knowledge evidentials

SA personal knowledge constructions are syntactically recognizable as a case of nominalization. The type of nominalization involved in this case is clausal. As defined earlier in §4.4.1, clausal nominalization concerns a whole clause whose predicate may still retain categorial features (e.g. tense, aspect, etc.). Such nominalized clauses cannot be used lexically. Nominalization in this instance merely allows a clause to function as a noun within a broader syntactic context without necessarily resulting in the derivation of a nominal constituent (Bugaeva, 2016: 97). My intention in this subsection is to argue that personal knowledge expressions in SA originated from an erstwhile biclausal construction, involving clausal nominalization, that developed into a monoclausal construction. Furthermore, I propose that part of the pragmatic function of expressing information source displayed in these monoclausal constructions has arisen following their use as main clauses.

5.2.2.1 Nominalization and biclausality

Nominalization via *-hV* and *-Ø* is featured, when employed in biclausal constructions, with a limited number of verbs that can semantically take sentential arguments, for instance *erameskari* 'not know' and many qualitative one-place verbs such as *pirika* 'be good' or *sunke* 'be false'. The nominal status of these sentential arguments is sometimes highlighted by the presence of nominal restrictive particles (e.g. the focus particle *hee* in (107)).

(107) *[Hemata   ki-hci   kusu 'okay-a-hci-hi]   **hee***
     what   3SO/do-3PS   PRG-0-3PS-NMLZ   FOC

  'an-erameskari.
  1PS-3SO/not.know

  'I do not know what they are doing.' (Murasaki, 2009: 29)

(108) *Ku-yee-**he**   sunke.*
  1SS-3SO/say-NMLZ   be.false

  'What I say is a lie.' [lit.: 'My saying [it] is false.'] (Murasaki, 1976a: 95)

As Bugaeva's (2016) underlines, nominalizations obtained with *-hV* and *-Ø* cannot be used lexically, which is illustrated clearly in copular constructions where a clause nominalized with either one of these strategies cannot be coreferential with the copular object as in (109). This contrasts with other cases of nominalization, for instance those obtained via the nominalizer *pe* 'thing', that are otherwise allowed to coreference the copular object in these same constructions, as in (110). Such a restriction in coreferencing the copular object means that the nominalized clause is not a lexical noun, and is diagnostic of the actual non-derivational properties of *-hV/-Ø* nominalization.

(109) * *Ku-yee-**he***   *wen*   ***pe***   *nee.*

      1SS-3SO/say-NMLZ   be.bad   thing   COP

      'What I say is a bad thing.'

(110) *'E-hci*   *ike*   *'e-kok-a-hci*   *'an*   ***pe [...]***

      3SO/eat-3PS then   APPL-3SO/incur.punishment-0-3PS   PRF   NMLZ

      hekaci   ***'ihunke-he***   *nee*   *manuu.*

      boy   3/placenta-POSS COP   DIR.KNW

      'The thing they had eaten and from which they had incurred in a (divine) punishment was the placenta of a baby boy.' (MRA: 16-7)

Furthermore, sentences like (110) provide evidence for the biclausality of the construction in that aspectuals need to be used within the nominalized clause itself in order to have semantic scope over the predicate of the nominalized clause (see the perfective *'an*). Similarly, categories like polarity applying to the main predicate do not have scope over the predicate within the nominalized clause – this signals embedding.

5.2.2.2 Biclausality and the copula *ne(e)*

Among the few verbs allowed to take a sentential argument resulting from clausal nominalization we find the copula *ne(e)*, which needs special attention in that it is the one predicate involved in the emergence of *-hV/-Ø* nominalization used as a marker of personal knowledge.

The use of clausal nominalization followed by a copula is featured in two restricted syntactic environments. The first environment is adverbial clauses. The

conjunctions introducing these adverbial clauses are *neeno* 'as', *kuniine* 'as if', *neya* 'but, though', *neyah* 'though', and *ne'ampe* [34] 'but, when', that contain, either synchronically or diachronically, the copula *ne(e)* (Bugaeva, 2016: 106).

(111) *'E-ramu-hu*   **neeno** *pirikano*   *kii*   *wa.*
2SS-3SO/think-NMLZ   as   well   2SS/3SO/do   FIN
'Do it well as you think.' (Murasaki, 1976a: 141)

(112) *'An-nukara-ha*   **ne'ampe**   *ray*   *hemaka.*
1PS-3SO/look-NMLZ   when   3SS/die   end.up
'When I looked [the demon] had died.' (Murasaki, 1976a: 141)

The presence of the copula as an original component of these conjunctions is seemingly what syntactically licenses the use of nominalization, since we can assume that the nominalized clause originally functioned as an argument of the copula *ne(e)*. This copula would have later combined with another element (e.g. an adverbial like *no* in *neeno*, or an interrogative particle like *ya* in *neya*) and fused with it to fulfill a precise syntactic function (Bugaeva, 2016). The resulting fused morpheme would have then become re-analyzable as a full-fledged adverbial conjunction, which is embedded by virtue of the subordinating function developed by conjunctions such as *neeno* and *neya*, more than by virtue of the presence of an erstwhile clausal nominalization. From a pragmatic point of view, these adverbial clauses, although featuring the NMLZ+COP construction, do not appear to have any evidential meaning whatsoever.

The other environment where the NMLZ+COP construction is encountered is in finite main clauses. Here too syntactic restrictions apply, since the elements that are allowed to follow the copula are limited – namely, the construction may be followed by aspectuals as in (113), final particles connected to epistemicity or mirativity as in (114), the dubitative adverb *nanko(o)* 'maybe' shown in (115), and inferentials or reportative evidentials exemplified in (116).

---

[34] This form could be analysed as a further case of nominalization (as it can be implicitly deduced from Murasaki, 1976a: 94), that likely involves the perfective *'an* and the nominalizer *pe* 'thing'.

(113) *Sirkunne*   *hemaka* *kusu* *kanna*
   condition.be.dark end.up because again

   hosipi-hi   *ne* **'an**.
   3SS/return-PK COP PRF

   'Since it became dark, she went back home.' (MRA: 6)

(114) *'E-niina*   *teh* *'orowa* *'e-'i-wooneka*
   2SS-collect.wood and then   2SS-1PO-situation.look

   kusu   *teeta* *'e-san-i-hi*   *ne* *'an* ***ike 'aa***?
   because here 2SS-descend.SG-0-PK   COP PRF FIN

   'You collected wood and then you came down here to check on us,
   right?' (MRA: 3)

(115) *'An-haw-ehe* *nuu*   *yahka wante-he*   *nee*
   1P-voice-POSS 3SS/3PO-hear though 3SS/3PO/know-PK COP

   nankoo   *nah* *'an-ramu*
   maybe   COMP 1PS-3SO/think

   'I think that, even if he hears our voices, maybe he (will) recognize
   them.' (MRA: 9)

(116) *Ćiśe oxmaxta śine hójnu ikòkajohó né-ruhe an.*

   Cise *oh-mah*   *ta* *sine* *hoynu*
   house 3SG/place-behind in one pine.marten

   i-ko-kayo-ho   *ne* ***ruhe an***.
   1PO-APPL-3SS/call-PK COP INF.RSN

   'Surely one pine marten must have called me [from] behind the house.'
   (PLA: 115)

  In these syntactic environments, NMLZ+COP constructions do not entail embedding of the nominalized clause. This shows from the fact that aspectuals or inferential evidentials following the copula *ne(e)* have semantic scope over the nominalized predicate and not on the copula itself (e.g. (113) and (116) above). This results in the copula being semantically bleached and, together with the nominalized clause, it shows all properties of a monoclausal construction.

5.2.2.3 Asemantic transposition

In §4.4.2, I discussed what is otherwise called "zero-derivation" as asemantic transposition following Spencer (2010, 2013). The process of asemantic transposition results in a change of word class that does not subsume a morphological change (from which the process is said to be morphology-inert). This approach is more felicitous when we discuss the process of nominalization involved in Ø-marked personal knowledge as it allows us to avoid any reference to the concept of "zero" which could be easily mistaken as hinting to the presence of an empty position in morphology (i.e. a morphological zero), that is not a conclusion this thesis wants to make (see §5.2.1.2).

As it regards Ø-marked personal knowledge resulting from asemantic transposition, we see how it seems to be quite rare in the syntactic environments described in §5.2.2.2. As a matter of fact, of all the syntactic elements allowed to follow *-hV ne(e)*, only the dubitative *nanko(o)* 'maybe' is attested after *-Ø ne(e)*.

(117) *Taa*   *teh*   *'ee*   *'anah, 'an-nukara*

     3SS/3SO/dig.up   and   3SS/3SO/eat   if   1PS-3SO/see

     'e'askay-Ø   *nee*   **nanko**.

     be.able-NMLZ   COP   maybe

     'Maybe I [will] be able to see her if she digs up [the potatoes] and eats them.' (PLB: 110)

In contrast, *-hV* nominalization, as we saw, is systematically found with all the syntactic elements allowed to follow the copula when the NMLZ+COP construction is used as an independent clause (of which examples (113)-(116) in §5.2.2.2 illustrate some examples). Table 5 briefly summarizes the acceptability of Ø-nominalization.

Table 5 – Acceptability of Ø-nominalization

Kind of syntactic elements following the copula	Element	Ø-nominalization accepted
Aspectuals	*'an*	no

Epistemic/mirative particles	*ko(h)*[35]	no
	'an ike 'aa[36]	no
	hetaneya	N/A[37]
Dubitative	*nanko(o)*	yes
Inferentials or reportative	*ruwehe 'an*	no
	sirihi 'an	no
	humihi 'an	no
	hawehe 'an	no
	manu	no

When used in the syntactic environments illustrated in §5.2.2.2 and §5.2.2.3, the NMLZ+COP construction has already pragmatically specialized into a conventionalized construction employed to express source of information, namely personal knowledge (see §7.2).

5.2.2.4 The emergence of insubordination

This syntactic environment described in §5.2.2.3 eventually might have provided the grounds for a process of insubordination (see §4.5). Insubordination involves the conventionalized main clause use of a formally subordinate clause (Evans, 2007) and allegedly develops through four separate steps. The first step sees a subordinate construction featuring a main clause, which, in the second step, is ellipted. The third step encompasses some restrictions on the kind of main clauses that can be ellipted, so that the interpretation of the ellipted material is also restricted (e.g. to a certain semantic class of verbs). Finally, the fourth and final step involves the conventionalized main clause use of the formally subordinate clause, that usually acquires specific pragmatic functions.

---

[35] The *h* in this form is sometime dropped in pronunciation. The origin and meaning of this final particle are unknown.

[36] I refer to *ike 'aa* (and to what appears to be its allophorm *i 'aa*) as a final particle due to the difficulty of further speculation on its internal composition. An attempt to resolve this particle would be to see *ike* as a reduced form of the nominalizing *'ikehe* (Murasaki, 1976: 97) and interpret *'aa* possibly as the one-place verb 'sit'. However, such cases of what would be a case of cumulative nominalization cannot be safely assumed for SA, and the origin of *i* is unclear, as there is no such nominalizer in this variety of Ainu. A nominalizer *hi* (often reduced to *i*) is indeed present in HA dialects, but no equivalent form is found in SA. Looking at the two varieties, HA's *hi* appears in complementary distribution with SA's *-hV* nominalization – this suggests that this latter is actually the corresponding to *hi* in HA. Moreover, the use of *'aa* 'sit' as a final verb of this construction would remain semantically dubious.

[37] The final particle *hetaneya* attaches to nouns and not to verbs so it is syntactically unacceptable in this environment.

Insubordination would represent the most recent stage in the diachronic development of NMLZ+COP constructions (Bugaeva, 2016). At this stage the sole nominalized clause is used as an independent main clause although formally retaining overt nominal morphology. Having the NMLZ+COP construction already specialized as a strategy to express personal knowledge, the use of nominalization in main clauses further specialized to become pragmatically reserved for marking a subkind of this type of evidentiality. As I better discuss in §7.2, in fact, main-clause nominalization via *-hV* and *-Ø* is specifically employed for interrogative statements featuring personal knowledge.

(118) *Poro   'iso   'e-nukara   ka   hanki-**hii**?*
3SS/be.big   bear   2SS-3SO/see   even   NEG-PK
'Haven't you seen the big bear?' ['Is it the case that you have not seen it such that now you say so?'] (MRA: 75)

(119) *Ećitom óxkajo tarap ekorō!*
*Ecitom   ohkayo,   tarap   e-koroo-**Ø**?*
Ecitom   young.man   strap   2SS-3SO/have-PK
'Young man of Ecitom, have you got a strap?' (PLA: 114)

The development of insubordination within the domain of personal knowledge for SA, as presented in the above subsections, as also argued in Bugaeva (2016), complies with the trajectory that Evans (2007, 2009) outlines when discussing the typological characteristics of the emergence of insubordination (see §4.5). The first stage of Evans's trajectory, which assumes the presence of canonical subordination, is represented by cases like (107), where the nominalized clause functions as a complement clause dependent from a main clause.

The second step in the trajectory is ellipsis of the main clause. In SA not all verbs that can take a sentential argument may be ellipted – for instance, qualitative verbs and verbs denoting internal state (see §5.2.2.1) cannot be omitted from the construction, as this would affect its comprehensibility. If we were to leave out the verbs *erameskari* 'not know' or *sunke* 'be false' respectively in (107) and (108) above, the originally intended meaning of the sentence would be lost – due to the lack of a main verb, the constructions results in a non-sensical expression. In contrast, from a semantic point of

view, ellipsis of the copula *ne(e)* is acceptable thanks to the fact that this copula is semantically empty (i.e. it merely expresses existence).[38] As such, the semantics of the construction is not compromised as drastically as it is the case for qualitative verbs and verbs of internal state.

Because of this strict limitation in the material that can be ellipted, that narrows down the choices to the only copula *ne(e)*, the missing element in the construction is straightforwardly recoverable. It follows that the underlying presence of any of the other verbs, that would nevertheless be syntactically permitted, becomes excluded by default. This encompasses the third stage in the trajectory described by Evans. Finally, examples like (118) and (119) illustrate the fourth and final stage of the trajectory, that entails a conventionalized main clause use of syntactically dependent clauses.

5.2.2.5 Evidence for the presence of Ø-nominalization

The actual syntactic status of sentences like the one in (119) as Ø-nominalized clauses could be objected to on the basis that a Ø-nominalized clause in the function of a main clause results in a construction which is formally identical to a non-nominalized clause containing a bare stem verb. In contrast, the assumption that sentences like (118) indeed involve clause nominalization cannot be challenged, since nominalization is formally signaled in morphology by *-hV*.

Nevertheless, we can adduce evidence for the presence of Ø-nominalized in instances like (119) on the basis of the use of *hetaneya*, a final particle. The final interrogative particle *hetaneya* is the sole syntactic element allowed to follow a nominalized clause when this is used as a main clause.

(120) *Ánko-jubítari śino hemáta [...] koróxćite okajaśi hetanea,*

      An-ko-yup-itari   *sino*   *hemata [...] koro-hci*

      1PS-3PO/have-brother-NMNL   really   what   3SO/have-3PS

      teh   *okay-a-hci-Ø*   **hetaneya?**

      and   exist.PL-0-3PS-PK   FIN

      'What on earth had my brothers got [...]?' (PLA: 200)

---

[38] Analogous cases of elision of *ne(e)* as expressing existence (though here in the function of copula) are, for instance, *Tah hemata?* 'What [is] this?' (Murasaki, 1976a: 79), or *Ku'ani neyke Kiyoko (ku-nee)* 'I (am) Kiyoko.' (Murasaki, 2009: 10).

The particle *hetaneya* is syntactically compatible only with nouns and it cannot attach to verbs. We find evidence for this syntactic characteristic of *hetaneya* within the very environments under consideration here. For one thing, *hetaneya* is never encountered following the NMLZ+COP construction (in Table 5 the structural unacceptability of *hetaneya* is signaled by N/A meaning "not applicable"). Conversely, it is seldom found following clausal nominalizations obtained via *-hV*, which I discussed as retaining a nominal function. All examples of *hetaneya* reported by Murasaki (1976a: 69) feature clause nominalization via the *-hV* morpheme. However, Murasaki considers the whole *-hV hetaneya* construction as one unitary morpheme and as such she claims it syntactically follows a verb.

As an attempt to provide further support to my assumption that *hetaneya* only takes a noun as its host, I propose the following analysis. We can look at *hetaneya* as composed by the three elements *he+ta+neya*. The element *neya* is recognizable as the adverbial conjunction, whose origin we can trace back to a combination of the copula *ne(e)* with the interrogative particle *ya* (also mentioned in §5.2.2.2). The element *ta*, although not analysed in reference grammars of SA, is reported in Ōtsuka et al.'s (2008) dictionary as an adverb expressing emphasis. It is found following a noun and preceding a verb (e.g. *Cikap ta ku-ne* 'I [want to] become a bird.'). With regards to *he*, there seems to be confusion in Ōtsuka's dictionary between *he(e)* as the result of nominalization of a verb stem ending in *e* and *he* as a focus particle following nouns. This same confusion is also found in Murasaki (1976a: 95, 111, 146), and it possibly originates from an oversight of the similar use of the form *he(e)* (as the result of nominalization and as the focus particle) sentence-finally in interrogative sentences. I propose that the *he(e)* involved in *hetaneya* is indeed the focus particle *he*. The adverbial *ta* is also licensed in this environment as it is compatible with nouns and it is followed by the copula *ne(e)* contained in *neya*. As we deduce from the presence of single stress in audio recordings, the stress pattern on *hetaneya* is the one of one single word – this could mean that the erstwhile *he+ta+neya* compound has undergone lexicalization.

5.2.2.6 Concluding remarks on the syntax of personal knowledge evidentials

Although the brief analysis presented in this subsection provides preliminary evidence in favour of the presence of insubordination in SA, I must address a number of issues that may challenge this argument. Firstly, the case of insubordination discussed here could potentially represent the only one featured in SA. This would force us to question

the peculiar reasons of such an isolated development of the phenomenon, which would demand a comparison among analogous constructions of SA that syntactically seem to be prone to insubordination (e.g. the [V]-*an pe ne(e)* construction that fulfills some kind of deontic/emphatic function, see Murasaki (1976a: 74)).

Secondly, the process by which insubordination would have derived from asemantic transposition does not entirely comply with the path of development described by Evans. As a matter of fact, a *Ø*-nominalized clause is not seemingly always accepted as the sentential argument of *ne(e)* – the construction [V]-*Ø ne(e)* is never encountered in my data, while the analogous construction involving -*hV* nominalization (i.e. [V]-*hV ne(e)*) is most common. The only instance where a *Ø*-nominalized clause appears to function as the sentential argument of *ne(e)* is when the copula is followed by the dubitative *nanko(o)* 'maybe' as in example (117) above repeated here as (121).

(121) *Taa*   *teh* *'ee*   *'anah, 'an-nukara*
   3SS/3SO/dig.up and 3SS/3SO/eat if 1PS-3SO/see
   'e'askay-Ø *nee* **nanko**.
   be.able-NMLZ COP maybe
   'Maybe I [will] be able to see her if she digs up [the potatoes] and eats them.' (PLB: 110)

Given the isolated character of this phenomenon, it is hard to say whether the *Ø*-marked clause is somehow licensed merely by the presence of the adverbial *nanko(o)*. This in turns challenges our previous generalization by which the verbs compatible with sentential arguments, that are obtained via all kinds of nominalization, also include *ne(e)*. If *ne(e)* was really not compatible with sentential arguments obtained from asemantic transposition, the emergence of insubordination (as intended by Evans) for this construction would not be expected – the development would in fact stop at the second stage in Evans's trajectory as there would be no verb that could be acceptably elided.

The syntactic approach to personal knowledge evidentials through the lens of insubordination that I propose here is tentative. Although the analysis above seems to clarify what might have been the development of SA personal knowledge expressions, many discrepancies with the prototype Evans describes arise. While the inadaptability

of Evans's theoretical framework to the case of SA is one possibility we need to address, it is also most likely that the sole personal knowledge domain represents too narrow of a scope to discuss insubordination in this Ainu variety. In this respect, we should extend the scope of the study much more in order to obtain a satisfying answer on whether insubordination is indeed a feature of SA, and the still daunting topic of subordination in this language should be specifically addressed in dedicated works.

5.3 HA direct evidentials

In this section I look at the morphosyntax of direct evidentials of HA. Direct evidentiality in this Ainu variety is encoded via four separate forms, which I introduced in §3.2.1 – *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne*. These forms are never found to be used as an independent predication in the sentence; rather they are exclusively employed as dependent predications with the function of marking information source.

In §3.2.3, I discussed how these evidential forms have historically developed from a noun+copula construction, where the nominal constituent semantically refers to some kind of sensorial perception. The nouns involved in the formation of HA direct evidentials are *ru* 'trace', *sir* 'appearance', *hum* 'sound', and *haw* 'voice', while we recognize the verbal constituent in all forms as the copula *ne*. Starting from a consideration of the categorial status of *ru*, *sir*, *hum*, and *haw*, throughout the following subsections I will propose that direct evidential expressions of HA represent a case of mixed category words from a morphosyntactic point of view. They simultaneously display properties of verbs, visible on the predicate under the scope of evidentiality, and of nouns, entailed by *ru*, *sir*, *hum*, and *haw*. From this discussion, I will move on to considering the issue of whether direct evidentials cause embedding and, following Bugaeva (2013), I will argue that direct forms appear to be on the path of specialization into auxiliaries, a process which, I note, is not clearly at the same stage of advancement across all direct evidentials.

5.3.1 Morphophonology of direct forms

I start with discussing phonological wordhood for HA direct evidentials in §5.3.1.1. In §5.3.1.2 I then describe their morphological characteristics.

5.3.1.1 Phonological wordhood

In order to propose that direct evidentials of HA form one unitary phonological word I depart from the brief account on these forms found in Bugaeva (2013: 671). Bugaeva argues that direct evidentials do not form a unitary phonological word, by noticing that the nominal constituent loses its stress that is otherwise preserved on the copula *ne* (e.g. *ruwe né* and not *ruwé né*). However, these empirical observations on stress pattern seem to not directly account for Bugaeva's conclusions about the phonological independency of the sensorial noun and the copula. As a matter of fact, she only references a personal conversation with Okuda Osami to support her statement.

Direct evidentials display a stress pattern similar, and yet opposite, to the one of other noun-verb constructions of Ainu. Two representative examples of these constructions are the zero-valency verb *sirpirka* 'be good weather' and the indirect evidential form *hawas* (discussed in §5.5.1), coming respectively from *sir* 'appearence' and *pirka* 'be good', and *haw* 'voice' and *as* 'stand'. In these constructions, only one element bears the stress, but this element is here the noun and not the verb (i.e. *sírpirka* and not **sirpírka*; *háwas* and not **hawás*). Many accounts on such noun-verb constructions, like for instance Bugaeva (2004: 29-30), regard forms like *sirpirka* as forming one phonological unit based on their single stress, which is in turns also taken as evidence for the occurrence of noun incorporation (see §3.4.3).

Although most of these accounts do not expressly mention evidentials like *hawas*, we see how this latter fits in rightfully with the analysis for *sirpirka* firstly in light of the syntactic elements involved in its formation – in both *sirpirka* and *hawas*, in fact we find a noun joined to a one-place verb. Moreover, in both instances the semantics of the noun relates to some kind of sensorial perception. As Bugaeva notices, this is a constant for many noun-verb compounds whose meaning refers to natural phenomena or ambient states, a felicitous outcome when we consider that *hawas* may be used as a lexicalized verb meaning 'make a sound, resound'. In light of the syntactic and semantic similarities with constructions like *sirpirka*, we can argue for the status of unitary phonological word for *hawas*.

I now want to focus on *hawas* because, as an analogous case of a sensorial noun accompanied by a verb, its stress pattern is most relevant for the present discussion on direct evidentials, especially when we consider the alternative form of this indirect evidential: *hawe as* (see §5.5.1). In *hawe as*, we witness exactly the same morphological layout present in forms like *ruwe ne* – that is, a sensorial noun in the possessive form

followed by a verb. Also in *hawe as* and analogous constructions, one of the elements loses its stress but, differently from what happens on *ruwe ne*, this element is here the verb (e.g. *hawé as* and not **hawe ás*).

For one thing, we see that the stress pattern in these constructions is not systematically predictable although their morphosyntactic layout appears to be identical. In §5.5.2 I discuss how forms such as *hawas* and *hawe as* represent cases of noun incorporation and pseudo-noun incorporation, so that the different stress pattern displayed by direct forms (one where it is the verbal constituent to be stressed and not the nominal one) may indicate that these evidentials do not subsume any kind of incorporation. Determining whether this is the case and whether incorporation results systematically in a stress shift falls outside of the scope of this analysis. More importantly for the present purpose, we notice that it does not follow how the presence of a unitary stress should be diagnostic of, or in any case connected to, phonological independency of elements involved in direct evidential forms, as Bugaeva seemingly assumes.

We could suppose that the sensorial noun in evidentials like *ruwe ne* actually forms one phonological unit with the preceding word, being enclitically joined to it. In this scenario, we could argue for the phonological independency of the sensorial noun and the copula at least from one another. However, this appears not to be the case, given that direct evidentials may be used at the beginning of sentences (with a pragmatic anaphoric function), which suggests that the sensorial noun cannot be phonologically dependent from any other word but the copula *ne*. Example (122) shows one such case with the direct evidential *hawe ne*.

(122) A: *E-erampewtek   hawe?*
          2SS-3SO/not.know   DIR.HRN

     B: *K-erampewtek,   k-erampewtek.*
        1SS-3SO/not.know   1SS-3SO/not.know

   A: ***Hawe ne**   yakun,   eci-epakasnu.*
        DIR.HRN   if   1SS>2SO2-3SO/teach

   'A: You don't know?   B: I don't know, I don't know.   A: If it's so, I [will] teach you.' (TMA: 56)

In light of this evidence, basing my conclusions on the characteristics of stress pattern, I propose that direct evidentials of HA do form one unitary phonological word, analogously to *hawas* and the other indirect evidentials. Nevertheless, an in-depth research on stress pattern variations, within noun-verb constructions specifically, is most needed to determine whether, if at all, stress placement is systematically diagnostic of phonological wordhood.

5.3.1.2 Possessive morphology in direct evidentials

Morphologically, direct evidentials include the possessive form of the nouns *ru* 'trace', *sir* 'appearence', *hum* 'sound' and *haw* 'voice'. The possessive form displayed by these nouns when they are found as constituents of direct evidentials is a shortened version of the canonical possessive form. This short form results from the omission of the segment *-hV* from the possessive morpheme *-VhV* (see §3.4.1), a phenomenon commonly attested in Saru Ainu (Tamura, 2000: 85) and Chitose Ainu (Bugaeva, 2004: 20).[39] Since it is suffixed to a nominal root ending in a consonant, the possessive morpheme originally takes the *-VhV* realization when it accompanies one of the sensorial nouns employed in direct evidentials, so that, although shortened, the possessive morpheme is overtly retrievable as the remaining *-V* segment following the root.

Ruw-e   from *ruw-ehe*
trace-POSS

Sir-i   from *sir-ihi*
appearence-POSS

Hum-i   from *hum-ihi*
sound-POSS

Haw-e   from *haw-ehe*
voice-POSS

---

[39] Only a couple of isolated cases of a direct form where the sensorial noun appears in the long possessive form (i.e. *ruwehe ne*) appear in my reference data, e.g. in BUG: 269.

It should be noted that all sensorial nouns listed here, except for *sir* 'appearence', represent exceptions to the vowel-copying rule for the possessive morpheme, since the vowels appearing in this latter do not correspond to the one found in the noun root (see §3.4.1). Furthermore, it is worth clarifying that the underlying form of *ru* 'trace' is actually *ruw-*, where the final consonant *w* is not a glide inserted via a phonological process but rather a segment of the root that is deleted in the non-possessive form, as the sequence *uw is not a permitted VC sequence word-finally (on which see Tamura, 2000: 23). The consonant *w* otherwise surfaces in the possessive form, as it is found here in an intervocalic position.[40] In this respect, I deviate from morphological analyses for this noun that refers to *w* exactly as an epenthetic offglide (e.g. Bugaeva, 2004: 70).

There are indeed cases where *ru* is compounded with another noun or verb root beginning in a vowel in which we do not witness the restoration of the root-final *w* – an example would be *ruetoko* 'path, direction of a motion' (from *ru* 'trace' and *etoko* 'front'). Nevertheless, I assume that the underlying noun root for *ru* when used in the formation of the evidential form is indeed *ruw-* in light of the *-VhV* realization of the possessive morpheme. In fact, if the underlying root ended in a vowel (i.e. *ru*), we would expect the possessive morpheme to appear in the *-hV* realization, as this is systematic with all vowel-ending nouns. Furthermore, the fact that *ru* represents one exception to the vowel-copying rule for the possessive morpheme is one more piece of evidence in favor of the anlysis where the morpheme is underlyingly *ruw-* with a final non-epenthetic glide, since such exceptions are found to occur with consonant-ending noun roots only (see §3.4.1). Further research on the morphophonology of this particular noun as used outside the evidential domain is needed to clarify this point, but for now I presume *ruw-* to be the underlying form.

5.3.2 Morphosyntax of direct forms

In this subsection, I focus on the analysis of the morphosyntax of HA direct evidentials, and I consider the possible development of direct constructions from biclausal into monoclausal constructions. As a foundation for the analysis to come, I first refer to Bugaeva's (2013) observations on the morphosyntactic behavior of *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne* to advocate her conclusion that, although originally recognizable

---

[40] Departing from Tamura's (2000) generalization, I would argue that the sequence *uw* is not allowed word-finally, but it is indeed allowed syllable-internally, given that *uw* is followed by a vowel-initial syllable (i.e. *ruw but *ruw.e.he*).

143

as copula complement clause constructions, direct expressions are on the verge of being re-analyzable as monoclausal noun-copula constructions (Bugaeva, 2013: 669-71). Before I consider these issues, I briefly look at the one case of morphological variation attested within direct forms – the alternation between the copula *ne* and the verb *an* 'exist'.

5.3.2.1 The *ne – an* alternation

Morphological variation does not affect HA direct evidentials with regards to their nominal constituent which, as I pointed out in §5.3.1.2, consistently appears in the shortened possessive form in all tokens across the reference corpora. Rather, variation affects the verbal constituent of direct evidentials that can change from the copula *ne* to the one-place *an* 'exist', which Bugaeva (2013: 671) also calls the locative copula given its complementary distribution with *ne* within this particular environment.

     This suppletion of the verb form is not ascribable to morphophonological or to morphosyntactic reasons, but suppletion is rather related to pragmatic considerations – the copula *ne* is used in affirmative statements (123), while the one-place *an* is employed in interrogative (124) and exclamative statements (125).

(123) *A-eramiskari*   *okkaypo*   *ek*   *wa an* *ruwe **ne**.*
     4S-3SO/not.know   young.man   3SS/come.PC   RSLT   DIR.INT
     'An unknown young man has come.' (BUG: 256)

(124) *Mak* *an*   *pe*   *kusu*   *e-moyre*   *a*   *ruwe **an**?*
     how 3SS/exist.PC   NMLZ because   2SS-be.late   PRF   INT.DIR
     'Why were you late?' (TMA: 12)

(125) *Yaysukupka*   *oruspe,*   *isoytak*   *ne*   *a-ye*
     be.sorrowful   story   tale   as   4S-3SO/say
     hawe   *tap*   ***an***   *na!*
     <DIR.HRN>   EPH   <DIR.HRN>   FIN
     'I [will] indeed tell a sorrowful story like [it was] a tale!' (TMA: 46)

In both interrogative and exclamative statements, the one-place *an* is sometimes dropped, so that the possessed noun alone fulfills the direct evidential function in these instances. In contrast, elision of the verbal element never happens with the copula *ne* in

affirmative statements. Nevertheless, the copula may be substituted by *un*, that is used to mark an affirmative answer to a question containing a direct evidential.

(126) A: *Hemanta eci-e-mina*   *hawe **an**?*
       what   2PS-APPL-3SO/laugh   DIR.HRN
    B: *Uwepeker ci-nu*   *wa c-e-mina*   *hawe*   ***un**.*
       tale   1PS-3SO/hear   and 1PS-APPL-3SO/laugh   DIR.HRN   FIN
    'A: What do you laugh about?   B: We heard a story and we laugh at it.' (Tamura, 2000: 238-9)

When discussing its assertive function in answers, Tamura (2000: 238) glosses *un* as a final particle, which is also the convention I adopt here. However, this categorization is used despite the fact that not only does *un* appear in complementary distribution with *ne* and *an* within evidential forms, but it also seldom substitutes *ne* in other copular constructions outside of the domain of information source. Its distribution particularly with respect to *ne* and *an* suggests that *un* could be a verbal element and not a final particle. In support to this theory, we can recognize the assertive *un* as the two-place verb *un* 'be in, live in' that, for its inherently locative semantics, fits in perfectly with the one-place *an* as a possible substitute for the copula in direct evidential forms. Though appealing, this proposal needs to be corroborated through a focused study of copular constructions to confirm the use of locative verbs as eligible replacements for the copula *ne* also outside the evidential domain.

Aside from a change in the verbal constituent within the direct form, example (125) shows the presence of the emphatic *tap*. This is just one of the nominal restrictive particles allowed to syntactically separate the noun and the verb that constitute direct evidentials. I discuss the relevance of this particle below.

5.3.2.2 Direct evidentials as mixed category constructions

Direct evidential constructions of HA display the characteristics of a mixed category, in that they simultaneously possess morphosyntactic properties of two separate lexical categories – nouns (the sensorial nouns *ru*, *sir*, *hum*, and *haw*) and verbs (the copula *ne* and the one-place *an*). The sensorial noun within the evidential form overtly retains nominal properties, while the predicate scope of evidentiality retains verbal features such as being able to be marked for aspect and mood, and to host person agreement.

The acceptability of nominal restrictive particles after *ruwe*, *siri*, *humi*, and *hawe* is just one piece of evidence for the maintained nominal status of the sensorial noun within direct forms. The emphatic *tap* in (125) is one example of the particles that have the potential to intervene between the sensorial noun and the copula – other such particles are the focus particle *he*, *ka* 'even', or the negative *somo*.

(127) *[I-y-erampokiwen   a   nispa poka,   sone   siknu*
       4O-0-3SS/feel.pity   PRF   man   at.least   truly 3SS/be.safe

       *wa an]   haw-e   **he**   an?*
       RSLT   DIR.HRN   <FOC> DIR.HRN

       'Truly at least the man who has had pity for me has survived?' (TMB: 12)

An even more obvious signal of the nominal status of *ruwe*, *siri*, *humi*, and *hawe* is the retention of possessive morphology that, as Bugaeva (2013) states, indicates that the constituent maintains its independency and thus its nominal status.

Again Bugaeva adduces the *ne/an* alternation discussed in §5.3.2.1 as one additional piece of evidence for the nominal status of *ruwe*, *siri*, *humi*, and *hawe*, in that, if the noun-verb constructions that constitute the direct forms had developed into a unitary verbal constituent, internal changes of this kind would not be expected. With regards to the verbal status of the scope predicate, as to demonstrate that the syntactic addition of the sensorial noun does not result in predicate or clause nominalization, we can look at the different scope taken by aspectuals, modal expressions or negation, as (128) and (129) illustrate. In the first instance, the negative *somo* (here in the post-verbal emphatic construction with the particle *ka* 'even' and the light verb *ki* 'do') has its scope only over the verb *esirkirap* 'worry about', while in the second case the scope of negation is limited to the verb *an* 'exist' and thus to the direct evidential.

(128) *Nep   eci-e-sirkirap   ka   **somo** ki*
       something   2PS-APPL-3SO/worry.about   even   NEG   do

       ruwe ne   na.
       DIR.RSN   FIN

       'You in fact [will] not worry about anything.' (KAY: 2-2,18)

(129) *A-en-ko-i-pak*   *ruwe*   ***somo*** *he*   *an?*

    4S-1SO-APPL-ANTIP-3IO/punish   DIR.RSN   <NEG FOC> DIR.RSN

    'Won't I be punished?' (TMA: 12)

The scopal characteristics of the negative *somo*, as well as the analogous ones of aspectual and modal markers, lead Bugaeva (2013: 669) to conclude that HA direct evidential constructions are essentially copula complement clauses, where the copula *ne* (or the verbs allowed to alternate with it) is the matrix verb. What follows from this observation is that these evidential constructions are syntactically biclausal. Nevertheless, we notice that one specific direct form, namely *ruwe ne*, presents important limitations with regards to clefting (Bugaeva, 2013: 670-1), which suggests that this evidential is possibly being re-analyzed as an auxiliary – in these instances *ruwe ne* retains its epistemic extension of certainty and does not function semantically as a proper evidential anymore (see Chapter 8). As a consequence of this re-analysis, the direct evidential construction should be regarded as monoclausal. To support this possibility, I point out that *ruwe ne* shows the highest combinability with other direct evidentials (see §8.3).

(130) *Rametok-kor*   ***siri ne***   *anan*   ***ruwe ne***.

    3SS/bravery-have   DIR.VIS   ADM   DIR.RSN

    'He was indeed so brave.' (Bugaeva, 2013: 672)[41]

This behavior may be representative of a development of direct evidentials from noun-verb compounds to full-fledged auxiliaries that was likely happening synchronically in the language at the time of data collection.

5.4 SA inferentials

Inferentiality in SA is encoded via five separate forms: *ruwehe ne(e)*, *ruwehe 'an*, *sirihi 'an*, *humihi 'an*, and *hawehe 'an* (see §3.2.1). Following Murasaki (1976a), I take these realizations as the basic forms of SA inferentials, although different alloforms for each form are attested in the reference corpora. I do not base this standardization of inferential forms on an empirical survey aimed at determining their actual underlying form, but rather my assumed representation merely follows from the trend found in

---

[41] My translation of the example reported by Bugaeva.

previous Ainu literature. This decision is due to impediments in carrying out a cohesive survey of alloforms, which will become evident throughout the remainder of this section.

In the subsections to follow, I will look at the morpho-phonological variants of each inferential form and then discuss their syntactic properties. The main outcome of the analysis will be that SA inferential constructions feature a case of pseudo-noun incorporation (PNI) (see §4.3.2) and that the use of inferentials can result in the embedding of the clause containing the predicate scope of information source.

The employment of inferential forms (specifically *sirihi 'an*) as independent predications is reported in the literature (Murasaki, 1976a: 97-8), but I could not find any example of such use in the reference corpora for my study. As such, the following subsections deal only with the morphophonology and morphosyntax of *ruwehe ne(e)*, *ruwehe 'an*, *sirihi 'an*, *humihi 'an* and *hawehe 'an* as dependent predications marking information source.

5.4.1 Morphophonology of inferentiality

The inferentials of SA seem to constitute one unitary phonological word. Like HA direct evidentials, they systematically bear a single stress and I could not find any instance, among the tokens for which an audio backup is available, that featured a prosodic pause between the sensorial noun and the verb. As for those corpora for which I have no audio backup at hand (e.g. PLA), the phonological unity of inferential forms is harder to determine. Important insights in this respect come from the edited transcription of inferential tokens. Especially in PLA, one single diacritic to mark stress is seldom found on inferentials (e.g. *húmhi an*) or, in some instances where stress is not marked, the inferential is even rendered as one single word in transcription (e.g. *ruhene*). Such editing choices seem to suggest that inferential forms constitute one phonological word, along with the testable and far more reliable evidence coming from the stress pattern of other tokens. Nonetheless, isolated cases in these same corpora are also attested where the edited transliteration indicates a possible independency of the nominal and verbal elements within the inferential forms (e.g. *rúhe án* in PLA).

The presence of a glottal stop /ʔ/ in between the noun and the verb of inferential forms across dialects cannot be confirmed either for all dialects depicted by the available data. While for Western Sakhalin dialects Murasaki (MRA, MRB) systematically signals the glottal stop on the verbal element of inferentials (by rendering

it with an apostrophe '), we do not find the same convention (nor any other systematic convention) for Eastern Sakhalin in the texts edited by Pilsudski or Wada. We could speculate on the presence of a glottal stop in Eastern Sakhalin inferentials on the basis of their stress pattern as rendered in transliteration, but this is not a reliable approach to make any serious claim on this matter.

Phonotactic rules apply at word boundaries which affect inferentials in such a way that they are realized differently from their idealized form, as discussed in the opening of this section. For instance, the /n/ in *'an* or the /r/ in *ruwehe* undergo feature assimilation when respectively followed by the nasal /m/ or preceded by the nasal /n/ (i.e. *'an manu* > [ʔam manu]; *an ruhe* > [an tuhe]). Furthermore, segments of the nominal constituent within inferential forms may be lost, affecting *-hV* or the *-V-* segment of the possessive suffix *-(V)hV*, the consonant *w*, or the initial aspirated /h/. As noted previously, this is possibly due to processes which operate in fast or casual speech. This happens most often in Eastern Sakhalin dialects. However, I cannot provide a full description of these processes again due to the lack of an audio backup, so that doubt remains also about whether these forms are representative of actual dialectal variants or whether they are irregular or idiolectal. Below are the attested variants for each inferential found in the reference corpora.

-	*Ruhe ne(e)*, *ruuhe ne(e)*	for *ruwehe ne(e)*
-	*Ruuhe an*, *ruhe an*, *tuhe an*	for *ruwehe 'an*
-	*Siri an*	for *sirihi 'an*
-	*Humhi an*, *umhi an*	for *humihi 'an*
-	*Hawhe an*, *hauhe an*, *haw an*	for *hawehe 'an*

I treat these variants as alloforms of what I take to be the "main" forms of SA inferentials.

5.4.2 Morphosyntax of inferentiality

Similarly to HA direct evidentials, SA inferentials developed from a noun-verb construction where the nominal element semantically refers to some kind of sensorial perception (see §3.2.3.2). There are however some important differences with the cognate HA construction.

First, the noun roots of sensorial nouns involved in SA inferentiality are *ruu* 'trace', *siri* 'appearence', *hum* 'sound', and *haw* 'voice'. We notice the lengthened root vowel in *ruu* (as opposed to HA *ru*) and the final vowel in *siri* (as opposed to HA *sir*), while *hum* and *haw* appear identical in both Ainu varieties. As it is the case for the HA cognate, the underlying form of *ruu* 'trace' is *ruw-*. As Murasaki (1976a: 4) suggests through her illustration of SA phonotactic rules, in this instance the final *w* allegedly undergoes assimilation (into *u*) and not elision, as it happens in HA. The conditions for assimilation would here be the same as in HA, since the sequence *-uw* is not allowed word-finally in SA, and this process would eventually instantiate the long vowel *u*. However, vowel lengthening in SA still remains an understudied phenomenon with regards to its occurrence and environment, so that research is needed to determine whether here we witness a case of elision or assimilation. In this analysis, I consider *ruw-* to be the underlying form of *ruu* 'trace', again on the basis of the possessive morphology on the noun root which takes the realization *-VhV* and represents an exception to the vowel-copying rule described in §3.4.1 – both characteristc of consonant-ending noun roots.

Secondly, the verbal constituent is not always the same across inferential forms. The one-place *'an* 'exist' covers the function of a verb in the construction, and we see the alternation with the copula *ne(e)* occurring exclusively when the nominal constituent is *ruwehe*. I will look at the semantico-pragmatic implications of this shift in the verb within inferential forms in Chapter 7.

Aside from the possessive morpheme, the nominal element within inferentials may retain other overt nominal morphology. Namely, the plural suffix *-hcin* is found to occur often on sensorial nouns, as shown in (131). On average, the inferential *hawehe 'an* is the one form to feature the plural suffix the most in my reference data.

(131) *Ahkapo-ho-hcin*   *cis*   **hawehe-hcin 'an**

3/young.brother-POSS-PL   3PS/cry   INF.HRN<-PL>INF.HRN

kusu 'an   *manu.*

PRG   DIR.KNW

'It seemed her younger brothers were crying.' (MRB: 238)

The retention of nominal morphology is relevant for my discussion of the morphosyntactic properties of inferentials. Specifically, this phenomenon provides

evidence for the presence of pseudo-noun incorporation (PNI), which I discuss in §5.4.2.2.

5.4.2.1 Inferentials and embedding

Before I move on to consider PNI, I shall briefly consider the issue of embedding. As syntactic constituents, inferentials are always found to follow their scope verb and can be followed in turn by coordinating or subordinating conjunctions as in (132), complementizers or, far more commonly, the reportative evidential *manu* as in (133).

(132) *Ehánḱeno óśmaḱepèka ex húmhi án-kusu, ...*

E-hanke-no	*osmake*	*peka*	*eh*
APPL-be.close.to-ADV	3/behind	through	3SS/come.PC

hum[i]hi an **kusu***, ...*

INF.FLT   because

'Because it seemed that someone came behind [him] in his vicinity, …'

(PLA: 77)

(133) *Tuhso neeno 'an*   *puy ahun*   *sirihi 'an*   **manu***.*

cave	as.if	3SS/exist.PC	hole	3SS/enter.PC	INF.VIS	DIR.KNW

'It seemed a hole like a cave opened.' (MRA: 95)

An inferential may seldom be followed by an aspectual expression which, despite its linear position, still has semantic scope over the notional verb to which evidentiality also applies, and not over the verb *ne(e)* or *'an* contained in the inferential form. Example (131) above, repeated here as (134), illustrates one such instance.

(134) *Ahkapo-ho-hcin*   *cis*   *hawehe-hcin 'an*

3/young.brother-POSS-PL   3PS/cry   INF.HRN<-PL>INF.HRN

kusu 'an   *manu.*

PRG   DIR.KNW

'It seemed her younger brothers were crying.' (MRB: 238)

The progressive *kusu 'an* has its scope over the notional verb *cis* 'cry' and not over the verb *'an*. Although attested, this construction is far from being representative of the canonical syntax of inferential expressions when an aspectual expression is present.

(135) *Unci*   *'okore*   *'us*   ***wa 'isam***   *ruwehe 'an*   *manu.*

       fire   all   3SS/burn   CNCL   INT.INF   DIR.KNW

       'The fire must have burnt out.' (MRB: 30)

Example (135) shows the most common syntactic structure, where the aspectual expression (here the conclusive *wa 'isam*) directly follows the notional verb and thus precedes the inferential.

     The semantic scope of aspectuals provides an insight into the monoclausal properties of inferential constructions and subsequently of the fact that they do not cause embedding of the clause containing the scope predicate. If in (134) the inferential *hawehe 'an* caused embedding of the clause *ahkapohohcin cis* 'her younger brothers cried', the progressive aspectual expression could not have its scope over the notional verb *cis* 'cry'. A valuable test to (dis)prove the theory of monoclausality of inferential constructions would be to see whether syntactic material, possibly with semantics that does not fall within the domains of aspect or evidentiality (i.e. something that it is not an aspectual or the reportative *manu*), is structurally acceptable and has its scope over the notional verb. If this was the case, we could advance one more piece of evidence in support of the monoclausality theory. If, in contrast, the semantic scope of the added syntactic constituent did not extend over the notional predicate, we would understand that the inferential construction does entail embedding. On these premises, we could consider sentences like the one in (134) as representative of a possible synchronic development of inferential expressions from biclausal into monoclausal constructions. This development remains difficult to test on the basis of the available data.

5.4.2.2 A case of PNI

As a piece of evidence for proposing that SA inferentials represent a case of PNI let us consider examples (136) and (131), repeated here as (137).

(136) *Aj-jupútárhi makapa haórokhe am manu.*

     An-yup-utar[i]-hi   *makap(a)*

     1P-older.brother-NMLZ-POSS   3PS/ascend.PL

     *ha[we]-**oro-k[e]he** an*   *manu.*

     INF.HRN-\<place-POSS\>INF.HRN   DIR.KNW

'It seemed my older brothers came up.' (PLA: 182)

(137) *Ahkapo-ho-hcin*   *cis*   *hawehe-**hcin** 'an*

       3/young.brother-POSS-PL   3PS/cry   HRN.INF<-PL>HRN.INF

       kusu 'an   *manu.*

       PRG   DIR.KNW

       'It seemed her younger brothers were crying.' (MRB: 238)

In §4.3.2, I introduced PNI and highlighted some of its main morphosyntactic characteristics, among which two in particular relate to syntactic freedom and the morphological specification of the nominal constituent involved in incorporation. In comparison with nouns in proper NI (§4.3.1), pseudo-incorporated nouns (i.e. PINs) are syntactically less bounded to the incorporating verb and they may also retain overt inflectional morphology, thus not resulting completely bare.

The two examples above show how SA inferential constructions perfectly comply with these two generalization. In (136), we see the full nominal constituent *oro* 'place', that here appears in its possessive form, intervening between the PIN *haw* 'voice' and the incorporating verb *'an*[42] to indicate that the PIN is not fully bound syntactically to its incorporating verb. Conversely, example (137) shows the retention of inflectional nominal morphology on the PIN. In this example, I underline the presence of the pluralizing suffix *-hcin*, but the possessive morpheme already hints at the non-bareness of the incorporated nominal. Syntax provides more evidence in support of the presence of PNI; however, in order to discuss this evidence we first have to consider the status of inferential expressions as erstwhile possessive constructions.

5.4.2.3 Inferential constructions as erstwhile possessive constructions

Possessive morphology on the sensorial noun within inferential forms suggests that we are in the presence of a possessive construction. On the basis of what I have discussed in §3.4.1, the sensorial nouns *ruu*, *siri*, *hum*, and *haw* are the possessees in such possessive constructions – this is because these nouns are the elements that structurally host possessive morphology. At the same time, we must understand the possessor as

---

[42] Such forms appear only three times in my reference corpora (once in PLA on *hawehe 'an* and twice in MRA on *humihi 'an*) and its structure is indeed unclear. The locative noun *oro* 'place' comes here between the sensorial noun and the verb within the inferential form and the possessive form is recognizable as the one of *oro* and not the one of the sensorial noun (the possessive form *-kehe* is widely attested on locative nouns but never on *haw* or *hum*).

being a third person referent, since third person is the only grammatical person to not trigger overt morphological agreement referencing the possessor on the possessee.

The question is now how to determine who is the possessor in these constructions. I argue that this is the whole clause containing the notional verb within the scope of evidentiality. This clause is able to function as an element in a nominal construction because it has undergone clausal nominalization. Before I move on to presenting my case, let us see the assumed structure of possessive constructions in (138). For the sake of clarity, I add here the indexing *pss* for "possessee" and *psr* for "possessor" and gloss the inferential in order to show its internal morphemic composition.

(138) *Útara tēkoro tóxśeno húmhi am manu*

[Utara	*teekoro*	*tohseno]*$_{psr}$	*[hum]*$_{pss}$-*ihi*
people	really	3PS/sleep.deeply	3/sound-POSS

'an	*manu.*
exist.PC	DIR.KNW

'It seemed [those] people were really sleeping deeply.' (PLA: 184)

If we are to propose a literal translation for this sentence, this would be close to 'there was the sound of the people's really deep sleeping'.

We can consider one objection at this point – why do we not understand the possessor in the construction as the subject of the notional verb (i.e. *utara* 'the people' in (138))? Indeed there are cases that suggest this is a sensible conclusion.

(139) | *Yuhpo* | *'utah* | *taa* | *cis-a-hci* | *hawehe 'an.* |
|-------|---------|-------|------------|---------------|
| older.brother | people | INTJ | cry-0-3PS | INF.HRN |

'It seemed the older brothers cried.' (MRB: 58)

A literal translation for (139) could be 'there was the the older brothers' crying voice'. However, this seems not to be the case. When the notional scope verb's subject is first or second person, person agreement on the possessee via morphological agreement is never encountered. This would indeed be expected, given the possessor-referencing strategy illustrated in §3.4.1. Consider (140).

(140) *'Otanuye*   *'e-kii*   *ru[we]he 'an*.

      SLV/sand.draw   2SS-VO/do   INF.RSN

      'You must have drawn on the sand.' (PLB: 107)

Since there is no agreement for the second person singular subject on the possessee *ruu* 'trace' (i.e. *'e-ruwehe*), there is also no evidence to argue that the possessor in the construction is co-referential with the notional verb's subject.

The double reading shown for (139) is most likely semantically derived, as the inferentials *hawehe 'an* and *humihi 'an*, that literally translate as 'there is the sound of' and 'there is the voice of', are often used along with a notional verb describing an event that entails the production of a sound/voice on somebody's part (e.g. *cis* 'cry', *yaykoniwen* 'grumble'). Such semantic compatibility between the notional verb and the sensorial stimulus subsumed by the inferential is all but systematic across different forms. This is true, for instance, for *ruwehe 'an* as (140) demonstrates – here the literal translation 'there is your sand-drawing trace' helps understand how the sentence results odd or even non-sensical. Conversely, saying that it is the nominalized clause that serves as the possessor in this construction is a felicitous assumption because it explains why morphological agreement with the subject of the notional verb is never found on the possessee and, subsequently, why we systematically find third person null-agreement instead.

Stating that the subject of the notional verb cannot be referenced in any way on the inferential form would, however, be incorrect. In fact, when it is present, the plural suffix *-hcin* that appears on the sensorial noun (see for instance (137) above) is found to refer to the plural subject on the scope verb. Although the plural morpheme *-hcin* is never found to co-occur with a singular subject on the notional verb, thus supporting this theory, its use along with a plural subject on the scope verb appears to be all but obligatory.

To finally return to the issue of PNI, when we see inferential constructions of SA as erstwhile possessive constructions, we notice how the nominal constituent that undergoes incorporation is not just a single noun (i.e. the possessive form of *ruu*, *siri*, *hum*, or *haw*), but rather a complex nominal constituted of a possessed sensorial noun and a nominalized clause, which are semantically a possessee and a possessor respectively. Having complex nominals (regarded as NPs, in Borik and Gerhke's (2015)

approach) and not just simple nominals or noun roots incorporated into a verb is one characteristic of PNI (as discussed in §4.3.2).

One last piece of evidence that justifies my proposed involvement of PNI in SA inferentials comes from modifier restrictions and the impossibility of constituent displacement for pragmatic purposes. I note, in fact, that both the possessed nominal and the nominalized clause are restrictive with regards to the modifiers they can take. As for the former, the only modifier allowed syntactically and semantically is the possessor clause, invariably found to precede it with no insertion of morphosyntactic material permitted. As for the nominalized clause, it is impossible for any modifier (e.g. demonstratives) to co-occur. Moreover, it is impossible to displace either one of the constituents of the erstwhile possessive construction, or even both as a whole, after the verb *'an* or *ne(e)* as a way to pragmatically focus them. These syntactic restrictions further indicate that incorporation is at work in the complex nominal composed of the nominalized clause and the possessive noun.

5.4.3 Concluding remarks on SA inferentials

As a conclusion to this section, let me summarize SA evidentials' structural properties. SA inferential forms developed from a noun-verb construction that phonologically seem to form one unitary word and that morphosyntactically represent a case of PNI. Evidence for the presence of PNI comes from the morphological non-bareness allowed for the PIN and from the acceptability of syntactic constituents insertion between the PIN and the incorporating verb. PNI in this instance concerns a complex nominal constituent, composed of a possessive noun and a nominalized clause which are part of an erstwhile possessive construction. The use of inferentials does not cause embedding, although the consistency of this one property is not entirely testable on the basis of the available data.

5.5 HA indirect evidentials

Indirect evidentiality is encoded in HA via four separate formal devices, introduced in §3.2.1. These are *siri an*, *siri ki*, *humi as*, and *hawe as*. As was the case for SA inferentials in §5.4, I address these forms as the main realizations of HA indirect evidentials, although at least one alloform for each is attested in the reference corpora. In this particular instance, my generalizations about the main realizations of indirect evidentials only partially follow from the previous literature on Ainu. Specifically, I

refer to Tamura (2000: 229) who reports *humi as* and *hawe as* in the variants displaying the possessive form on the nominal element. Also, she discusses both *siran* and *siriki* (this latter one intended as the combination of *sir* and *iki*) in variants including the nominal element in the non-possessive form (Tamura, 2000: 186, 230). I depart from Tamura's analysis of these forms with regards to this last convention for *siri an* and *siri ki*, and prefer instead to take all forms that feature the nominal element with the possessive morpheme as the main realizations of HA indirect evidentials. Other than being a theoretically more cohesive approach, this decision also allows me to discuss the morphosyntactic characteristics of these forms in a more consistent way, since indirect forms displaying or not displaying the nominal element in the possessive are seen to differ structurally.

Differently from what we saw for SA inferentials in §5.4.1, the nature of HA indirect evidentials alloforms is not solely phonotactic. The formal variations encountered for *siri an*, *siri ki*, *humi as*, and *hawe as* are only partially ascribable to the phonological environment in which the evidentials are used. Phonological processes can explain namely the elision of the initial /h/ in *humi as* and *hawe as*. Rather, alloforms differ from main forms morphologically, namely in whether the nominal element in the construction retains possessive morphology. The only exception to this is represented by *siri iki* and *siriki*, alloforms of *siri ki*. In the former, the morphological change affects the verbal constituent within the evidential form that is here the one-place *iki* 'do', as opposed to the synonymous two-place verb *ki* that we find in *siri ki*. In the latter, the morphological change affects both the nominal and the verbal elements, that are here respectively the non-possessive form *sir* and the one-place *iki* 'do'. I delay the discussion on verbal constituents within indirect evidentials until §5.5.2.

As I discuss in more detail in the following subsection, the presence or absence of possessive morphology on the nominal constituent is connected to the morphosyntactic function the indirect form fulfills as a whole in the sentence. This is entirely different from what happens for SA inferentials, whose alloforms and main forms are not seen to function differently from a morphosyntactic point of view. The alloforms attested in the reference corpora are summarized below.

- *Siran*   for *siri an*
- *Siri iki, sirki, siriki*   for *siri ki*
- *Humas, umas, umi as*   for *humi as*

- *Hawas*, *awas*, *awe as*   for *hawe as*

In another striking contrast to SA inferentials, the use of HA indirect forms as the independent predication in the sentence is widespread. For the clarity of the analysis to follow, it is worth stating here the functions and semantics of indirect forms when they are used as independent predications – *siran* is used as a lexical verb with the meaning of 'be so' or 'pass' (with reference to time); *sirki* and *siriki* are used with the meaning of 'appear', 'look like'; *humas* is used with the meaning of 'resound', 'feel' and, more rarely, 'think'; *hawas* is used with the meaning 'make voice', 'say', 'speak' and 'talk'. In addition, *siri an* has one more dependent predication use as a marker for resultative/progressive aspect (see §8.2.3.1). I will dedicate a thorough discussion to the meanings and uses of indirect forms as independent predications in Chapter 8 but, in the remainder of this section, I will analyze the structural properties of these forms, independent of pragmatic considerations. In order to bring out a cohesive analysis, I will refer to *siri an*, *siri ki*, *humi as*, and *hawe as* and their alloforms as "sensorial perception predicates" (SPPs), in light of their invariably subsuming a reference to a sensorial perception both when used as dependent or independent predications. I will refer to the constructions they are involved in as "sensorial perception constructions" (SPCs). Their (in)dependent predication function will be evident in glossing and translation.

In the following subsections, I will look at the morphophonology and morphosyntax of SPPs, making special reference to the related direct evidential forms of this Ainu variety with which they share several properties. The main outcome of this section will be that HA SPCs have developed from an erstwhile possessive construction, and that the resulting structure has come to show morphosyntactic features proper of noun incorporation (NI) and pseudo-noun incorporation (PNI). Furthermore, these instances of incorporation are seldom found to co-occur with relativization, resulting in a structure that is reminescent of an internally-headed relative clause. Eventually, I will show that the occurence of the possessive morpheme on the nominal constituent within SPPs is closely connected to the mono- or bi-clausal properties of the indirect evidential construction.

5.5.1 Morphophonology of indirect forms

I touched on the morphophonology of indirect forms briefly in §4.3.1.1 as a way to compare their phonological characteristics with the ones of the structurally analogous

direct forms, such as *ruwe ne*. Direct and indirect evidentiality are encoded by structurally similar formal devices, constituting of a nominal element that bears possessive morphology and a verbal element, which notably display an opposite stress pattern.

Direct forms and SPPs of HA under scrutiny originate from the same nouns that semantically refer to some kind of sensorial perception. However, there is one important difference between direct forms and the SPPs I consider here – the noun *ru* 'trace' is not involved in the formation of SPPs. The only nouns we find in this instance are thus *sir* 'appearence', *hum* 'sound', and *haw* 'voice'. When they are part of an SPP, these nouns always retain their stress (e.g. *sirí ki*, *hawé as*), while the verbal constituent remains unstressed, and this happens consistently notwithstanding the presence or absence of possessive morphology. The only effect that the possessive suffix has on the stress pattern of SPPs is that it causes a shift from the first to the second syllable of the nominal constituent (e.g. non-possessive *háwas* vs. possessive *hawé as*). Following on from the discussion of stress and phonological wordhood given in §5.3, I argue that HA SPPs form one unitary phonological word.

Focusing specifically on the morphology of the nominal constituent in SPPs, I refer back to the analysis of direct evidentials provided in §5.3, since the nouns *sir*, *hum*, and *haw* appear in the same shortened possessive form I discussed there. The one difference with direct evidentiality is that in SPPs, the nominal constituent may otherwhise appear in the non-possessive form, as discussed in the opening of this section. Conversely, the verbal constituent needs to be addressed separately, as we do not see the same verb used in all SPPs.

Three separate verbs take part in the formation of SPPs. The first is the one-place *an* 'exist', already seen in interrogative direct forms of HA and in SA inferentials. The next is the one-place *as* 'stand', that occurs when the nominal constituent is *hum* or *haw*. The final verb found in SPPs is the two-place verb *ki* 'do'. As mentioned above, *ki* 'do' in *siri ki* is the only verb to show variation as it can be substituted by its one-place equivalent *iki*. For all other verbs we do not witness any kind of alternation (such as the *ne-an* alternation described for direct evidentials) nor deletion – that is, the verbal constituent cannot be omitted from the SPP.

5.5.2 Morphosyntax of indirect forms

Throughout the remaining subsections, I concentrate on a number of syntactic constructions displayed by SPPs of HA that appear synchronically in the language. Although the properties of these constructions may hint at possible diachronic developments, the evidence from the reference data is insufficient and does not clearly support this conclusion. I will not advance any specific claim about the evolution of these SPCs.

5.5.2.1 Possessive constructions and PNI

As a start, I discuss SPCs as erstwhile possessive contructions, in virtue of the possessive morphology retained on the nominal constituent when the SPP takes the form *siri an*, *siri ki*, *humi as*, or *hawe as*. The structure I assume here is no different from the one I discussed in §5.4.2.3 for SA inferentials. That is, while the role of possessee is fulfilled by the nominal constituent within the SPP, the clause containing the verb that falls under the scope of evidentiality fulfills the function of possessor, having previously been nominalized via clausal nominalization (discussed previously in §4.4.1). Example (141) illustrates the assumed structure. Here again, the SPP is glossed in order to show its internal morphemic composition with possessor and possessee indexed.

(141) *[**Hunak**   **un**   **ka**   **a-i-y-ani**   **wa**   **paye-an**]$_{psr}$*
     where   to   INT   4S-4O-0-carry and   go.PL-4S

*[**hum**]$_{pss}$-i*   *as.*
    sound-POSS stand.PC

'It seemed they went carrying me to somewhere.' (TMA: 4)

Evidence for the status of the nominalized clause as the possessor in these constructions comes again from morphological referencing (or lack there of) found on the possessed noun, where no person agreement can be found and third person null-agreement is evidenced. Indeed co-referencing of the possessor with the subject of the scope verb is imaginable, especially in those cases where this subject is a third person and the SPP used is either *humi as* or *hawe as*. However, as in SA inferential constructions *humihi 'an* and *hawehe 'an*, the subject-referencing reading appears to be

merely semantically implicated by the meaning of verbs that often co-occur with these SPPs (see §5.4.2.3).

For the specific case of HA SPCs, we can adduce one more piece of evidence in support of the assumed underlying possessive structure. In a few isolated cases, in fact, iterativity of the event expressed by the scope predicate is referenced on the verbal constituent within the SPP. More concretely, iterativity is overtly marked with plural morphology. A verbal feature (iterativity) relating to the aspectual contour of the event depicted by the scope verb is translated as number agreement on the SPP verb, as normally happens for nouns, and this clearly signals the nominal status of the clause containing the scope verb (i.e. the possessor). Example (142) presents one such case. Plurality on the SPP verb in this instance is overtly marked by the suppletive form *okay* 'exist' (for the paucal *an*). The background context for this example is that a daughter finds herself in the position of acting against her own father, although he has been constantly attentive to her. Here the SPP *siran* functions as a dependent predication marking resultative aspect.

(142) ***[I-omap]***$_{psr}$ ***[sir]***$_{pss}$***-i***   ***okay***   *pe*   *somo*

    4O-love   appearance-POSS   exist.PL   though   NEG

    arpa-an   *ka*   *eaykap.*

    go.PC-4S   even   not.be.able

    'Though he has been loving me, I can't [do otherwise] but go.' (KAY: 21-4,2)

Similar to what I propose for SA inferentials, I argue that HA SPCs like the one depicted in (141) represents a case of PNI. Let me discuss the evidence for this statement starting from the syntactic restrictions these constructions present. Firstly, the presence of modifiers for the possessive noun and the nominalized clause is restricted or completely unacceptable. Although a wide range of nominals would potentially be allowed syntactically, the possessive noun may only be modified by the nominalized clause which is the sole possessor, while the nominalized clause cannot take any. In this sense, the restriction is not essentially semantic, as Borik and Gehrke (2015) discuss for PNI (see §4.3.2), but rather syntactic. As such, this instance of PNI of Ainu would fit in with those rarer cases where modifier restriction is unmistakably syntactic (Borik and Gehrke, 2015: 20). Secondly, clefting is not permitted. Neither the possessed noun or

the nominalized clause can be displaced after the verb for pragmatic purposes. The hypothesis of PNI holds also when we consider the proposal that the sensorial nouns *sir*, *hum* and *haw* are part of a possessive construction, and thus form a complex nominal constituent with the preceding nominalized clause. As I underline above in §5.4.2.3, the incorporation of complex nominals is a characteristic of PNI.

Corroborating evidence finally comes from the morphological complexity allowed for the incorporated item and from the limited syntactic freedom this item still retains despite incorporation. The presence of possessive morphology on *sir*, *hum* and *haw* is already diagnostic of the fact that the incorporated nominal is not completely bare; however, the insertion of syntactic constituents in between the incorporated item and the incorporating verb is here even more illustrative of syntactic freedom. Consider (143).

(143) *Aynu*	*ek*	*hum*	*i-os*	*as.*
person	3SS/come.PC	IND.FLT	<4O-behind>	IND.FLT

'It seemed a man came behind us.' (KAY, 24-3,2)

In this example the locative expression *ios* 'behind us' intervenes between the pseudo-incorporated constituent *aynu ek hum* and the incorporating verb *as*, signalling that the former retains some syntactic independency from the latter.

At this point a clarification must be made. In the opening of this section I address the possessive morphology on *sir*, *hum* and *haw* as the evidence for their involvement in a possessive construction, and the formation of a complex nominal with the nominalized clause becomes a diagnostic for the presence of PNI. However, in (143) the nominal *hum* appears in its non-possessive form. Despite this evident discrepancy, I still argue that the case illustrated in (143) is an instance of PNI for two reasons. The first is precisely because of the acceptability of a syntactic constituent intervening before the incorporating verb, while the second reason is the impossibility of syntactic insertion between *sir*, *hum* and *haw* and the clause containing the scope verb. As will become clear in §5.5.2.2, these syntactic limitations do not hold for another group of SPCs of HA that, in the opposite manner, do not allow syntactic insertions between the incorporated item and the incorporating verb, but do permit insertions between the incorporee and the clause containing the scope verb. I will discuss these instances as representing cases of NI proper.

The example above in (143) where the noun *hum* appears in its non-possessive form is not an isolated case. As a matter of fact, 23% of the tokens that display the syntactic properties of PNI also display *sir*, *hum* and *haw* in their non-possessive form. This phenomenon does not seem to be representative of a dialectal or an areal feature nor of a diachronic development of indirect evidential constructions, since possessive and non-possessive noun forms are consistently found in all the reference corpora I consulted. This is independent of the place or time of data collection for each corpus. Rather, this could be representative of a synchronic development – such a conclusion is supported by the fact that even in those instances of NI proper discussed in 5.5.2.2, both morphological variants of *sir*, *hum* and *haw* are attested.

5.5.2.2 NI and biclausality

Noun incorporation proper (NI) is another syntactic process involved in sensorial perception constructions (SPCs). Examples (144)-(146) illustrate the structural layouts attested for SPCs in which the SPP displays characteristics of NI.

(144) *Otuypa-an   kun-i   ne   yak   a-ye   kor*
harvest-4S   obligation?-POSS   COP   COMP   4S-3SO/say   while
sir-an.
appearence-be(RSLT)
'It had been said that crops should have been harvested.' (TMA: 50)

(145) *A-mac-ihi   ka   tane   ray   wa*
4-woman-POSS   even   now   3SS/die   and
ohonno   *sir-an.*
some.time   appearence-be
'Now even my wife died and some time passed.' (TMB: 10)

(146) *Ukuran   ka   yaanipo   isam   anki   sir-ki.*
be.evening   even   almost   3SS/not.be   about   IND.VIS
'Even in the evening it seemed he was almost about to die.' (TMA: 14)

What we notice in the SPCs depicted in (144)-(146) is that it is possible to have syntactic constituents intervening between the nominal constituent in the SPP (which is

163

sir 'appearance' in all three examples provided here) and the preceding scope predicate. This is quite different from what we saw in the SPCs discussed in §5.5.2.1, where no such syntactic insertion is acceptable and the SPP is syntactically adjacent to the scope predicate. The kinds of syntactic constituents which intervene in this environment are coordinating or subordinating conjunctions, like *wa* 'and' or *kor* 'while' in (144) and (145), time or space adverbs co-occurring with a conjunction, like *ohonno* 'some time' in (145), or adverbials that convey a semblative-approximative meaning like *anki* 'about' as in (146), *noyne* 'as if' and *pekor* 'just like'. In contrast, no syntactic constituent can separate the nominal and verbal elements within the SPP. As a comparison, consider once again example (143) shown previously in §5.5.2.1, that shows that this is indeed possible in other SPCs.

Let us see how, in light of these behaviors, these SPCs can be recognized as involving NI. As I discussed in §4.3.1, one prototypical characteristic defining NI is that this process is the formation of one unitary stem from a nominal and a verbal morpheme. I argue that the HA SPCs under scrutiny in this subsection fit in with this first prototypical property of NI. I base this on the fact that the nominal morpheme taking part in the process constitutes one single root that cannot be morphemically analyzed further. In the cases at hand, the incorporated nominal root is never found to be a complex root since the nouns *sir*, *hum*, and *haw* do not combine with any other root before undergoing incorporation (which is nonetheless possible in many of the languages showcasing NI that Muro 2009 surveys). In the same way, the verbal morphemes *an*, *as*, and *(i)ki* are never expanded via additional morphology previously to the incorporation of the sensorial noun.

However, I must address one important discrepancy to this first generalization. Instances of SPCs like the one in (147) seem to be in opposition to what has just been said, since the incorporated sensorial noun bears possessive morphology.

(147) *Arpa-an*   *wa*   *ene*   **sir-i**-*ki*   *ene*
        go.PC-4S   and   like.this   appearance-POSS-do   like.this

        sir-an   *[h]i*   *a-nukar*   *poka*   *ki*   *kus[u] ne*   *na.*
        appearance-be NMLZ   4S-3SO/see   at.leat   SLV/VO/do INTN.FUT   FIN
        'I will go and indeed at least see how the situation is.' (KAY: 6-1,8)

Despite the presence of possessive morphology in these instances, I still argue that what we witness here is a case of NI and not, as discussed above, another example of PNI. The evidence for this comes from the fact that the incorporated sensorial noun, despite the inflectionl morphology it hosts, can be separated from the scope predicate by syntactic insertions as seen in (147) with the conjunction *wa* 'and' and the adverb *ene* 'like this', which is not possible with pseudo-incorporated nouns.

Fluctuations in the retention of possessive morphology are not a peculiarity of SPCs featuring NI, but are also attested in the instances where SPPs are recognizable as the result of PNI (see §5.5.2.1). I regard such fluctuations as the result of the seemingly synchronic development of SPCs. In fact, the the lack of possessive morphology on the sensorial noun is attested as a minor feature of PNI (only 23% of tokens) and analogously, the presence of possessive morphology is equally uncommon with NI. Cases where *sir*, *hum*, and *haw* are noun-incorporated and still retain the possessive morpheme make up a 33% of the total number of tokens available from the reference corpora. SPPs resulting from PNI tend to have an evidential function with regards to pragmatics, while SPPs resulting from NI tend to function as aspectuals or as independent lexical verbs (see §8.2.3). That is, the distribution of possessive morphology on the noun within SPPs may be indicative of a process of semantico-pragmatic specialization of these forms into the function of evidentials(-aspectuals) or the one of lexical verbs that, unfortunately, is not possible to reconstruct precisely and appears to have crystallized halfway during the late stages of the language.

The differences of SPCs featuring NI and those featuring PNI are not limited to morphology. The two kinds of constructions in fact also differ syntactically, with one main characteristic being the fact that the incorporated nominal in SPCs does not take modifiers. As I discussed in §4.3.1, modifiers for an incorporated noun may or may not be allowed. The restrictions in the types of modifiers allowed are usually language dependent but are generally found to be syntactic in nature (Muro, 2009). That is, it is not the case that NI disallows the presence of modifiers altogether, but simply in the HA case the sensorial nouns *sir*, *hum*, and *haw* do not exhibit any modification.

If we advance the conclusion that incorporated nouns in Ainu SPCs do not take modifiers, we need to define the syntactic function of the clause containing the predicate that is the scope of the SPP. Consider again (146) repeated here as (148).

(148) *[Ukuran   ka   yaanipo   isam]*   *anki   sir-ki.*

       be.evening even almost   3SS/not.be   about IND.VIS

       'Even in the evening it seemed he was almost about to die.' (TMA: 14)

Since I argue that the incorporated noun *sir* 'appearance' does not take any modifier, I propose that the whole clause containing the scope predicate *isam* 'not be', shown in square brackets in (148), is the subject of the SPP *sirki*. Such an assumption complies with the possible results of modifier stranding that Muro (2009) discusses for NI (see §4.3.1). This possibly is seemingly supported by what we witness in the referencing of verbal arguments across subordinated clauses.

     The promotion of a clause to the subject of an SPP becomes a sensible proposal when we think of the type of SPCs under scrutiny in this subsection as an erstwhile possessive construction. This is no different from the construction described in §5.5.2.1 that eventually instantiates PNI. From this point of view, the clause containing the scope predicate acts as a nominalized constituent in that it covers the function of possessor in the original possessive construction. After NI takes place, the erstwhile possessor (i.e. the clause) remains stranded and could potentially be regarded as a modifier (or "genitival modifier" as Muro (2009) defines it) of the incorporated sensorial noun. However, as Muro proposes, possessors are the one kind of stranded modifiers to be re-analyzed as arguments of the incorporating verb. As a nominalized constituent, the clause containing the scope verb is syntactically acceptable as an argument of the SPP and should not be considered a modifier of the sensorial noun. This is in contrast to the case of SPCs featuring PNI. Since no other modifier is ever encountered in co-occurrence with *sir*, *hum*, or *haw*, in this environment, we can conclude that these nouns do not take modifiers when involved in incorporation into an SPP. What follows from this conclusion is that NI in this instance does not cause the syntactic saturation of the incorporating verb – a welcome outcome in light of the typological behavior of this process discussed in §4.31.

     One more piece of evidence to support the promotion to subject of the possessor comes from analogous cases of possessee incorporation. Kobayashi (2008) discusses such cases (see §3.4.3) highlighting how the erstwhile possessor is re-analyzed as the subject after NI applies. The promotion is here evident from morphology, since the personal affix hosted on the possessee (referenced to the possessor before NI), appears with corresponding personal suffix which is found with one-place verbs.

For the specific case at hand, the argumental status of the erstwhile possessor I am arguing for is seemingly confirmed by considering argument referencing across verbs in subordination. In (149) below, the nominalized *tane icire* 'now he grilled me' functions as the subject of the SPP *humas*, that is part of a causal subordinate. It also functions as the object of the two-place verb *arkimatekka* 'be surprised of', the predicate of the main clause.

(149) ***Tane i-ci-re***   *noyne* *hum-as*   *pe*   *ne*
now 4O-3SS/burn-CAUS   as.if   IND.FLT   NMLZ COP
kusu,   ***ar-kimatek-ka***   *a-ki.*
because   CMPL-SLV/3SO/be.surprised-TR   4S-VO/do
'Now because it indeed seemed he grilled me, I was really surprised of that.' (KAY: 19-4,27)

This proposal, however, is not safe from objections. There is no overt morphology to clearly signal either the subject argument function of the nominalized clause for the SPP *humas*, or to signal the fact that the sentential argument is co-referenced in the object function for the verb *arkimatekka*. Direct arguments in Ainu are in fact zero-marked and recognized only via linear position (as discussed in §1.2.1). The fact that we can recognize the nominalized clause as co-referencing the object argument of *arkimatekka* in (149) may thus be merely implicated by the semantics of this latter verb.

In light of the available data, it is impossible to advance any safe conclusive claim on the subject argument function of the nominalized clause by adducing further morphosyntactic evidence. The sentence illustrated in (149) is the only token in the reference corpora to display such a structure. A far more common structure is the one depicted in examples (144) and (145) in the opening of this subsection, where the SPP is separated from its scope predicate by a coordinating or subordinating conjunction. In such cases, it seems that the erstwhile possessor ceases to function as an argument for the SPP and re-gains its clausal status. These specific examples may represent a stage of the development of SPCs that involve NI where the constructions are re-analyzed as biclausal. After this re-analysis of the construction as biclausal, no nominal constituent whatsoever is found to occur with the SPP as a replacement of the nominalized clause which is no longer an argument, and so it appears that NI now results in the syntactic saturation of the incorporating verb.

5.5.2.3 Classificatory NI in SPCs

In this subsection, I now address a particular kind of NI that seldom appears in the SPCs discussed in the previous two subsections, namely classificatory NI. Consider examples (150) and (151).

(150) *Pet   pes   rera   san*   ***hum***   *neno   kane*
river by   wind 3SS/descend.PC   sound like   ADV

hum*-as*   *hine …*
sound-stand.PC(IND.FLT)   and

'The sound was so that it seemed like a wind came down by the river and…' (KAY: 4-4,6)

(151) *E-siknu*   ***haw-e***   *ene*   ***haw****-as*
2SS-survive voice-POSS   like.this   voice-stand.PC(REP)

[h]i   *ka*   *an*   *kor …*
NMLZ   even   3SS/exist.PC   while

'While the voice is so that they even say that you have survived like this…' (KAY: 19-5,32)

The peculiarity of these SPCs is that they feature an unbound nominal which is semantically identical to the incorporated sensorial noun and which occurs between the clause containing the scope verb and the SPP. Morphologically, this unbound copy of the incorporated sensorial noun may be marked for possession, like *hawe* in (151), or be completely bare, like *hum* in (150). Conversely, the incorporated sensorial noun in these instances never bears possessive morphology.

Looking at the syntax of these SPCs, we recognize the structure described in §5.5.2.2 since NI does not cause syntactic saturation of the incorporating verb and the possessor of the erstwhile construction that instatiates the SPC is re-analyzed as the subject of the SPP. The only major difference is that the sensorial noun is reduplicated. From a syntactic perspective, these SPCs showcase the structural properties of classificatory noun incorporation (CNI), where the IN is supplemented by an unbound and semantically more specific nominal that is external to the verbal constituent (Mithun, 1985) (cf. §4.3.1).

The analogies between the HA constructions treated here and the prototypical CNI, are clearly visible, since the copy of the incorporated noun is syntactically unbound and external to the verbal constituent. The one characteristic of the HA SPCs taken into account here that deviates from the prototype is that the external nominal is semantically identical to the incorporated noun, while cross-linguistically it is found to be semantically more specific. Nevertheless, Mithun names sporadic cases where the IN and its copy are semantically identical, so that the HA case is far from being an isolated exception. The possibility for the unbound nominal to be morphologically more marked than the IN is not mentioned openly in the literature on CNI. By comparing the cases where possessive morphology appears on the external nominal (e.g. (151)) with those where it does not (e.g. (150)), no particular difference in the syntax (or the semantics) of the construction can be identified.

The occurrences of CNI among the tokens consulted for this study are extremely rare – in my reference corpora, this kind of SPC is encountered only three times, so that the two examples I reported above represent 66% of the total number of tokens already. Although it concerns a smallest subgroup of the SPCs we witness in HA, the presence of CNI helps clarify the characteristics of another subtype of SPCs where the IN appears relativized. I consider these SPCs in the following conclusive subsection.

5.5.2.4 Incorporation and relative clauses

Analogous to the constructions I discussed in §5.5.2.3, another small number of SPCs showcases the "reduplication" of the IN found within the SPP via a syntactically unbound nominal. The main difference with the SPCs surveyed above is in the syntactic position of the NI copy, more concretely in the fact that it occurs after the SPP and gives rise to a construction that suggests relativization has taken place. Such a deduction about relativization is based on the general tendency of Ainu to form relative clauses via the gap strategy, where the relativized noun heads the subordinate clause (see §3.4.2). Example (152) illustrates this apparent case of IN relativization.

(152) *Cisinaot* *onnay-un* *sesserke* **haw-e-*as***
grave interior-to 3SS/cry voice-POSS-stand.PC(IND.HRN)

[h]aw-e *ene* *an* *hi …*
voice-POSS like.this 3SS/exist.PC NMLZ

'[Such] voice that it seemed from inside the grave [someone] cried was like so: …' (KAY: 6-3,3)

The possessed sensorial noun *hawe* 'the voice of' in (152) follows the SPP *hawe as* in a syntactic layout that suggests that the sensorial noun *hawe* within the SPP has been relativized. In §3.5.2, I highlighted how the assumption that in this kind of constructions an IN is relativized contrasts with what are traditionally understood as the characteristics of the Ainu relative constructions. Since in Ainu the relativization of any grammatical function is obtained via the gap strategy (either with or without retention of morphosyntactic feature within the RC), the relativized noun no longer occupies its original position in the clause. As such, stating that the second *hawe* (according to the linear order) appearing in (152) is the same *hawe* incorporated in the verb *as* and that it has been relativized raises the question of why relativization in this case does not result in an empty syntactic position within the RC. Furthermore, as we are assuming that *hawe* is incorporated to *as*, its relativization would violate lexical integrity. A syntactic process like relativization should not in fact be sensitive to the internal morphological structure of the SPP.

We can respond to these objections by arguing that the SPC in (152) represents an instance of an internally-headed relative clause (IHRC), a kind of relative clause where the relative head remains within the relative clause and it is not displaced into the main clause (see §4.2.1). The emergence of an IHRC is made possible when we consider the underlying, non-relativized structure of (152) as involving classificatory noun incorporation (CNI). In this scenario, I assume that the original position of the syntactically unbound copy of the IN that appears after the SPP is within the same clause as the SPP itself. This original structure is in all corresponding to the one shown in examples (150) and (151) in §5.5.2.3. Example (153) illustrates the underlying, non-relative structure of (152).

(153) *Cisinaot*   *onnay-un*   *sesserke*   **haw-e**
grave   interior-to   3SS/cry   voice-POSS

haw-e-*as*.
voice-POSS-stand.PC(IND.HRN)

This assumption solves the double impasse addressed above, which is problematic for an analysis of (152) as a relative construction. This way, in fact, the relativization of *hawe* complies with all other instances of relativization reported for Ainu, as it too is obtained via the gap strategy. The original pre-SPP position of *hawe* is regularly left blank when this *hawe* is promoted to head of the RC. Moreover, the process of relativization does not violate lexical integrity, since it is not the IN itself the noun that is relativized but rather its unbound syntactic copy.

In order to better analyze the IHRC under scrutiny and to see how it is in line with the typological properties of IHRCs I outlined in §4.2.1, let us consider (154), which is a restatement of (152) with additional clarification of the RC and main clause (MC).

(154) *[Cisinaot   onnay-un   sesserke   **haw-e**-as*

     grave   interior-to   3SS/cry   voice-POSS-stand.PC(IND.HRN)

    ***[h]aw-e**$_{RH}$]$_{RC}$[ene   an   hi …]$_{MC}$*

    voice-POSS   like.this   3SS/exist.PC   NMLZ

    'The voice for that it seemed from inside the grave [someone] cried was like so: …' (KAY: 6-3,3)

As (154) illustrates, the RC constitutes the constituents spanning *cisinaot* to *hawe*, while this latter element is the relative head (RH) in the construction. Given this syntactic layout, my first remark is related to the nominal status of the RC. IHRCs are said to be nominalized clauses in actuality, and their categorial status may be signaled by overt nominal morphology (cf. example (75) in §4.2.1). Alternatively, IHRCs may be zero-marked for nominalization – this is the stance Modena and Muro (2009) take in order to bypass the problem of providing evidence for the presence of null complementizers (see §4.2.1). The Ainu IHRC is among those IHRCs that are not marked as nominals via overt morphology, but that are instead zero-marked. Nominalization here is not evident from any particular surface realization, but the clause simply functions as a nominal with its constituents showing up in their basic order.

The syntactic behavior of the RH in the Ainu IHRC also appears to adhere to the tendencies observed by Basilico (1996) regarding the possible positioning of the relativized nominal within the RC that is either fronted or moved in a post-verbal position though still being VP-internal. More concretely, the RC does not occupy a position consistent with the one it has in the non-relative construction. Since the RH

hawe in (154) occurs after the SPP, that is the verb of the RC, I could argue that it has exited the VP, though still being within the RC, and it is thus in a VP-external position. Together with fronting (i.e. the situation where the RH gets left-dislocated within the RC), having the RH moved outside of the VP is one result of RH-displacement addressed by Basilico. A clarification is in order at this point. To the best of my knowledge, there is no general consensus among scholars on how we define a VP in Ainu, and there is no study that aims to answer this question in the literature. In light of this theoretical gap, the claim that the RH *hawe* in (154) is found outside of the VP cannot be safely supported, and my assumption is merely based on the general tendency that Ainu displays to not have any nominal constituents following the verb in a subordinate clause. Determining the extension and characteristics of the Ainu VP falls outside of the scope of this study. For the present purposes, and to avoid any unnecessary theoretical speculation, I simply say that the RH is right-dislocated in a post-verbal position, while it is still included in the RC. Whether this position also happens to be VP-external is not a main concern here. The relevant conclusion is that the RH position is not consistent with the role the nominal had in the non-relative construction.

As Basilico (1996) states, by referencing Diesing's (1992) mapping hypothesis, RH displacement may be a requirement for binding. Since the syntactic analysis of IHRCs I provide here is not framed within a specific syntactic framework, I slightly deviate from Basilico's explanation of RH movement by excluding discussion of Diesing theory. Nevertheless, I do assume that RH displacement in the Ainu case is needed in order for the RH to be bound by the variables projected by an operator. From this view, RH displacement becomes a syntactic strategy to avoid semantico-pragmatic ambiguity. In the case at hand, the operator only projects one variable relevant for binding, namely grammatical number. In this sense, the operator has the function of targeting the one nominal that cross-references the third person argument of the verb in the main clause. Semantically a case of quantification (see §4.2.1), the RC itself determines the scope for binding. In other words, the nominal whose features agree with the variable projected by the operator must be within the RC. If we consider the sentence in (154) again, the feature "third person" projected by the operator is found in more than one nominal: the noun *cisinaot* 'grave', the locative noun *onnay* 'interior', or the sensorial noun *hawe* 'voice of'. In order to solve the ambiguity, the RH must move to the right edge of the RC and it is the resulting non-canonical syntax that signals the

nominal to undergo relativization and to function as the third person argument of the main clause verb.

To conclude this subsection on incorporation and IHRCs, I shall consider one more SPC, analogous to the one I just surveyed, but that syntactically seemingly represents an instance of double headed relative clause (DHRC). DHRCs are essentially IHRCs (see §4.2.2) where the RH appears twice, once in the relative clause and once in the main clause. I argue that this particular structure arises once the nominalized clause (i.e. the erstwhile possessor in the possessive construction involved in NI) is followed by a subordinating conjunction. The whole SPC is then re-analyzed as bi-clausal. Consider examples (155) and (156).

(155) *Pon-no* *poka* *hemesu-an* *kor,* ***hum**-as*
 be-little-ADV at.least climb-4S while sound-stand.PC
 hum-i *ene* *an* *hi …*
 sound-POSS like.this 3SS/exist.PC NMLZ
 'When I climbed just a little, the feeling that (I) felt was like so …' (TMA: 54)

(156) *Hapo* *itak* *ne* *wa* ***sir**-an* ***ruw-e***[43]
 mother word COP and appearance-be.PC(RSLT) trace-POSS
 a-nukar *a* *korka, …*
 4S-3SO/see PRF but
 'I had seen the fact that (= that indeed) [those] were [her] mother's words, but …' (KAY: 19-4,6)

Since the clause containing the predicate that was originally the scope of the SPP now has a subordinated function (i.e. the SPC is now bi-clausal), it follows that the RC in instances like (155) and (156) is composed of the sole SPP (*humas* and *siran* respectively in the examples above). Here, we see the RH appering both in the RC and in the main clause, which suggests a DHRC. Furthermore, in these constructions we never encounter determiners intervening between the SPP and the external RH (i.e.

---

[43] When the SPP is *siran*, the unbound syntactic copy, and nominal that undergoes relativization, is not semantically identical to the IN – that is, it is not *sir* 'appearance' but *ru* 'trace'. I address the reasons for this semantic discrepancy in Chapter 8.

between the RC and the RH in the main clause). This is a piece of evidence that we are not in the presence of a correlative (see §4.2.2).

The typological similarities with correlatives shared by DHRCs might be at the basis of the emergence of a very rare structure where the relative construction is lost and the clause containing the SPP is co-subordinated to the main clause via a conjunction. The formerly external RH is nevertheless present, but it has the sole function of an anaphoric nominal that cross-references the IN of the SPP. Example (157) shows the only case of such a structure attested in my reference corpora.

(157) *"Ahun-ke*   *yak*   *pirka*   *wa"*   *sekor*
    3SS/3SO/enter.PC-CAUS   if   3SS/be.good   FIN   ADV

    haw*-as*   ***wa***   ***haw****-e*   *a-nu.*
    voice-stand.PC(REP)   and   voice-POSS   4S-3SO/hear

    '"You may let him come in" it was said and I heard [that] voice.'
    (BUG: 257)

It is otherwise possible that the external RH in constructions like (155)-(156) has been re-analyzed as a nominalizer, since we seldom find *ru*, *sir*, *hum*, and *haw* in complementary distribution with other nominalizers such as *hi* or *pe*, like in (158).

(158) *E-hekote*   *kamuy* *opitta* *a-ko-caranke*   *wa*   *ene*
    2SO-3SP/turn god   all   4S-APPL-3SP/complain and   like.this

    sir-ki   ***hi***   *e-nukar*   *kusu ne*   *na*   *hani.*
    appearence-do NMLZ   2SS-3SO/see   INTN.FUT   FIN   FIN

    'You will see (the fact that it is such a situation) that they complain towards the gods that protect you.' (NKM: 193)

Although it could be that all the different constructions taken into account here are representative of diachronic development of SPCs of HA, there is no consistent evidence to advance any safe claim on this regard. As far as we see from the presently available data, the development of SPCs appears to be synchronic.

5.5.3 Concluding remarks on HA indirect evidentials

Indirect evidentials of HA involve both NI and PNI, two processes that give rise to different structures that are pragmatically employed with different semantics (which I discuss in Chapter 8). All the structures depicted above are found in the reference corpora for this study independently from the time and place of data collection – that is, distinct morphosyntactic layouts of indirect expressions cannot be safely ascribed to dialectal differences or to a diachronic development. It is most likely that the morphosyntactic variety showcased by HA *siran*, *sirki*, *humas*, and *hawas* is representative of a synchronic development, that is today impossible to investigate further given the moribund status of the language.

In some regards, the outcomes of the analysis I provided above contrast with past claims on *siran*, *sirki*, *humas*, and *hawas* and related issues that we find in the previous Ainu literature. In particular, I argue for the re-analysis of the clausal noun, or rather the original possessor in a possessive construction, as the subject of the verb resulting from incorporation. In my analysis, this is shown to be the case in most examples where the incorporated sensorial noun does not retain possessive morphology. My claim goes against Bugaeva's (2015) understanding of these constructions, as she proposes that once the sensorial noun looses the possessive suffix it functions as a nominalizer, which represents in turns the first stage of the emergence of a general modifying clause construction (GMCC) (see §3.4.2). Furthermore, the proposal that HA indirect evidentials are erstwhile possessive constructions deviates from what the literature traditionally reports for the canonical possessive construcion. In fact, while complex possessees are seldom attested, complex nominals or even nominalized clauses in the function of possessors are never accounted for (see §3.4.1). An even more peculiar aspect that HA indirect expressions highlight is the presence of internally-headed and double-headed relative clauses. These are two kinds of relative clauses never discussed for Ainu, which is said to only display externally-headed relative clauses (see §3.4.2). A study with a wider scope on neighboring dialects would indeed be beneficial to clarify some issues remaining from the analysis above, such as the Nibutani dialect or the Shizunai dialect that are closely related to the Saru-Biratori and Chitose dialects taken into account here. In particular, it would be interesting to see whether internal-headedness can be said to be an areal feature of Southern-Hokkaidō dialects, and whether any clearer morphological evidence can be found for the promotion of the

clausal argument post-NI to subject. All of this is left for future research. For now, let us move to the reportative *manu*.

5.6 Reportative *manu*

In this section, I look at the morphosyntax of the reportative evidential of SA – *manu*. In the previous literature *manu* is the most overlooked evidential form among the ones I take into account in this thesis with regards to morphosyntactic properties. The analysis I propose here is innovative and eventually advocates the status of *manu* as a final particle.

5.6.1 Observations on morphology

The reportative *manu* (also transcribed in the corpora as *manuu* to signal lengthening of the final vowel or *manuy* in PLA and PLB) has been poorly described with regards to its origin and its morphosyntactic function. No clear definition of *manu* in terms of its morphological features is found in the previous literature on Ainu.

As far as the reference corpora used for this analysis make it possible, determining or even speculating on the morphological characteristics of *manu* turns out to be a daunting task. This is true for two main reasons, namely 1) in the corpora *manu* is never encountered featuring any kind of grammatical or derivational morphology, and 2) *manu* has no allomorphs (both the lengthening of the final vowel in *manuu* and the presence of a final glide in Eastern-Sakhalin *manuy* are non-morphemic, but rather both these forms just represent phonological variants). The (un)acceptability of specific morphology in conjunction with *manu* or the presence of allomorphs would be a precious insight into its internal composition, from which we would be able to detect the origin and possible pattern of development for this evidential. While some researchers propose that *manu* has originated from a contraction of *hum* 'sound' and the one-place verb *'an* 'exist' (Bugaeva, p.c.), to date we cannot make any conclusive or safe statement about its morphological features.

5.6.2 Syntactic status of *manu*

As for syntax, previous accounts on *manu* are slightly more informative. Murasaki (1976a: 53-64) reports the form *manu* in the section of her sketch grammar dedicated to "auxiliary constructions".[44] *Manu* is said to follow a verb or verb phrase to form a

---

[44] My translation from Japanese of 助動詞連語 *jodōshi rengo*.

complex verb construction without changing its syntactic status. Throughout this section, Murasaki more or less explicitly provides numerous insights on the syntactic status of the different constructions. After a first look, it already appears quite clearly that the "auxiliary constructions" reported here are regarded less in terms of their actual syntactic properties and more in terms of their "auxiliary" function, by which they somehow contribute to the meaning of the verb they attach to. Although brought together into one single group, these constructions show quite varied syntactic properties so that, though it is an attempt to discuss different forms on the basis of their loose functional characteristics, we can see that Murasaki's classification is highly preliminary. Expanding from Murasaki's observations, specifically on *manu* and more generically on the whole class of "auxiliary constructions", I propose here that *manu* is in fact a final particle and not an auxiliary of some kind.

I define *manu* as a final particle in light of a number of structural features and pragmatic usages it has that fit in with the typological charactersitics Hancil et al. (2015: 16-7) ascribe exactly to final particles. Final particles are said to have no conceptual meaning, cannot undergo questioning or focus, and need a host unit to be used grammatically. Functionally, they fulfill tasks related to discourse structure, speaker attitude and modality, or illocutionary force. According to Heine et al. (2015: 120), the loss of conceptual meaning is exactly the result of the acquisition of a procedural meaning. Morphosyntactically, final particles are not licensed by syntax but are indeed subject to structural restrictions as they need a host element to be used grammatically, which they usually follow. Furthermore, they cannot be modified nor inflected thus turning into an invariable form, and are usually monomorphemic. From a semantico-functional perspective, we clearly see how *manu* is in line with the typological behaviors of final particles. *Manu* has no conceptual meaning and the fact we have so many doubts about its historical development (see §5.6.1) so that we cannot trace back its original meaning seems to be a proof of this; and it has lost its conceptual meaning in favor of a functional meaning, that is the one of evidential. However, here I primarily consider the structural evidence for the status of *manu* as a final particle. Some of its behaviors, that are more straightforwardly observable, seem to already support my assumption – *manu* in fact must follow a host verbal predicate to be used grammatically though the syntactic properties of this verbal host are not an issue, and it is clearly monomorphemic, having allegedly lost its compositionality in an earlier stage of its development (see §5.6.1).

In the remainder of this section, I consider in deeper detail the less evident inflectional properties of *manu* and the possibility for it to be modified, to eventually argue how, with respect to these two aspects as well, it can be considered a final particle. In order to do so, I run some tests for *manu* and all other "auxiliary constructions" singled out by Murasaki (1976a). The final aim is to focus exactly on the peculiar syntactic features possessed by *manu*, addressing them as a piece of evidence for its status as a final particle, beside its semantico-functional characteristics named above that also help identify *manu* with this latter categorial status. Moreover, I intend to underline how different *manu* is in terms of syntactic behavior when we compare it to other "auxiliaries".

5.6.2.1 "Auxiliary constructions" of SA

Murasaki (1976a: 53) lists a total of 18 "auxiliary constructions". In my analysis, I slightly revise Murasaki's list, which I amend specifically in two places. First, I do not include here the form *-hV ne 'an*, since I analyze it as a form of personal knowledge (see §7.2); second, I add the allomorph *ea* for the perfective *'an*. The form *ea* indeed never appears in the texts used by Murasaki as the basis for her grammar, but it is fairly common in the SA Eastern dialects recorded by Pilsudski (1912). Eventually, I take into account 16 separate forms, which I summarize below along with their meaning/function.

1) *kusu 'an*   progressive aspect
2) *teh 'an*   resultative aspect
3) *kusu kara*   purposive aspect
4) *wa 'isam*   conclusive aspect
5) *ki*   emphatic
6) *koyaykus/'eaykah* 'not be able to'
7) *'easkay*   'be able to'
8) *hemaka*   conclusive aspect
9) *'an/ea*   resultative/perfective aspect
10) *rusuy*   'want to'
11) *ranke*   reiterative or habitual aspect
12) *'ekasre*   'do too much'
13) *hanki/hannehka* negative

14) *'esinka*   'be difficult to', 'struggle doing'

15) *'etunne*   'not want to'

16) *manu*   reportative evidential

As Murasaki already points out, all these forms follow a verb, forming with it some kind of complex predicate. Although this is a generalization that holds for all 16 forms listed here, it is quite obvious that the kind of syntactic dependency subsisting between them and the main verb varies considerably from case to case. The most obvious example are the progressive *kusu 'an*, the resultative *teh 'an*, the purposive *kusu kara* and the conclusive *wa 'isam* which, differently from all remaining forms, feature an overt coordinating/subordinating conjunction (i.e. *kusu*, *teh*, *wa*).

For the sake of clarity, throughout the discussion to follow I regard the [main verb+"auxiliary"] construction as being composed of a "first element" (i.e. the main verb) and a "second element" (i.e. the "auxiliary" form).[45] I choose this terminology solely on the basis of the linear order of elements within the construction; the categories "first" and "second" do not refer to any kind of semantic or syntactic primacy. Furthermore, the employment of this generic terminology allows us to avoid the misleading label "auxiliary" used by Murasaki (which, as will become clear below, is infelicitous in many of the cases under scrutiny), until we are able to propose a more adequate terminology.

5.6.2.2 Syntactic tests for *manu*

I run five separate tests in this analysis. The first test concerns relativization. Here I look at whether the whole construction undergoes relativization of arguments belonging to the first-element notional verb and as such can be said to function as one single predicate. The aim of this test is two-fold. First, the test is useful to understand whether the clause that contains the construction can be headed by a noun, thus functioning as a dependent, non-finite clause (i.e. a relative clause). For example, when *rusuy* 'want to' is the second element in the construction, it is possible to relativize an argument of the verb which is the first element. Example (159) shows the noun *henke* 'old man', the

---

[45] Only for *kusu an*, *teh an*, *kusu kara* and *wa isam* the "second element" is better understood as the sole verbs *an*, *kara* and *isam*, while the conjunctions *kusu*, *teh* and *wa* are regarded merely as a syntactic link between the two constituents.

former argument of *'ipeyan* 'make eat', heading the dependent relative clause containing the construction V+*rusuy*.

(159) *[Tan henke   'ipe-yan   rusuy]*_{RC}   **henke**.
      this old.man   3SS/3PO/eat-CAUS   want   old.man
      'This old man [is] an old man who wants to make people eat.'
      (Murasaki, 2013: 28)

Second, the test aims to account for the monoclausality of the construction. Relativization of a syntactic argument in biclausal constructions as in (160) is in fact impossible. This is due to the fact that the intended relative head does not have an original function within what is recognized as the relative clause. Rather, its function is found in what was already an embedded clause before relativization happened.

(160) *[_{SUB}[_ 'eh]   kusu   ku-'asin]_{RC}   **'ahci**.
        3SS/come.PC   because   1SS/go.out.PC   old.woman
    Intended meaning: 'The old woman for which I went out because she came.'

Conversely, if relativization is possible like in (159), we understand that the original syntactic role coindexing the relativized noun is not found in what was an already embedded clause. That is, the construction is monoclausal.

    With the second test, I look at whether the second element of the construction may also be used independently in the language. This test aims to verify the syntactico-semantic dependency of the second element and, in turns, its possibility of functioning as an independent predication within the sentence. One "auxiliary" that responds positively to this particular test is *hemaka*. Examples (161) and (162) show *hemaka* as a dependent (functioning as a conclusive aspect marker) and independent predication respectively.

(161) *Wahka   tun-ke-'ene   ren   hemaka*
      water   3S/middle-POSS-to   3SS/sink   end.up
      '[The stone] sank away in the water.' (Murasaki, 2016: 16)

(162) *'Itah   ton-ke-ta   'e-**hemaka**-ha   ne   'an   kusu.*
       word   3S/middle-POSS-in   2SS-3SO/finish-PK   COP   PRF   because
       'Well, you stopped in the middle of [your] speech.' (Murasaki, 2013: 16)

In a third test, I consider the obligatoriness of a syntactic linkage between the first and second element as a further way to determine whether the construction displays monoclausal or biclausal characteristics. A syntactic linkage (namely, a coordinative or subordinative conjunction) appears to be needed in some of the constructions considered here. Leaving out the conjunction in these instances results in an unacceptable construction or, alternatively, if the resulting construction is still syntactically acceptable, it could have a semantico-pragmatic function different from the one intended. As illustrated in (163) and (164), the presence or absence of the conjunction *kusu* 'because' makes a crucial difference, since it distinguishes progressive from perfective aspect.

(163) *'Ahci   tani   suukawka   **kusu**   'an.*
       old.woman   now   3SS/sew   because   3SS/exist.PC
       'The old woman now is sewing' (Murasaki, 1976a: 53)

(164) *'Ahci   suukawka   'an.*
        old.woman 3SS/sew   PRF
       'The old woman has sewn.'

With the following test, I verify the syntactic status of the first element in the construction, aiming to determine whether it structurally functions indeed as a verb or if it is better recognizable as a nominal constituent. In some of the constructions under scrutiny, the first element can be followed by nominal particles such as *ka* 'even' or *pateh* 'just' (Murasaki, 1976a: 144). The acceptability of these elements in this particular environment suggests that syntactically, the first element behaves like a noun and that, as such, it structurally functions as an argument of the second element of the construction. In (165), the nominal status of the notional verb (the first element in the construction) *yayororee* 'brag' is signaled by the particle *pateh* 'just', while syntactically it covers the function of object for the verb *ki* 'do', which is the second

181

element in the construction. The subject of the verb *ki* 'do' is co-indexed with *tara henke* 'that old man'.

(165) *Tara henke*   *'ampene*   *yayoroyee*   **pateh** *ki.*
       that   old.man   really   3SS/brag   just   SLV/VO/do
       'That old man really does nothing but bragging.' (Murasaki, 2013: 20)

The final test deals with nominalization, more precisely with clause nominalization obtained via the same *-hV* morpheme discussed for personal knowledge (see §5.2.2). The compatibility of the *-hV* morpheme with a certain construction is indicative of two separate things. Firstly, it signals that the construction as a whole indeed has the syntactic function of verb – in §5.2 above, I discussed the fact that *-hV* selects only verbal stems. Secondly, it specifically tells us that the second element within the construction (the one to which the nominalizing morpheme attaches) is morphosyntactically part of the verbal constituent. In example (166), the fact that the perfective *ea* can host *-hV* indicates that it indeed forms one single predicate together with the notional verb.[46]

(166) *Hemáta ájnu makánte kućа oxta án eáha.*

      Hemata   *aynu*   *makan*   *te[h]*   *kuca*   *ohta*
      what   person   3SS/come.down.PC   and   hut   3S/place+in
      an   *ea-**ha**?*
      3SS/exist.PC   PRF-NMLZ
      'What [kind of] person has come down into the hut?' (PLA: 134)

As already pointed out above, the final aim of this analysis is not to obtain a definitive classification of all the "auxiliaries" originally discussed by Murasaki. This falls out of the immediate scope of the present study and, furthermore, the few tests applied here most likely represent too narrow a perspective on the syntax of many of these constructions. A more nuanced study would be necessary in order for us to properly and consistently define them. Nevertheless, I propose a preliminary definition for "auxiliary constructions" on the basis of how each of them responds to the various

---

[46] Here the nominalization functions as a marker of personal knowledge. I substituted the gloss DIR with NMLZ on purpose here for the clarity of the discussion at hand.

syntactic tests applied. Table 6 summarizes the results of the tests, and groups the different forms together under six separate classes according to the analogous syntactic properties they are found to display. In the table, "o" and "x" indicate respectively whether each form responds positively or negatively to the test, while "?" indicates that no example relevant to determine the syntactic behavior was available in the corpora.

Table 6 – Results of the syntactic tests for *manu*

Tentative classification	"Second element" in the construction	Undergoes relativization as one single predicate	Second element can be used independently	Presence of syntactic link between first and second element	Presence of nominal morphosyntax after first element	Undergoes nominalization as one single predicate
Aspectual strategies	*kusu an*	o	o	o	x	o
	teh an	o	o	o	x	o
	kusu kara	o	o	o	x	o
	wa isam	o	o	o	x	o
Light verbs	*ki*	o	o	x	o	o
Light verbs-auxiliaries	*koyaykus/eaykah*	o	x	x	o	o
	easkay	o	x	x	o	o
Auxiliaries	*hemaka*	?	o	x	?	o
	an/ea	o	o[47]	x	x	o
	rusuy	o	x	x	x	o
	ranke	o	x	x	x	?
Auxiliary-adverbials	*ekasre*	x	x	x	x	o
	hanki/hannehka	?	o	x	o	o
	esinka	o	?	x	o	?
	etunne	o	?	x	?	?
Final particles	*manu*	x	x	x	x	x

On the basis of these results I now discuss the syntactic status of the "auxiliary constructions". After I present the main reasons that have led me to propose the tentative classification and labelling in Table 6, I specifically focus on *manu*, proposing that it is in fact a final particle.

---

[47] The form *ea* actually never appears as a single predicate. Although fulfilling the same pragmatic function as *an*, it appears to be more grammaticalized.

5.6.2.3 Explanation of the categorization of "auxiliary constructions"

Let us start this discussion by considering *kusu an*, *teh an*, *kusu kara*, and *wa isam*, which I call "aspectual strategies". They are called "strategies" in that the aspectual readings they all separately express are not necessarily encoded directly by the semantics of the verb employed (i.e. *an* 'exist', *kara* 'make' or *isam* 'not exist'), nor are these semantics brough out in any way by the kind of conjunction used (i.e. *kusu* 'because', *teh* 'and' or *wa* 'and'). Rather, the aspectual readings are derived from the combination of these verbs and the relative conjunctions together with the main notional verb.

Given the overt, obligatory presence of a syntactic linkage, these constructions formally appear to be biclausal. Nevertheless, differently from other co-subordinative constructions that involve the conjunctions *kusu*, *teh* and *wa*, the aspectual constructions *kusu an*, *teh an*, *kusu kara*, and *wa isam* seem to display some characteristics of monoclausal constructions. One piece of evidence in support of this comes from relativization and nominalization. All four of these aspectual constructions can in fact undergo relativization or nominalization as one single predicate along with their notional verb. For instance, with the progressive *kusu an*, the whole construction can be headed by a noun which originally is an argument of the first-element notional verb structurally governed by *kusu* (167). As shown in (160) above, repeated here as (168), it is impossible for an argument of the verb embedded by *kusu* to become the head of the main clause when *kusu* functions as a proper causal subordinative conjunction.

(167) *[_ suukawka   kusu   'an]   **'ahci**.*
      3SS/sew   because   3SS/exist.PC   old.woman
    'The old woman who sew.'

(168) **[_ 'eh   **kusu**   ku-asin]   'ahci.*
      3SS/come   because   1SS/go.out   old.woman
     Intended meaning: 'The old woman for which I went out because she came.'

This evidence shows that structures involving a notional verb followed by *kusu 'an, teh 'an, kusu kara,* and *wa 'isam* are somehow monoclausal, although formally they still retain a biclausal syntax.

I consider *ki* as a light verb in that it is semantically empty (it has the mere pragmatic function of expressing emphasis but it does not convey its original meaning of 'do', as in example (165) above), and because it takes a nominal constituent as its argument (i.e. the notional verb) which in turns bears semantic content. In labelling *ki* as a light verb, I mainly refer to Butt's (2003) definition, which include semantic vagueness and nominalization of a notional predicate conveying meaning as two pivotal characteristics of this kind of verbs.

The definition of auxiliaries, and consequently of the labellings I use "auxiliaries", "light verbs-auxiliaries" and "auxiliaries-adverbials", is the most precarious. In linguistic theory, there seems to be little to none consensus on what is (or is not) an auxiliary (Heine, 1993) and the separate criteria that constitute this class of verbs are usually defined on a language-dependent basis. Since with this survey I do not aim to thoroughly outline the features and extension of the auxiliary verb class in Ainu, I limit myself to addressing two of the criteria through which auxiliaries are defined typologically (Heine, 1993: 22-4) that help bring together the elements under scrutiny. These are 1) that auxiliaries are syntactically separated from their support notional verb, and 2) that they provide expression for the notional domains of tense, aspect, and mood. My survey remains then highly preliminary, but it represents a development from Murasaki's in that at least it highlights some structural properties previously unnoticed. Further study will be needed on these structural properties in order to understand whether they can be considered diagnostic of auxiliarity.

In light of this, I call *koyaykus/'eaykah* 'not be able' and *'easkay* 'be able', light verbs-auxiliaries by virtue of the fact that, though they structurally take a nominalized notional verb as their argument exactly like *ki* 'do', they are not semantically empty, and because they function to express mood (i.e. potentiality). One other difference with *ki*, a property that according to typology should go against the definition of *koyaykus/'eaykah* and *'easkay* as auxiliaries (Abraham, 1990: 201), is that these latter can hardly be used as single predicates that take non-sentential arguments,[48] while *ki* 'do' used independently is most common in the language.

With regards to auxiliaries, while it is true that the majority of the elements included in this class cannot be used as independent predicates in the language, the conclusive *hemaka*, the perfective *'an* and the negative *hanki/hannehka* represent notable exceptions (see for instance example (162) above). The first element in these

---

[48] At least one example of *koyaykus* used as an independent predicate is found in PLB: 113.

constructions is incompatible with nominal morphosyntax, which seems to signal that it does not have a nominal function but rather a fully-fledged verbal function (i.e. they are not light verbs). Nevertheless, the notional verb may indeed be followed by elements like *ka* 'even' when either the negative *hanki/hannehka* or *'esinka* follow. The only two auxiliary-like properties that consistently bring all the elements in this class together are that they are structurally separate from their notional verb and that they provide it with functional meaning relating to aspect (e.g. the conclusive *hemaka*), or mood (e.g. the volitive *rusuy*).

What seemingly best differentiates auxiliary-adverbials from auxiliaries is a number of morphosyntactic features that are never encountered in conjunction to the latter ones. For instance, the possibility of preceding the notional verb (as reported by Murasaki 1976a: 59-61) makes them similar to analytical adverbs like *'ampene* 'really', the difference with these being that some of these auxiliary-adverbials may also be used independently without a support verb. Some auxiliary-adverbials may otherwise be reduced to a bound morpheme that is affixed to the notional main verb. This is specifically the case for *'ekasre* reduced to *'ekas-* (Murasaki, 1976a: 59-60). In this respect, *'ekasre* resembles a number of bound adverbial morphemes, like *si-* 'really' or *(o)ar-* 'completely', which are similarly prefixed to a notional verb.

5.6.2.4 *Manu* as a final particle

I turn now to the class of final particles, whose only element is the reportative *manu*. As summarized in Table 6, *manu* responds negatively to almost all syntactic tests. A sentence with *manu* cannot be headed by a noun and thus become a modifier for a nominal constituent. When a notional verb is accompanied by *manu*, its arguments cannot undergo relativization. Moreover, *manu* cannot be a host for the nominalizing morpheme *-hV*, so that a clause whose verb takes *manu* cannot derive a nominal constituent and function as a sentential argument.

(169) **Pirikano*   *'okay-a-hci*   *manu-***hu***   *an-'erameskari.*

       well   exist.PL-0-3PS   REP-NMLZ   1PS-3SO/not.know

         'I did not know that people said they lived well.'

This incompatibility with the nominalizing morpheme clearly indicates that *manu* is not a verb, nor part of the verbal stem in any way.

In addition, *manu* is never encountered used as a single verb nor, as a matter of fact, as any kind of independent predication in a sentence. Rather, it is always featured in combination with a support element. The element to which *manu* attaches is never followed by nominal morphosyntax, such as *ka* 'even' or *pateh* 'just' (named above especially for light verbs), nor does *manu* appear linked to it via any kind of syntactic linkage. These two structural characteristics seem to suggest that, on the one hand, the first element of the construction indeed has the syntactic function of verb and, on the other hand, that the construction is monoclausal.

In light of these syntactic behaviors, *manu* is thus strikingly similar to such sentence-final particles like *kanne*, *soh*, *naa* or *noo*. These, and many other alleged sentence-finals, are included by Murasaki (1976a: 64) in the section discussion "final particles". We should once more be careful not to rely too much on Murasaki's categorization, since the actual class identity for a number of the elements included in it can be questioned.[49] Nevertheless, Murasaki's definition for many of the elements listed in this section of her grammar appears to be felicitous – among them, the aforementioned *kanne* (expressing a polite imperative), *soh* (expressing invitation), *naa* or *noo* (that emphatically convey speaker's involvement). These final particles are in fact "final" in that the sentence where they are featured cannot be syntactically expanded further – e.g. via the use of co-subordinative conjunctions or nominalization.[50] Moreover, final particles never appear used as independent predication, they are not a syntactic head, and they need a head word (here, a verb) in order to impart meaning. As we have seen from the syntactic tests applied, *manu* then fits in perfectly with other final particles of SA.

5.7 Summary

In this chapter I presented an analysis of the morphophonology and morphosyntax of SA and HA evidential forms. Evidentials of both varieties display strikingly different structural properties and their development cannot be reduced to one unitary process. This is also true for evidential forms within the same variety, as we have seen for SA personal knowledge evidentials and inferentials for instance. Overall, there are two morphosyntactic processes chiefly involved in the formation of Ainu evidentials:

---

[49] Almost all personal knowledge forms (e.g. *-hVV*, *-hV ne(e) nanko(o)*, *-hV ne 'an ike 'aa*) are in fact included among these final particles.

[50] The only syntactically admitted element is said to be the complementizer *nah* (Murasaki, 1976a: 64).

nominalization and incorporation. This latter process consists of both incorporation proper and pseudo-incorporation.

As for SA, I argued that personal knowledge evidentials *-hV* and *-Ø* have developed from clause nominalization. In the final stage of the development of these evidential forms, clause nominalization has brought forth the emergence of insubordination. The inferentials *ruwehe 'an/nee*, *sirihi 'an*, *humihi 'an*, and *hawehe 'an* have been shown to involve pseudo-noun incorporation, while I argued for the status of the reportative *manu* as a final particle. As for HA, I discussed direct evidential forms *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne* as cases of mixed category, further highlighting the specific case of *ruwe ne* which is possibly in the initial stage of development into an auxiliary. The cognates of SA inferentials, that is HA indirect evidentials *siran*, *sirki*, *humas*, and *hawas*, have been discussed again from the perspective of noun incorporation and pseudo-noun incorporation, with special attention to a number of particular constructions that showcase classificatory noun incorporation and internally headed relative clauses – two features never before discussed for the Ainu language.

The morphosyntactic properties of evidentiality I addressed in this chapter, especially those of HA indirect evidentials, will turn out to be relevant for the comprehension of the different semantico-pragmatic functions of evidential forms dealt with in Chapters 7 and 8. In the following chapter, Chapter 6, I introduce the theoretical background on information theory and discourse analysis required for the following analytical chapters.

Chapter 6

Background Assumptions on Semantics and Information Theory

6.1 Content of the chapter

Chapter 6 is dedicated to giving an introduction to the relevant concepts of semantics and information theory that I will be addressing throughout the analytical chapters, Chapters 7 and 8. This chapter is divided into seven sections. In section §6.2, I outline the grounding for the analysis to follow, with reference to previous research on Ainu. In section §6.3, I present my approach to discourse analysis, with special attention on how discourse affects and is affected by interpersonal relations, to topicality and givenness, and to textual parsing. In §6.4, I introduce and explain the sense hierarchy, which will be relevant specifically for SA inferentiality (see §7.3) and HA direct and indirect evidentials (see §8.3 and §8.4), while in §6.5 I discuss deixis. Section §6.6 presents the theory of territory of information. Here, by departing from the original theory designed by Kamio (1997), I introduce and illustrate my revised model that I will use to analyze SA personal knowledge evidentiality (see §7.2). Section §6.7 deals with TAM categories, presenting a definition for tense reference, mood, perfectivity and telicity. The chapter concludes in §6.8.

6.2 Grounding for the analysis

Previous research on Ainu evidentials, as outlined in Chapter 3, highlights a number of important issues that I intend to address and develop in my analysis. In this respect, past accounts on Ainu evidentials are the basis from which my argumentation departs. While I intend to produce an account of Ainu evidentiality that is as all-round as possible, I propose to linger on some particular morphosyntactic and semantico-pragmatic aspects of this category, which, among others, I take to be fundamental for a proper definition of evidentiality in the language. These aspects are:

- The centrality of sensory perceptions and stimulus ontology
- The speaker's perspective towards information and information source
- The interaction between evidentiality and epistemic modality

As I said in §3.3.4, Izutsu (2004) postulated systematic pragmatic entailments of evidentiality which are connected to the semantics of the noun at the origin of the

evidential form. Similarly, Takahashi (2013, 2014) discusses the salience of evidentials' semantics, being however the first to look at it in terms of stimulus ontology. Following from Izutsu's and Takahashi's observations, I propose to develop the discussion on stimulus ontology, specifically for SA inferentials (see §7.3) and for HA direct and indirect evidentials (see §8.3 and §8.4). Here I highlight the central importance that the sensory stimulus at the basis of the source of information entailed by the evidential form has in our understanding of the modality, directiveness, and reliability of information acquisition. The final aim is to show how stimulus ontology, and thus evidential semantics more generally, is in fact one of the underlying aspects that regulates SA and HA evidential systems (see Chapter 9). Furthermore, developing the discussion in Satō (2013), I propose to clarify the formal correspondences between direct and indirect evidentials of HA, that seem to interest exactly the stimulus ontology subsumed by the evidential semantics.

Takahashi (2013, 2014) is also the first to reason on a possible difference in speaker's perception of, or involvement towards, the information (§3.3.4). He furthermore suggests that such pragmatic functions of evidentiality may be mirrored formally in evidential forms (e.g. the *ne/an* alternation in forms like *ruwe ne*). Similar observations are made by Bugaeva (2004, 2012a, 2013). Following recent theoretical approaches to evidentiality and speaker's perspective (§2.2.1.2), I propose to build up from Takahashi's and Bugaeva's remarks to show that speaker perspective is in fact a recurrent feature of Ainu evidentiality that does not only interest HA but that is also relevant in SA, for both personal knowledge and inferential evidentiality (see §7.2 and §7.3). Speaker perspective can be discussed in terms of the modality of perception of a stimulus (see §7.3.4) or in terms of conceptual distance (deixis) respectfully to the information (see §7.2.4).

A third point that needs special attention is a more obvious one, as it is a recurring topic in almost all typological studies on evidentiality – the interaction between evidentiality and epistemic modality (§2.2.2). Despite the attention given to epistemic modality in general studies on evidentiality, satisfying accounts on this category in connection with evidentiality are quite scant for Ainu. My intention is here to consider epistemic modality as a possible constant in Ainu expressions of information source. More specifically, I aim to understand whether epistemic modality can be said to represent an accessory semantico-pragmatic extension of evidential expressions in the language or, in contrast, it is equally as important as evidentiality when shaping the

expression of the dynamics of information exchange. In order to properly address all these issues, I now proceed to introducing my framework concerning semantics and pragmatics, starting from discourse analysis.

6.3 Discourse analysis

In this section, I introduce my background assumptions on discourse analysis. The focus of this section is on discourse and interpersonal relations, topicality and givenness, and textual parsing.

6.3.1 Discourse and interpersonal relations

For the purpose of my study, I take a focused approach to discourse analysis, one that is concerned with discourse as applied to interpersonal relations. Such an approach is needed specifically in order to discuss SA personal knowledge evidentiality (see §7.2), a kind of evidentiality that within my reference corpora is almost exclusively encountered in conversation – that is, used in discourse between two or more speakers. My attention in this instance is then on how discourse as a whole is affected by the dynamics of a speaker-to-speaker interaction, but also on how this latter kind of interaction can be affected in its own turn by the organic development of discourse.

In drawing my assumptions on the main characteristics of this interplay between discourse and interpersonal relations, I refer to Johnstone's (2008) survey on some different domains of information exchange. According to Johnstone, the main characteristics of discourse are its being prone to redefine the circumstances within which discourse itself happens as well as its malleability under the influence of these same circumstances. It follows that we understand discourse as constantly changing with regards to its structure and internal features. This ever-changing property of discourse is particularly relevant for the case at hand since it can prompt speakers to employ linguistic devices differently or to use different linguistic devices altogether to fit in with the changing communicative necessities. In this sense, Johnstone's approach is most suited to the case of SA personal knowledge evidentiality and eventually helps explain the use, distribution, and choice of SA forms *-hV* and *-Ø* within conversations (see §7.2).

According to Johnstone (2008: 10), the mutual influence of discourse and interpersonal relations takes two separate roles, and each one of these follows two

191

directions simultaneously. Johnstone summarizes the two-way interaction as in a) and b) below.

a) Discourse is shaped by interpersonal relations among participants, and discourse helps shape interpersonal relations.
b) Discourse is shaped by expectations created by familiar discourse, and new instances of discourse help shape our expectations about what future discourse will be like and how it should be interpreted.

Let us break down these two generalizations. The interaction described in a) entails that the use or even the acceptability of language structures or particular linguistic devices in discourse may depend on the kind of relation existing between those who are involved in the discourse itself. For instance, the use of anaphoric expressions referring to elements or participants previously introduced in discourse, or whose saliency is simply taken for granted, may not be acceptable (in terms of pragmatic clarity) if one of the speakers involved in the conversation has no access to the overall general context containing the referents anchored by this anaphora. The interaction described in b), on the other hand, entails that habitual activities, recurring topics, or repeating patterns within discourse (or across discourses) create a familiar context that enables people to interpret and produce new instances of discourse through the use of fixed ways of expression that are anchored within a shared cultural substratum.

In the consideration of the interaction of discourse and interpersonal relations, we understand that the cohesiveness and eventually the efficiency of discourse as an act of information exchange depends on a number of factors. More concretely, this depends on whether all speakers who take part in discourse are equally aware of the participants, referents, setting, events, and all other meaningful pieces that ultimately constitute the very information being exchanged. Alternatively, in case there is no equal prepossessed knowledge among speakers before discourse commences, all relevant bits necessary to a felicitous understanding of information must be introduced gradually in due course as discourse proceeds. If neither of these conditions is met, the overall purpose of discourse fails and discourse results in an incomplete or faulty information exchange.

For the specific instance of discourse I treat here, the discrimination between new and old information appears crucial, since assuming speakers' knowledge about participants, events and the like can easily compromise the outcome of information

exchange. This feature of information within discourse complies with the definition of givenness, a concept that I discuss in the following subsection. Together with givenness, and logically connected to it, I also introduce topicality, a concept that applies to those pieces of information that creates expectations or familiarity in discourse.

6.3.2 Topicality and givenness

As stressed in the previous subsection, it is necessary to distinguish between old and new pieces of information in the act of communication, since making any presuppositions on knowledge shared among speakers can hinder or compromise a felicitious information exchange.

In order to ensure that no piece of information that is essential to a good outcome of communication is taken for granted, a common ground among speakers needs to be set. The notion of common ground, developed in studies such as Stalnaker (1974), Karttunen (1974), and Lewis (1979), and adopted by Krifka (2006), entails that there is a set of propositions that constitutes the shared knowledge of those speakers, whose informational content is known to all speakers involved in communication. Common ground is nothing more than a way to model information that is mutually known to be shared and continuously modified in communication (Krifka, 2006: 4). The postulation of a common ground becomes relevant when we see the act of communication as a transfer of information and as the optimization of this transfer relative to the temporary needs of interlocutors. That is, different pieces of information can be introduced, highlighted, backgrounded and recalled throughout the communicative act depending on what is presently relevant to the speakers involved.

In setting the common ground of communication, speakers first establish content – that is, what communication is about or the content of information being shared. Common ground content is made up of all those propositions that are presumed to be shared, and it relates to entities that have been previously explicitly introduced (either during the same communicative act or beforehand). Alternatively, such entities can be accommodated even though they are not explicitly introduced. This happens especially when entities are linked to propositions expressing uncontroversial facts, and these can be added implicitly to the common ground context simply because the common ground context needs to be of a certain kind (Krifka, 2006: 4-5). Krifka illustrates this with a couple of examples where he points out that if a speaker were to say that she had to take her pet to the vet, the interlocutor would expect this pet to be something like a cat and

not something like a gorilla. Though both the cat and the gorilla are two entities not explicitly introduced beforehand, saying "I took my gorilla to the vet" is not acceptable while saying "I took my cat to the vet" is. The entity "my gorilla" is here unfelicitous if not previously introduced explicitly because it is not uncontroversially expressed in the proposition of "bringing a pet to the vet".

New information is continuously added to the common ground context not just as general propositions or new entities, but also as information associated with specific entities that have been already introduced (Reinhart, 1982). Information then can constitute a "comment" to an entity which the speaker is referring to and that she identifies as salient in a particular moment of communication. This entity about which a comment is given is recognized as the topic or the psychological subject (Krifka, 2006: 30). When speaking of topicality in this work, I specifically refer to the property of discourse referents as newly introduced entities or salient entities about which a comment, expressed within discourse either in one clause or across several clauses, is given (Reinhart, 1982). Participants have high topicality when either one of these conditions is met; conversely, if they are not themselves newly-introduced or if the comment to them is not newly-introduced, they have a relatively low topicality status.

Entities and comments can otherwise be introduced as old information, though they have never been mentioned in communication before. Evidence that information is treated as old usually comes from the fact that anaphoric expressions, such as determiners and demonstratives, are used along with entities that appear anew in the common ground content. The case of Ainu is no exception to this tendency. I further expand on this point by saying that old information is not only defined by virtue of the use of anaphoric expressions, but it may also be taken for granted on a cultural basis. In the case of Ainu we see how some events that pertain to fixed literary *topoi* are especially prone to be considered as given by speakers, especially in folktales that are characterized by a recursive pattern and canonical settings (see §1.5). Speakers make implicit predictions on how content is developing on the basis of their cultural background. Krifka (2006: 5) calls such manipulation of the common ground "management".

Features like anaphoric expressions and implications made on cultural grounds are givenness features in that they indicate whether the entities or events they are connected to are at all present in the common ground or whether they are available in the immediate common ground, that is relevant at one particular moment of communication

(Krifka, 2006: 27). Along the lines of Quirk et al. (1972), when speaking of givenness in this thesis, I thus refer to the property of entities and events which are clearly and unmistakably available in the common ground set for communication as elements already supplied by the context. Their degree of givenness can, in turn, be made explicit via the use of overt linguistic devices such as determiners, demonstratives or other anaphoric expressions (Gundel et al., 1993).

6.3.3 Textual parsing

In order to analyze evidential tokens throughout Chapters 7 and 8 consistently, I need to resort to some rules that allow me to systematically compare discourse excerpts, in a way that enables me to eventually advance generalizations on the use of evidentials across different reference corpora and, ultimately, in separate Ainu varieties. This subsection is dedicated to illustrating these parsing rules that I will be applying in the analysis. In the remainder of this subsection I address a number of parsing rules which merely represent a methodological tool I employ in order to divide discourse or narration, as featured in the reference corpora, with the final aim of obtaining language "chunks" that are similar in terms of their semantico-pragmatic features. I do not claim that these parsing rules necessarily correspond to fixed patterns of language production that are in turns representative of certain cognitive processes in the Ainu speakers' mind. From the practical side, this methodology is meant to compensate for the impossibility of conducting active language elicitation (see §1.3.2), therefore these parsing rules will be used throughout the analysis to follow for each Ainu example to appear.

Following Johnstone (2008: 125), I do not understand parsing rules as "generative". This means that I do not assume there are rules of textual parsing that exist *a priori*, before and apart from discourse. Rather, I intend parsing rules to be a statistical generalization of how discourse is produced, and thus they exist *a posteriori* to the uttered discourse. Rules of textual parsing then are not models describing an actual cognitive process, but rather a generalization of the phases through which this process unravels.

The rules I will be applying especially regard the boundaries and stages of discourse. For any instance of discourse we can detect a beginning and an end, and we can further divide this discourse into smaller units. Discourse is the representation of unfolding knowledge and social relations, and as such is the illustration of an ever-

changing situation of information exchange. Due to this, my ultimate goal is not deriving a model for discourse's internal structure to be applied to different cases as some kind of parsing formula. Nevertheless, we can outline the internal structure of discourse thanks to internal patterns and regularities that allow us to systematically generalize about which units of discourse precede or follow the others (Johnstone, 2008: 78).

These patterns and regularities within discourse constitute internal coherence – the recursiveness of words, the cohesiveness of the temporal and spatial setting or the focus on a specific topic of discussion defines and singles out one specific episode within discourse (Johnstone, 2008: 82-3). Different narrative episodes are usually set apart by the use of overt linguistic devices (e.g. time/space adverbs, signposting conjunctions) which clarify the change of scenery and put episodes into a logical relation with each other (Johnstone, 2008: 85, 92). Aside from linguistic devices, one more discourse characteristic that may facilitate the definition of episodes, and thus parsing, is the recursiveness of narrative *topoi*. Especially in traditional narratives, which often follow a predetermined structure, the presence of a certain *topos* creates an expectation for the development of discourse in that this specific theme is anchored to a fixed narrative schema.

As discourse unfolds organically following the speaker's train of thoughts, it may be the case that we cannot straightforwardly retrieve internal coherence and so that the clarity of a narrative episode becomes compromised. Johnstone (2008: 118) discusses some ways to overcome this impasse. The use of anaphoric, cataphoric or exophoric expressions, for example, can help locate unexpected digressions or "illogical" developments of discourse with respect to the previous discussion or narrative, or the general context. Johnstone notes that transcription may also represent a useful tool for textual parsing, in that it is most likely unconventional writing (or, in the presence of an audio resource, special prosodic features) that is a mirror of internal cohesiveness or of shifts between discourse episodes that may not be represented through other more explicit devices (i.e. overt signposting). Let us consider a short passage of an Ainu folktale to see how some of these parsing rules apply to the actual language. The background context for this example is that a woman who lived with her son brought him up with all comforts to be a young man who eventually got married, but right when it seems things could not be better the woman goes suddenly blind, it seems, due to a divine punishment.

(170) *... ruwe ne* **ayne**, *[a-kotan-u-ta,* *sine* *pon*
DIR.RSN then 4-village-POSS-in one be.small

menoko *a-e-etun-kar,* *hine*
young.woman 4S-APPL-3SO/marry-make and.then

mat-kor *hine* *oka-an* *ruwe ne* *a* *p,*
woman-3SS/have and.then exist.PL-4S DIR.RSN PRF NMLZ

easir, *yuptek* *menoko* *a-ne* *kusu,* *kina*
really be.active woman 4S-COP because grass

haru hene, *nep* *hene,* **a-e** **rusuy** **ka** **somo**
crop DUB something DUB 4S-3PO/eat want even NEG

ki **no,** *sukup-an* *wa* *[a-po-ho* *a-resu*
SLV/VO/do ADV live-4S and 4-child-POSS 4S-3SO/raise

hine *oka-an* *pe* *ne* *a* *p,* *a-po-ho*
and.then exist.PL-4S NMLZ COP PRF NMLZ 4-child-POSS

mat-kor] *hine* *orano,* *u-heturaste-an* *wa oka-an*
woman-3SS/have and.then and REC-live.together-4S RSLT-4S

a **p,]** *hemtomani-wano* *nisapno* *ar-siknak-an,* *hine ...*
PFR NMLZ that.moment-from suddenly CMPL-be.blind-4S and.then

'… so being, [my son] married a young woman in our village, and [so] he had a wife but, well, because I was an active woman, we lived with no need for food like vegetables or whatever and I raised my son, but… my son got a wife and we all lived together, but from that moment I suddenly went completely blind, and …' (TMA: 2)

One boundary of this passage is set by the conjunction *ayne* 'then', which marks a turning point in the narration and connects two sentences or periods with different or, more commonly, contrasting content. Within this passage we encounter the three main character of the story (i.e. the old woman, his son, and his son's wife) and the main setting of the narration is also set (i.e. the village) – these elements remain stable throughout the passage, which thus shows internal coherence. The passage features also some cataphoras (obtained through the strategy of zero-anaphora most common in Ainu), for instance the unmarked third person subject of the verb *eetunkar* 'get married' that coreferences the noun *apoho* 'my son' which only appears some lines below. The

197

portion of the text that starts from *apoho aresu* 'I raised my son' to the following *matkor* is in actuality a repetition of what has been said just some lines above, which serves as a clarification and to provide the support for the cataphora. A further indication of internal coherence of this passage is signalled by the idiomatic phrase *ae rusuy ka somo ki no* 'with no need of eating…', which is recurrent at the beginning of narration as a way to describe the initial idyllic situation soon to be corrupted – as such, this passage also contains a narrative *topos* of Ainu folktales. The end boundary of the passage is marked by the adversative construction *a p* 'but', which marks a twist of events (i.e. the fact that the woman boes blind).

The foundations of parsing that I presented here are just some of the ones lined out by Johnstone. In my approach to textual parsing, I focus on these specific rules as they are most relevant in light of the kind of reference sources for my study. The main boundaries of discourse (i.e. the beginning and the end) are indeed easy to define for the Ainu texts I analyze – these correspond to the start and the conclusion of transcription or the discourse recording decided by the corpora collectors. The genre of the reference texts most often facilitates the subdivision of discourse into episodes. As I said in §1.5, Ainu narratives follow a predictable structure and the repetition of narrative *topoi* is most common. Moreover, the different episodes within Ainu narratives are easily recognizable thanks to the use of recurrent expressions describing the setting (e.g. the action of going to the mountains) or overt signposting that signals a change in the setting itself (e.g. the subordinating *hine* 'then' signaling something that happens subsequently to something else).

6.4 Sense hierarchy

In this short section I introduce a hierarchy of senses following from studies such as Classen (1997a, 1997b) that focuses on the cultural perception, classification, and organization of senses. As Classen (1997a: 402) strongly points out, senses from an anthropological perspective are "avenues for the transmission of cultural values" so that, already from this general definition, we see the pertinence of senses to information exchange and, ultimately, to evidentiality.

The human consideration of senses tends to vary among cultures so that defining one universal hierarchy which organizes separate senses according to their salience, reliability, or other feature is impossible. Even the categorization of senses is not unitary across cultures of the world, as Classen (1997b) reports cases where one or more of the

five basic senses distinguished in Western culture are either collated or further separated by internal specifications. Here I take some representative cases of sense categorization and organization in order to motivate the proposed hierarchy that will be necessary for the discussion of those Ainu evidentials that entail a sensorial source of information (i.e. SA inferentials (see §7.3), and HA direct and indirect evidentials (see §8.3 and §8.4)).

Classen (1993: 2-3) reports of cultures where taste/smell and touch are collated together into one single sense, in contrast with sight and hearing which are in turns distinguished from each other. At the same time, in Western cultures the sense of sight is considered to be the most important or the "highest" of senses because it is the most informative (i.e. the one that ensures a more direct or complete experience of something) (Howes, 2011), as opposed to hearing which due to its lack of physicality, is considered the sense providing the least tangible or reliable experience. If we take sight and hearing to be the two extremes of a scale that has tangibility of the stimulus and directness of experience as its main parameters, we can place taste/smell and touch somewhere in between as they provide an experience of something that is tangible thanks to their physicality, but not as direct as the one achievable through sight. As I will better show throughout Chapters 7 and 8, there is evidence coming from the formal encoding of evidentials in the language that smell/taste and touch are considered in Ainu to be equal in terms of reliability and tangibility and that thus these three senses are possibly lumped together as one in Ainu, though they are clearly differentiated in the Western culture.

When we try to represent the hierarchy, we obtain the following scheme:

Sight > Smell/Taste - Touch > Hearing

The hierarchy we obtain is one organized according to saliency, where this term refers to the higher or lower reliability and informativeness of these senses as means to know reality. Consequently, when applied to evidential forms, this hierarchy outines the informativeness of these forms in terms of the level of reliability (with which speaker accesses information) they encode, much like the evidential hierarchies discussed by Levinson (1983). It must be noted that the evidential hierarchy that will surface from the application of the present sense hierarchy are not used here as a way to predict the speaker's choice of evidentials in a certain situation (as in Faller, 2002). Given the available data and the vitality status of Ainu, ascertain whether this hierarchy helps

predict the choice of evidentials is impossible. The aim of the hierarchy is illustrative of the internal semantic organization of the evidential category and is not meant to make any specific claim about pragmatic uses of evidentiality such as those connected to thrustworthiness or subjective evaluation.

It should also be noted that, though this hierarchy is supported by typology and has value for the purpose of the present study discussing information acquisition (i.e. evidentiality), it is far from being true for and applicable to other aspects of the language that might have to do with sensorial perceptions, nor should it be taken as representative of a general anthropological characteristic of the Ainu culture. I do not engage in these issues here. Further research (most of which falls outside of the domain of linguistics proper) should be carried out in order to better define sensorial perception and sense organization within the Ainu culture.

6.5 Deixis

In §2.2.1.2, I introduced speaker's perspective, as discussed by Squartini (2008), as one fundamental concept for the analysis of Ainu evidentiality. There is one more concept related to perspective and conceptual "distance" that is central to the present study – deixis. Following Fillmore (1997), I broadly understand deixis as being concerned with the coding of physical or non-physical distal relations in the dimentions of time and space between fixed reference points. Specifically in language, we anchor elements of discourse, like participants or events, with the use of deictic expressions to specific points in time and space. These may differ in their closeness to a certain physical place or to a particular moment in time taken as the reference points for the discourse itself. In order for a deictic expression to be used felicitously and to fulfill its referencing function in discourse, we need to provide a clear context so that the deictic expression can be appropriately anchored by a retrievable referent.

With regards to the anchoring of deictic expressions in discourse, I deviate from Fillmore's account and assume that referents of deixis are not only found within the immediately available context, but also in the conceptual framework of shared knowledge. In other words, deictic expressions can be anchored to referents that are not overtly introduced in discourse but whose saliency and retrievability are just merely implied on the basis of what all speakers who participate in discourse share in terms of prepossessed knowledge. This is the stance on deixis taken by Bartee (1996: 47) in her work on deictic expressions in Lhasa Tibetan. Bartee's (1996: 48) model of deixis is

sociocentric more than egocentric – that is, the assumed knowledge shared by participants in the speech act where discourse happens is relevant to the correct use and eventually to the comprehensibility of deictic expressions. She argues that this is the case, although it is indeed the speaker (i.e. the ego) that is the sole entity controlling the utterance containing the deictic expressions.

Starting from this broad definition found in Bartee, I expand the notion of spatial deixis into the wider notion of social deixis. More specifically, this is the type of deixis that accounts for anchoring of referents according to social variables and not simply to their physical position in space, much like the stance taken by Anderson and Keenan (1985) with regards to honorifics or kinship terms, whose use they regard as properly deictic. In this sense I deviate from Bartee (1996: 48) in that, when she speaks of sociocentricity, she invariably refers to a physical place. Although Bartee's proposal is not merely concerned with the speaker's reality, spatial deixis here is nevertheless connected to the corporeal field of interactants, their moves, and routine practices in some framed space. In contrast, in my proposal sociocentricity rests on systematic social variables (e.g. social status, personal acquaintance) through which the speaker posits referents conceptually more closely or further away from herself. There is no actual physical place to provide the ground for deixis, but rather there is an idealized plan shaped by social norms.

Similarly, I expand on the notion of temporal deixis. I start from Fillmore's understanding of temporal deixis as a kind of deixis that pertains to the time dimension and that anchors referents to certain present, past or future moment, with respect to a referece time. In my approach, temporal deixis does not concern the temporal frame imposed by the passing of time in the real world, but rather it concerns the temporal frame dictated by discourse and its development. In other words, temporal deixis does not apply discourse-externally, on a broader time dimension where discourse represents some sub-portion of this time that encompasses the speech act where information exchange happens. Rather, this kind of deixis applies discourse-internally and takes discourse as the very temporal frame that delimitates the choice of the reference point and the possible temporal placement of referents to be anchored via deictic expressions. Following the approach to narrative and context deixis found in Zubin and Hewitt (1995: 132), I understand temporal deictic relations as defined by topicality and givenness of referents with respect to a deictic center (here, the speaker), two qualities of referents in context that are defined and change as these referents are introduced,

reintroduced, or backgrounded throughout discourse. On the basis of their topicality and givenness, the speaker posits referents conceptually closer or further away from herself.

The following example serves to illustrate the process of assessment of the level of speaker acquaintance or social closeness to the referents present in discourse/narration (i.e. elements taken into account in the exchange of information), and their level of givenness and topicality. The example shows how, while the definition of topicality and givenness rests on contextual restrictions (i.e. whether a referent has already been introduced or not), the definition of social closeness has a lot to do with background information that often goes beyond what discourse provides.

(171) ***Nisahta   oro-wa***   *tani*   ***'i-koutasa   kusu***
    morning   3/place-from   now   4O-3SS/visit   CAU.FIN
    [...]   suy   'ek-hi.
         again   3SS/come.PC-PK
    'Now, she's been at my place since the morning to visit me, again she came.' (MRA: 7)

The conversation takes place in the mid-morning and involves the Ainu informant, her Ainu friend and the collector. The informant's friend has arrived late to the recording session that is taking place and the informant is telling her about the collector's whereabouts before she got there. 'She' refers to the collector, who has been introduced earlier in discourse when the Ainu women discuss that she is now recording her last session before returning to Japan for a while, she is also a friend of both women but possibly not a closed one given that she is a foreigner, much younger than the two informants and a relatively new acquaintance – the referent 'she' is therefore socially distant but given and topical in this instance. 'Since this morning' provides the time reference that frames the shared information temporally – this piece of information is introduced only at this point and it is thus non-given. 'Visit me' represents the purpose that leads to the main event that is reported (i.e. the 'coming'), and marked with evidentiality, and as such better defines it. This piece of information too is introduced only at this point and it is thus non-given. Finally, 'came' refers to the main event that is being reported. The event has a visible result, that is the collector being there at the moment of utterance, and it was also mentioned, again throught the use of the verb *'eh* 'come' earlier in the conversation – as such, this referent has a high topicality and it is

202

given. If we translate this in terms of deictic closeness, we see how 'she' is deictically close to the speaker in terms of narrative deixis but distant in terms of social deixis. Similarly, the time reference for the main event 'since this morning' and its purpose 'visit me' are distant in terms of narrative deixis, while the main event, considered as a whole, is close to the speaker in terms again of narrative deixis.

It must be noted how, in defining topicality, givenness and social closeness, I take into account components that are extra-clausal with respect to the predicate on which the evidential is used, for instance the cause leading to the main event *'ikoutasa kusu* 'to visit me'. This is necessary as the different dectic relation of these pieces of information, that refer to the "how", "when", "why" and "who" making up the reported event (see §6.6.3.1), show to directly influence the eventual formal encoding of evidentiality. This process is applied to all tokens of evidentiality I address in this study and is particularly relevant for the discussion of those tokens featuring personal knowledge evidentials that I analyze in §7.2, as the differences in deictic closeness of these elements prove to directly influence the encoding of this kind of evidentiality (that in this instance appears marked as *-hi*). A definition of spatial deixis as sociocentric is especially important for the analysis of evidentials found in conversations, where participants, events and referents mentioned are part of the shared common knowledge of speakers. Conversely, a definition of temporal deixis as discourse-centered is relevant for the discussion of evidentiality in narration, where temporality does not necessarily comply with an actual linear time frame, but most often is defined as the speaker's thoughts unfold organically.

6.6 Territory of information

Spatial and temporal deixis, as presented in §6.5, is the ground on which I base my model of Territory of Information (TI). In the first subsection to follow, I survey the original Theory of Territory of Information developed by Kamio (1997). In the remainder of this section, I outline the deviations from Kamio's model that I make for the analysis of Ainu evidentials. In doing so, I provide Ainu examples for each passage so to guide the reader throughout the analytical process I employ for all tokens of personal knowledge evidentiality and whose outcomes become pivotal in the discussion of this kind of evidentiality in §7.2. The new version of Kamio's Theory of Territory of Information, that I present here as an original contribution, proves to be an effective way of formalizing the pragmatic dynamics that prompt the use of different evidential

forms specifically in Ainu and eventually explain the distribution of these forms within the reference corpora.

6.6.1 Basic notions

When speaking of territory of information (TI) in my analysis, I mean a conceptual model for formalizing deixis and pragmatic interactions among the elements (i.e. participants and/or events) that play a part in the sharing of information, as applied specifically to the case of SA personal knowledge evidentiality (see §7.2). As I mentioned in the opening of this section, I develop this model on the basis of Kamio's (1997) Theory of Territory of Information (TTI), which he proposes in order to discuss the use and distribution of direct and indirect linguistic devices employed in the transmission of information in Japanese, Chinese, and English.

By focusing on these languages, Kamio notices how, in a given conversational context, the dynamics of transmission of information may be marked by the use of different formal devices depending on the speed with which information sharing/acquisition happens. Specific circumstantial factors define the situation where information sharing/acquisition happens, and they pragmatically require the use of direct or indirect linguistic devices which are strictly language-dependent. In English, in the situation where A and B see A's mother, A would utter the sentence in (172) while B would have to utter the sentence in (173).

(172) *That lady is my mother.*

(173) *Isn't that lady your mother?*

In this situation, the declarative present tense utterance in (172) and the interrogative negative present tense utterance in (173) are regarded as a direct and an indirect forms respectively (Kamio, 1997: 5-6). Impoliteness or awkwardness would result if B were to say something like 'That lady is your mother' or if A were to say something like 'Isn't that lady my mother?'.

Kamio identifies the circumstantial factors that rule the use of direct and indirect forms in English (as in Japanese and Chinese) as linked to the concept of closeness of information to either the speaker or the hearer in a given conversational context. The definition of this closeness rests on the contextual preconditions and variables that place

the speaker, hearer and information in relation to one another. The TTI then presents itself as a way to formalize the concept of closeness via the postulation of an ideal territory through which information moves and is exchanged between speaker and hearer.

Kamio (1997: 16-17) understands the TI as a virtual mental space each person possesses. Within this TI, a person stores that specific information over which they exert direct control. In this sense, the TI constitutes a subset of information that is part of the general knowledge of that person. An exchange of information happens when the separate TIs of a speaker and a hearer interact. In this process, any given piece of information may fall either exclusively within the TI of one speaker or the other or within both territories at once. This is possible as the TI is conceived not as an all-or-nothing entity but rather as gradable and relative (Kamio, 1997: 17). From these very basic assumptions, we can see how Kamio's theory develops on the concept of fluid interaction of knowledge, whose medium is information. In formalizing his TTI, Kamio (1997: 23) resorts to a series of equations to illustrate the possible kinds of interaction between speaker and hearer in a given conversational situation.

6.6.2 TI revised – relevant concepts for Ainu

In my approach to Kamio's TTI, I focus on three main aspects that provide the necessary theoretical background for the development of my own model of territory of information. These aspects are 1) the distinction between "having" and "knowing" information, 2) the distinction between realis and irrealis as the two domains encompassed by the TI, and 3) the application of the TTI to discourse analysis and the notion of empathy (as defined in Kuno, 1987).

Kamio (1997: 16-17) operates a distinction between *having* and *knowing* information (see §6.6.3.2). *Having* information means that a given piece of information is part of the general set of facts known to a person. *Knowing* information means that a piece of information is not only part of the general knowledge of a person but also that this piece of information is perceived as being conceptually "close" to that person (e.g. because it is related to the person themselves or someone closely related to them, as in example (172) above). Let us consider a couple of Ainu examples to clarify the distinction.

(174) *Mac-ihi*   *'isam…*   *koro*   *kun*   *mah*

3/woman-POSS   3SS/not.exist   3SS/3SO/have   obligation   woman

'isam   ***manu***.

3SS/not.exist   REP

'They say he doesn't have a wife… [that] there's no woman for him.'
(MRA: 84)

[The informant is talking about a man who is not one of her close acquantainces and who she knows to be a bachelor.]

(175) *Nisahta*   *oro-wa*   *tani*   *'i-ko-u-tasa*   *kusu*

morning   3/place-from   now   4O-APPL-REC-3SS/cross   because

'i-w-ooneka   *kusu*   *suy*   *'ek-**hi***.

4O-0-3SS/visit   because   again   3SS/come.PC-PK

'Now, she's been at my place since the morning to visit me, again she came.' (MRA: 7)

[The informant is talking about the collector (Murasaki) and tells her Ainu friend about her whereabouts on the day of the recording]

In example (174) the information regarding the marital status of the man the speaker is talking about is part of her general knowledge (i.e. the speaker *has* information), but it is also clear that she does not perceive this piece of information to be "close" to her, given that this man is not one of her close acquaintances or maybe because this information was originally reported to her indirectly. The fact that this piece of information is thus not *known* to the speaker is also marked explicitly in the language by the use of the reportative *manu*. Conversely, in (175), the speaker still speaks about a third person to someone, but here this person is the collector of the text, someone the speaker considers among her close acquaintances – in this instance the speaker both *has* and *knows* information. Therefore she can tell about the collector's whereabouts to her friend using the personal knowledge form *-hV*. Theoretically, knowing information entails the presence of a TI, which is a subset of knowledge dedicated to that information which is "close" to a person. Furthermore, we can see how knowing information subsumes having information, while the opposite does not hold (i.e. having information is not necessarily knowing information).

As mentioned above, Kamio assumes that, in the exchange process, information moves from the speaker's TI into the hearer's TI. However, the transition is not instantaneous. Information does not enter someone's TI all at once (being thus *had* but not *known*), nor does it solely pertain to the speaker's or hearer's TI. Rather, information is assimilated in a gradual and scalar manner and it may require a certain period of processing before it can be said to have entered someone's TI. This in-between moment in the process of information exchange may be represented formally in language. Forms subsuming indirect information acquisition may be used the first time information is accessed and in the following time until assimilation is completed (Kamio, 1997: 37-8). A number of circumstantial variables, such as the nature of the interlocutors' acquaintance, the background context or the social environment, may accelerate or hinder this process. This is in line with what Aksu-Koç and Slobin (1986) describe for Turkish (see §2.2.1.3). The distinction between knowing and having information is then a way to capture the scalar nature of information exchange.

Following Akatsuka (1985), Kamio (1997: 133-4) further reasons on the domains of realis and irrealis in connection to information transmission. Akatsuka (1985) introduces the idea that these two domains influence the assimilation and processing of information. Realis is here the domain where a piece of information settles down and becomes knowledge, while irrealis is the domain where information is found at the moment in which is not yet known (in the sense of "knowing" used above). Again on the basis of the empirical use of indirect and direct forms in language, Kamio assumes that when any given piece of information is first acquired, it remains for a certain period of time within the irrealis domain as uncertain or unreliable information. Only after adequate processing can it enter the realis domain. Among the variables that accelerate or hinder the processing of information, Kamio (1997: 137) names informant's reliability and speaker's "involvement" or "direct experience" of the context in which transmission happens. Depending on these (and other) variables, a piece of information may remain in the non-realis domain longer and thus formal indirectivity in language persists. In order to capture this interimediate moment of information acquisition, Kamio introduces a third stage to Akatsuka model: a stage where information belongs both to the irrealis and the realis domains.

To conclude this subsection, let us consider the relation between the TTI and discourse analysis. In Kamio's view the TTI is relevant for discourse analysis in that it becomes a systematic way to predict which linguistic forms will be used in an utterance

to convey information through an analysis of conversational context and territorial relations (Kamio, 1997: 160). Kuno (1987) advances this same idea in his theory of empathy, formulating a theory of psychological distance that is analogous to Kamio's territorial relations. In both theories we see how the concept of distance is pivotal in defining what ultimately influences the formal ways we employ in the language in order to communicate. However, while in Kuno "distance" is understood as being between the speaker and other entities involved in the conversational context, in Kamio it is assumed to be between the speaker and/or the hearer and the information that is being transmitted.

6.6.3 A model of TI for Ainu

The model of TI I propose for Ainu is meant to be a way to formalize distal relations and ways of interaction in information acquisition, that I assume to be the foundation for the formal encoding of personal knowledge evidentiality in SA. As I explain in Chapter 7, personal knowledge evidentiality concerns information that falls inside the set of notions known to the speaker. A given piece of information of this type has been acquired through some channel whose nature is no longer relevant; that is, information has undergone assimilation (see §2.2.1.3).

Like Kamio's TI, the TI I assume for Ainu is primarily based on the concept of closeness. However, in Kamio's original theory the TI represents a mental space where only information that the speaker has already assimilated is found, all other kinds of information (i.e. information not yet assimilated or unknown to the speaker) falling outside of this mental space. Differently, what I mean here by TI may include information that has already been assimilated by the speaker or that has yet to be assimilated; while, like Kamio, I assume information unknown to speaker to fall outside of the TI. In other words, the kind of information Ainu TI encompasses both information that may be *known* or *had*, in Kamio's terms. This is one major difference with Kamio's model. In this sense, we can see how the Ainu TI then becomes a representation of the realis domain and the domain half-way between realis and irrealis, relevant for information assimilation, that Kamio develops from Akatsuka (see §6.6.2). This is one main revision to Kamio's model of the TI needed to account for the formalization differences of personal knowledge in SA.

6.6.3.1 TI layout – subdivision and elements

The kind of "closeness" relevant for the Ainu TI takes two different dimensions that can be discussed in terms of social deixis and narrative deixis. Social deixis represents a conceptual closeness to the speaker which is measured in terms of the nature of personal acquaintance, differences in social status and age. Narrative deixis represents a conceptual closeness to the speaker, which is measured in terms of topicality and givenness; this distance is in turn determined via discourse analysis and parsing (see §6.3.1 and §6.3.3). At this point, we can visually represent the TI as in Figure 7.

Figure 7 – Ainu TI's layout

Taking the top-left corner of the TI as the focal point F, that corresponds to the speaker, the TI develops in two deparate dimensions, each one pertaining to one kind of deixis: social (SD) or narrative (ND). The interaction of these two kinds of deixis, with their higher (+) or lower (–) values, delineates four separate quadrants in the TI. These quadrants represent portions of the TI that may host elements of information that are conceptually closer or further away from the speaker in different deictic terms. Quadrant 1 is the portion of the TI reserved for elements conceptually closer to the speaker as far as both kinds of deixis are concerned; conversely, quadrant 4 is the portion of the TI reserved for elements the speaker perceives as conceptually further away from herself. Quadrants 2 and 3 represent portions of the TI that are conceptually equally distant from the speaker, however by virtue of different deictic values – respectively [SD+; ND–] and [SD–; ND+].

In the process of acquiring or sharing of information, the speaker relates to different elements that are involved in the process itself. As I illustrate in §7.2, it is the conceptual closeness of these elements that defines the immediateness of information

acquisition/sharing, which is ultimately what decides the formal encoding of personal knowledge evidentiality. But what are these elements?

The first set of elements I define pertain to the conversational context – that is, in the situation where information exchange happens. In this context we identify a source of information (*S*), a participant who has direct knowledge about a certain proposition which she reports via evidentiality. This direct knowledge about the proposition has come from information assimilation, of an information coming possibly from an original indirect source (see §2.2.1.3) that now the speaker perceives as part of her set of personal knowledge. In this sense, the notion of source I employ here resembles the one of Gunlogson's (2008), which I provisionally borrow, in that the source is a participant (or "agent" in Gunlogson's terms) to the conversational context, who commits to a certain proposition and its content and whose commitment does not depend on another agent's testimony on that proposition. Nonetheless, further specifications of Gunlogson's definition of source make this term not fit entirely with my understanding of "source" in the case of SA, especially with regards to the possible number of sources, their retrievability and, most importantly, source's reliability. Therefore, in the remainder of this section, I will depart from Gunlogson's definition and present the characteristics of this conversational-context participant I call "source". Together with the source, we also recognize a recipient or the participant that is the goal of information exchange (*R*), and the information itself which is being exchanged (*I*). Depending on whether we are dealing with a declarative or an interrogative statement, we are able to recognize a different role for the speaker *F*. In the case of a declarative statement (176), *F* is recognized as the source *S*: the speaker possesses information and she uses personal knowledge evidentiality to share it. In the case of an interrogative statement (177), *F* is recognized as the recipient *R*: the speaker does not possess information and she employs personal knowledge evidentiality in order to acquire it.

(176) *Anoka*   *kayki*   *'ampene*   *'an-eramiskari-**hi***   *nee*   *ko.*

     I   too   really   1SS-3SO/not.know-PK   COP   FIN

    'I really did not know him either.' (MRA: 80)

    [The speaker (*F=S*) is telling the collector (*R*) she did not know who was the man they

    are talking about (*I*).]

(177) *E-niina*   *teh*   *'orowa 'e-'i-wooneka*   *kusu*

2SS-collect.wood   SIM   then   2SS-1PO-situation.look   because

*teeta e-san-i-**hi***   *ne*   *'an*   *ike 'aa?*

here 2SS-descend.SG-0-PK   COP   PRF   FIN

'You collected wood and then you came down here to check on us, right?' (MRA: 3)

[The speaker (*F*=*R*) is asking her friend about her coming to her house to check the situation and about what she did before (*I*).]

Any given piece of information that is exchanged refers to a certain event, which we can decompose further into the separate parts that define it. The other set of elements I postulate includes these parts of the event, content of information, which are the following: the subject of the event or the one entity that acts or experiences it (*t*), the object or the one entity that is subjected to the event (*o*), the location or time when the event happens (*l*), and the purpose or cause that prompts the event (*c*).[51]

(178) *E-niina*   *teh*   *'orowa 'e-'i-wooneka*   *kusu*

2SS-collect.wood   SIM   then   2SS-1PO-situation.look   because

*teeta e-san-i-**hi***   *ne*   *'an*   *ike 'aa?*

here 2SS-descend.SG-0-PK   COP   PRF   FIN

'You collected wood and then you came down here to check on us, right?' (MRA: 3)

[The speaker is asking her friend (*t*) about her coming to her house (*l*) to check the situation (*c*) and about what she did before.]

The idea behind this subdivision is that, while the speaker relates to the information as one organic entity, she may relate in different ways to the separate parts that make up the information itself. All these elements equally fall within the TI depending on their deictic distance from the speaker. However, they conceptually pertain to two separate domains of information exchange that, as I discuss in §6.6.3.3, belong to two different conceptual categories (i.e. evidentiality and epistemic modality). This difference is formalized via the use of capital letters for elements of the conversational context domain and lower-case letters for elements of the event content of information.

---

[51] About the presence or absence of certain elements from the example reported here, I refer the reader to §6.6.3.3.

Furthermore, I visually capture this separation in the formalization of the TI using a dotted line, where the space within this dotted line represents the event context.

Figure 8 – Two domains of Ainu TI

If we take again example (178) above, we can organize the elements in the TI as follows. The deictic relations of elements with regards to *F* follow from what has been said in §6.5 (cf. example (171)).

Figure 9 – Elements in the TI, example (178)
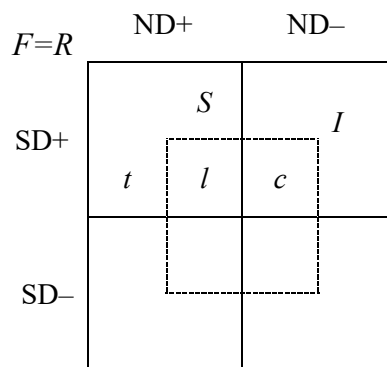
It appears clearly from this formalization of the TI that, in the process of information exchange, not only do I assume the relevance of the conceptual distance between the speaker and the information itself, but I also include the distance between the speaker and the entities involved in the larger conversational and event context. In this sense, my approach incorporates both Kamio's (1997) and Kuno's (1987) approaches to speaker's interaction (as previously discussed in §6.6.2).

6.6.3.2 Knowing and having information

One last assumption about the Ainu TI regards Kamio's distinction between *knowing* and *having* information. In Kamio's theory (see §6.6.1), knowing information entails the complete assimilation of information and also entails the speaker now having direct control over it. In my framework, assimilation of information results in personal knowledge, which is the one requirement the speaker must possess in order to exchange information via personal knowledge evidentiality (see §7.2).

But which of the elements that fall within the TI can be said to possibly know and/or have information? These are those elements that actively interact with the information *I*, either as entities that exchange it or as entities that perform or experience the event expressed by it; in other words, *S*, *R*, and *t*. The entity *o* is here excluded as, although it may experience the event, it can never be the entity that performs it actively. The elements *S*, *R*, and *t* however are not alike in how they have and/or know information. Table 7 summarizes the differences among them.

Table 7 – Having and knowing information

	S	*R*	*t*
Has information	yes	no	yes
Knows information	yes	no	no

As the entity that is able to transmit *I*, *S* knows information. This in turn theoretically subsumes that *S* also has information (see §6.6.1 and §6.6.2). As the entity that receives *I* for the first time, *R* cannot be said to have information which is newly acquired. This in turn theoretically subsumes that *R* also does not know information. Finally, as the entity directly involved in the event content of *I*, we can say that *t* has information. However, it is not always the case that *t* has assimilated this information, as this may still be only part of the general knowledge possessed by *t*. Since we can neither test or theoretically postulate information assimilation for *t*, this entity is understood as generally not knowing information. These assumptions will be fundamental to discuss source reliability for SA personal knowledge evidentiality, that I address in §6.6.3.5.

6.6.3.3 Epistemic tone and evidential tone

With the aim of understanding whether the different formal encoding of personal knowledge via the forms *-hV* and *-Ø* is influenced by categories unrelated to information source, in §7.2.2 I will survey polarity, aspect, and other categories when they co-occur with personal knowledge expressions. The outcomes of this survey will show that the use of either *-hV* or *-Ø* cannot be consistently or systematically ascribable to the co-occurrence of any of the categories taken into account, which in light of their rate of appearance with personal knowledge evidentiality are likely to influence the formal realization of personal knowledge. Nonetheless, I will highlight how epistemic modality indeed shows some kind of correlation with the formal encoding of personal knowledge, in that most personal knowledge evidential expressions marked via the *-hV* form also bear a strong epistemic overtone of certainty.

Following from this observation, I propose that it is the simultaneous interplay of evidentiality and epistemic modality that is decisive to the formal encoding of personal knowledge evidentiality. In this sense, each personal knowledge evidential expression subsumes a certain evidential tone and a certain epistemic tone – one pertaining to the objective evidence possessed by the speaker who uses the personal knowledge expression, and the other pertaining to the subjective evaluation of the evidence and truth value perspective on the reported event on the speaker's part. These two factors are independent from each other, meaning that it is not necessarily true that a high evidential tone for a certain proposition corresponds to a high epistemic tone or vice versa.

On these premises, in order to carry out a cohesive analysis of all tokens of personal knowledge from the perspective of their separate evidential and epistemic tones, we need a systematic way to measure these tones for each instance of personal knowledge evidentiality in the corpora. A methodology that allows us to compare a large number of tokens and eventually support our theory that a higher or lower evidential and epistemic tone corresponds to one or the other form of personal knowledge. To accomplish this, I utilize Kamio's (1997) Theory of Territory of Information. Kamio's TTI allows us to grasp and formalize the deictic relations that exist among elements involved in the exchange of information, and it is these deictic relations that provide the basic indications for the calculation of evidential and epistemic tones.

In §6.6.3.1, I presented the subdivision of the TI into four separate sections characterized by as many different interplays of social deixis and narrative deixis. In terms of general deictic relations with the focal point, there is one portion (i.e. portion 1) that is found to be the closest to this latter, and one portion (i.e. portion 4) that is found to be the furthest away from it. On the other hand, the remaining two portions (i.e. portions 2 and 3) are found to be in the same deictic relation with regards to the focal point, though by virtue of different parameters. One way to systematically treat the deictic relations of those elements involved in the exchange of information, found within the various contexts in which personal knowledge evidentials are used, is to resort to fixed numerical values. Starting from 1, the portions in the TI are assigned a higher value the closer they are to the focal point of the TI. Therefore, the portion furthest away from the focal point is assigned a value of 1, the one closest to it a value of 3, while the remaining two portions, that are equidistant, are assigned a value of 2. Elements in the TI are then assigned the value corresponding to the section they occupy. Consider again (178) from above.

Figure 10 – Elements in the TI with values, example (178)
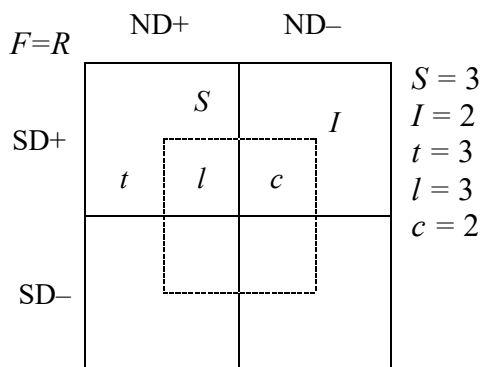
Depending on the section is it placed in, the deictic relations of multiple elements in relation to the speaker can be thus captured via mathematical operations. The layout of these operations is meant to represent the processes of information exchange that happens in actual conversation. It must be noted that, much like the rules for textual parsing presented in §6.3.3, the numerical values assigned to the portions of the TI and the mathematical operations proposed to calculate the evidential and epistemic tones are just methodological conventions I employ in this analysis, to make sense of the use of personal knowledge evidentials – a linguistic feature whose adoption by Ainu speakers has become impossible to test via active elicitation. Specifically, the mathematical

operations are meant to represent (but ultimately and primarily to formalize) the cognitive process subsumed in the exchange of information. Therefore, there can be said to be psychological plausibility to these calculations in light of how they help us capture the cognitive process happening in the speaker's mind that ultimately leads her to encode personal knowledge in two possible separate ways (i.e. the *-hV* or *-Ø* forms). Nonetheless, it must also be noted that the applicability of these formulae is restricted to the case of personal knowledge evidentiality and, even more, to the tokens of evidentiality featured in the reference corpora for this study. With this approach I do not necessarily claim that cognitive processes of Ainu speakers, which also go beyond the domain of evidentiality, can or should be reduced to a bunch of mathematic formulae; rather, dedicated studies in cognition should be conducted in this regard. This is left for future research.

In §6.6.3.6 below, I present the two separate mathematical operations through which the evidential and epistemic tones are obtained. The number and kind of the elements taken into account varies since epistemicity and evidentiality are defined by different interactions. One peculiarity which must be noted relates to the elements in the event context: t (the subject), o (the object), c (the cause or purpose), and l (the location or time). Differently from the elements included in a conversational context where information exchange happens (see §6.6.3.1), in an event context it is not mandatory for all these elements to be present for the exchange of information to have a felicitous outcome. The occurrence of elements within the event context may depend exclusively on the lexical entry of the predicate that describes the event, or the content of *I*. For instance, a predicate like 'fall' that does not lexically require a patient or a theme cannot be expected to bring an element o to the event context, as this is not logically included in the prototypical event the verb encodes. Alternatively, some elements (especially c, and l) may not be retrievable from the context at hand merely because the event described by the predicate is underspecified (e.g. not all 'falling' events need an expression of location to be semantically complete).

Now let us consider the role of epistemic modality in TTI. From a theoretical perspective, epistemic modality has to do with how much the speaker vouches for the truthfulness of the information that is being exchanged (see §2.2.2). In this sense, the speaker expresses her own perspective of the information, which is shaped by the level of acquaintance or familiarity with the content of the information itself. All of this happens regardless of the objective means through which information is acquired, that is

216

the source. If we are to translate this generalization into our framework of personal knowledge evidentiality, we can recognize the speaker as the deictic point F while the information is formalized as I. As mentioned in §6.6.3.1, F will be recognized as either the source S or the recipient R depending on whether the statement is declarative or interrogative.

Evidentiality, on the other hand, is concerned with the objective evidence for the information that is being exchanged, and it does not include any indication of speaker's involvement, attitude or subjective validation of this information (see §2.2.1). In this sense, the speaker expresses her own access to the information, whose immediateness is shaped by the level of acquaintance or familiarity with the source of the information itself, regardless of her own personal perspective on the information or its content. If we are to translate this theoretical generalization into our framework for personal knowledge evidentiality, we can recognize again the speaker as the deictic point F, the information as I, while the source is formalized as S. Although S is recognized as the source on a theoretical basis, in §6.6.3.2 I showed how t also may qualify as a reliable source for an information. In contrast, the recipient R did not meet the requirements of a reliable source. This sharing of the role of source between S and t needs to be addressed directly when we approach the calculation of the evidential tone.

6.6.3.4 Evidentiality – access to the event

In order to translate the abovementioned theoretical generalization of evidentiality into my framework, I turn to the relation among F, S, and I. As I introduced in §6.6.3.1, F represents the focal point from which the Ainu TI develops, while both S, the source, and I, the information, are included among the elements of the conversational context. In the process of information acquisition, the source represents the gateway between the speaker and the informational content (i.e. the speaker has access to information thanks to the source that reports it), and as such we can say that F accesses I through the source of said I. The distance that intervenes between F and the source S derives different degrees of reliability where the former affects the latter.

A possible variation in deixis between the speaker and the source must not be seen as a variation in personal knowledge as such. Conversely, what is here subjected to deixis is the whole direct source itself. Being encompassed by the source, it follows that personal knowledge about the information as well is deictically closer or further away from the speaker, nevertheless remaining unchanged in substance. This difference in

deixis is representative of the fact that the speaker may perceive personal knowledge belonging to another person with variable reliability. In other words, it is easier for the speaker to rely more steadily on a given source if some kind of relation holds between them: a stronger "familiarity" with the source influences its reliability in the eyes of the speaker. Variables that may affect this reliability are, for instance, the source's social status, gender, kinship, or other kinds of interpersonal relations with *F*. I previously argued that these same variables also define social deixis within the TI (see §6.6.2 and §6.6.3), and as such the source must be sensitive to this particular kind of deixis.

6.6.3.5 Selection of the most reliable source

The discussion about the different relations subsisting between *F*, *S* and *t*, and the possible restrictions to positioning within the TI that derive from them, highlights an important feature of personal knowledge. We notice in fact that the entities possessing personal knowledge pragmatically belong to different dimensions of the conversational context – *S* is part of the speech act dimension, while *t* is part of the contextual dimension. It follows from this that the personal knowledge about information that these two entities equally possess is also connected to two different dimensions at once.

As I reiterated above, both *S* and *t* qualify positively as reliable sources for the information, since their referents both have information (see §6.6.3.2). Given this equality, the speaker must resort to other criteria of selection that are not simply based on source reliability. These new criteria should take into account the fact that personal knowledge is divided between two different dimensions of the conversational context. Furthermore, the criteria should also acknowledge the tendency of the speaker to validate personal knowledge belonging to external entities. More specifically, the "externality" of such entities should concede both the possibility of playing a role in the speech act dimension (if these entities are retrievable), and the quality of being separate from the speaker. I will go into deeper detail on these two characterstics of externality in §7.2.4.2, where I discuss the relevance of external-*S* for some instances of personal knowledge evidentiality. The source *S* proves to be addressed as a valid part of the speech act even if relegated to a marginal role or even if the referent of the source is not retrievable within the conversational context at hand. External-*S* is a prerogative of interrogative statements, and as such its referent is always unmistakably different from *F*'s referent.

By trying to meet all these requirements, the speaker seeks the one entity with personal knowledge within the conversational context that simultaneously satisfies the following:

1) Is the actual medium of transmission for the information present at the speech act level.
2) Is also present in the contextual dimension.
3) If external, can be nevertheless addressed as a part of the speech act.
4) Refers to an separate entity from herself (i.e. the speaker).

However, depending on the inner characteristics of each conversational context, it is possible that one or more of the criteria given here cannot be met by either S or t. In such an eventuality, the speaker selects the one entity that better responds to the requirements needed to become her access to the informational content (i.e. the most reliable source).

As I pointed out earlier in this subsection, declarative statements are characterized by the fact that the speaker also covers the role of source in the speech act (i.e. $F=S$). The identity of t here makes a crucial difference. If t is a different entity from the speaker, then it responds felicitously to criteria 2 and 4. S in turns responds positively only to criterion 1, because its referent is not a part of the contextual dimension and it is also recognized as the speaker (i.e. it fails criteria 2 and 4). If, in contrast, the speaker is also the subject of the event ($F=t$), t still meets criterion 2 but also criterion 1, as F also equals S; at the same time t ceases to meet criterion 4 because it does not refer to a separate entity from the speaker anymore. In both the instances described here, criterion 3 is inapplicable. We can see as a matter of fact how, by definition, declarative statements do not allow S to be external in any case, while t could never be recognized as an element of the speech act dimension in these statements.

As for interrogative statements, S and t undoubtedly always meet criterion 4 since, even if t equals S, this S indicates surely a different entity from F. Again we need to operate a distinction on the basis of whether S equals t. If in fact S has a different referent from t, this t felicitously meets only criterion 2 in addition to 4, while S meets criteria 1 and 3. If conversely S equals t, this latter is found in the peculiar position of also meeting criteria 1 and 3, which would normally be unapplicable to the entity t but

that are acquired through the overlapping identity with *S*. Similarly, *S* responds positively to criterion 2, which is obtained through the correspondence with *t*.

The following summary table groups the four cases outlined here and eventually shows which entity the speaker selects as the source of the information. For the sake of consistency, we will say that in cases of equal reliability, the source chosen in interrogative statements will be by default *S* while it will be *t* in declarative statements.

Table 8 – Criteria met by *S* and *t* and results of the selection process

	Relation	Criteria met by *S*	Criteria met by *t*	Reliable source(s)	Selected source
Declarative	*F=S≠t*	1)	2), 4)	*t*	*t*
	F=S=t	1), 2)	1), 2)	*t* or *S*	
Interro-gative	*F≠S=t*	1), 2), 3), 4)	1), 2), 3), 4)	*S* or *t*	*S*
	F≠S≠t	1), 3), 4)	2), 4)	*S*	

Now that we have discussed the reliability of *S* and *t* as possible sources of information, we can formalize their relation with *F* and *I* to derive the evidential tone in personal knowledge statements.

6.6.3.6 *EP* and *EV* calculation

Here I present the mathematical operations I employ to calculate the epistemic tone (*EP*) and the evidential tone (*EV*). I start by discussing the calculation of *EP*.

As stated in §6.6.3.3, the pragmatic process by which the speaker (*F*) evaluates the event or content of the information (*I*) being reported via personal knowledge evidentiality happens regardless of the medium of the source (*S*). The access to the information thus happens directly and subjectively on the speaker's part, with no taking into account the objective source of evidence. However, the speaker accesses the information not only as a whole, but also assesses its separate components (i.e. *t, o, c, l*). These components may have contrasting deictic relations among each other and to the speaker. As a consequence, they do not necessarily occupy the same place within the TI as *I* does (i.e. *F* may relate differently to single parts of the reported information than it relates to *I* when presented as a unitary entity). Differently from *I*, its inner components are sensitive to both social and narrative deixis and can thus fall in any on the quadrants of the TI.

The process by which the speaker *F* perceives the information *I* as a whole and as the combination of the different elements involved is formalized via the following operation.

$$EP = I + \frac{i}{x}$$

Here *I* represents the information. The lower-case *i* signifies the grouping of all different elements of the event, while *x* is a variable equal to the total number of elements of the event. By calculating an average value through the fraction $\frac{i}{x}$, we can capture, as a precise value, the overall deictic distance perceived by the speaker towards the different elements of the event, again independently from her perception of the event as a whole. Let us consider (179).

(179) *'An-haw-ehe   nuu   yahka   wante-**he**   nee*
       1P-voice-POSS   3SS/3PO/hear though   3SS/3PO/know-PK   COP

       nankoo   nah   'an-ramu.
       maybe   COMP   1PS-3SO/think

       'I think that even if he hears our voices maybe he will recognize us.'
       (MRA: 9)

F = S
I = 'recognize' (TI value = 2)
t = 'the professor' (TI value = 2)
o = 'our voices' (TI value = 3)
l = 'the professor's house' (TI value = 1)
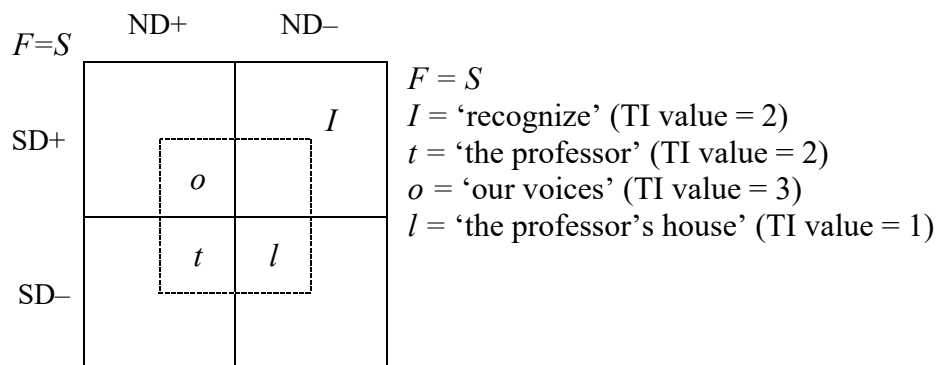
Given the values assigned to the elements in the TI, the value of *i* becomes 6 (resulting from the addition of values of *t, o,* and *l*), while the variable *x* amounts to 3 (as the elements making up information content). As shown in the following calculation, the total *EP* for example (179) results as 4.

$$EP = 2 + \frac{6}{3} = 4$$

On the other hand, the operation I use to calculate the *EV* must acknowledge not only the speaker's choice of the most reliable source, but also the fact that, at the speech act level, the speaker's relation to *I* is inevitably mediated by the source. This relation between speaker and event follows from the fact that, from a pragmatic point of view, there can be no exchange of information without a source. This logical dependency exclusively pertains to the speech act dimension and it is unrelated to the actual choice of the most reliable source the speaker chooses according to the context. In other words, the speaker relates to the event as including the inescapable presence of a source by default – the actual identity of this source and its real deictic relation with the speaker are a secondary concern. I use a separate operation to represent the special pragmatic relation between the speaker and the event, to which the selection of the best possible source available (according to the conversational situation) follows. This operation is shown below.

$$EV = \frac{I}{S} + S/t$$

Here the fraction $\frac{I}{S}$ is intended to represent the information *I* which is accessed through the source *S*. That is, the access to *I* on the speaker's part is mediated and dependent on the deictic relation they have with the source. The addition of the value of *S* or *t* (depending on the kind of statement) is representative of the selection of the most reliable source operated by the speaker (see §6.6.3.5). If we take again example (179), an assertive statement, it will be the value assigned to *t* the one added to the result of the $\frac{I}{S}$ fraction, while *S* that here corresponds to the speaker is assigned the value of 3 since obviously it cannot possibly be deictically far away from it.[52]

$$EV = \frac{2}{3} + 2 = 2{,}7$$

---

[52] In order to ease the comparison of tokens, in the presence of decimals I round off to only one figure after the decimal point. This is why the resulting 2,66 with recurring 6 of this instance is reported as 2,7.

The combination of *EP* and *EV* gives the overall tone of the personal knowledge evidential expression (*PKT*) (that thus for the illustrative example considered here is 6,7), whose value ultimately clarifies the formal encoding of this kind of evidentiality via either *-hV* or *-Ø*. I present discussion of *PKT* and the outcomes of the calculation and comparison among tokens later in §7.2.5 and §7.2.6.

6.7 TAM categories

In this section, I present my background assumptions on the verbal categories of modality, telicity, tense, and perfectivity. Moreover, I briefly summarize the approaches and outcomes of previous studies on the modality and aspect in Ainu. Finally, I discuss how verbal categories, as defined here, relate to the Theory of Territory of Information outlined in §6.6.

6.7.1 Modality

When speaking of modality, I am discussing the conceptual category regarding the attitude of a speaker towards the content of her utterance, as opposed to mood which is the grammatical category that comprises the formal way to express modality in a language (Palmer, 2001: 28).

Following Palmer (2001), I distinguish the two domains of realis and irrealis within modality. Realis modality refers to situations that are actualized or knowable through direct perception, while irrealis modality refers to situations that pertain to the realm of thought and that are knowable only through imagination or abstraction. Despite this theoretical clear-cut distinction, languages may conceptually categorize events and situations differently, and not all that has yet to be actualized is regarded as pertaining to the irrealis domain. A good representative example of such languages is Caddo, cited by Mithun (1995: 385), where future (that refers to unactualized events by definition) can be marked as realis. In this case, it is the portrayal of the event by the speaker that makes a difference in the categorization of the event (as implying expectation for its immediate actualization or not).

Although typologically less common, the case of Caddo is significant in how it shows that speaker's subjectivity may constitute a decisive factor in the overall perception of events as either realis or irrealis. From what we observe in the case of Ainu, and especially for SA personal knowledge evidentiality (§7.2), there is reason to think that the speaker's perception of the event is indeed relevant to the realis/irrealis

distinction in this language as well. Here, however, I propose that the variable is not the speaker's portrayal of the event, but rather her conceptual closeness to it (see §6.6.2). If an event is conceptually more distant to the speaker, in the eyes of the speaker it is less probable that it will occur or that it will be actualized thus falling into the realm of realis. Although Ainu does not have any specialized formal device to mark realis/irrealis modality, the distribution of dubitative and mirative particles seems to systematically indicate underlying irrealis modality (see §7.2.8). The definition of modality for Ainu I provide here is meant to give a model for the discussion of speaker's attitude towards an event within the sole domain of evidentiality.

6.7.2 Telicity and event decomposition

I define telicity in my framework as the property of a predicate to entail the existence of a "natural" endpoint to the event it describes (Demonte and McNally, 2012: 1). Following approaches in Beavers (2012), Rothstein (2012) and Kennedy (2012), I assume that the telicity of predicates is not merely defined on the basis of the inherent temporal structure imposed by the event they describe – that is, no verb is intrinsically telic or atelic based on its meaning alone. Rather, telicity takes a broader scope as it is defined both on the basis of the verb's intrinsic semantics and the incremental characteristics of the verb arguments.

I note that when I use the term "verb arguments", I mean all direct arguments that are required by the lexical entry of the verb for that verb to be used grammatically in the language. Obliques, like locatives and cause/scope arguments, are not included. Locative expressions (of both time and space) are usually regarded as the most reliable clue to a verb's telicity, in that they set the boundaries or underline the duration of the event, thus clarifying whether it has reached its endpoint. Snyder (2012), for example, argues that it is locatives that may help us categorize motion predicates as either actions or accomplishments (i.e. as atelic or telic). However, the use and distribution of locatives in Ainu (even in the limited scope provided by predicates that fall under the scope of evidentiality) show that the expression of a source, path, or goal for an event does not necessarily comply with the overall telicity of the predicate, as defined by verb's inherent semantics and its arguments. In light of this, it is likely that locatives in Ainu are licensed *a posteriori* by telicity (or by other semantic characteristics of the predicate) and are thus dependent on it, rather than being a clue for its definition. Determining which are the possible semantic characteristics that regulate the use of

locatives falls out of the scope of my study, but this non-systematic behavior of locatives in connection with telicity is enough evidence at least to exclude them from among the criteria to define telicity.

Verb arguments influence the telicity reading of the predicate through their incremental characteristics. Following Kennedy (2012), I assume that some semantic properties of arguments (that may be either formally expressed or simply inherently included in the nominals that cover the function of arguments) provide the event with an ending point that eventually triggers its telic reading. These properties are collective-mass expressions (e.g. 'all', 'no', etc.), possessives, definiteness (in the shape of bare singularity or marked with determiners such as 'that', 'this'), and measure expressions ('one', 'two', 'one kilo of…'). In contrast, properties like partitive expressions ('some') and indefiniteness (marked via bare plurality or expressions such as 'a lot') erase the logical presence of an ending point for the event, that is then understood as atelic.

Since in Ainu no verb can be felicitously used without at least one argument,[53] we can rely on verb arguments as a systematic way to define the telicity of predicates, without postulating an inherent temporal durativity of the simple verb based on its lexical contour (as in Lim and Zubizarreta, 2012). The telicity value thus derived may, however, be modified by the use of aspectual expressions that can semantically add or erase an endpoint to the event, thus making it telic or atelic. The aspects I concentrate on in my analysis are the following:

- Resultative: an aspect expressing a state, and the concluded event this state has originated from (Nedjalkov, 1988).
- Conclusive: an aspect denoting the cessation of an event.
- Purpositive: an aspect denoting that an event is about to happen (either naturally or because it was actively prompted), and the state preceding this event.
- Progressive: an aspect denoting that the event is projected onto a state of unlimitedness or continuousness (De Swart and Verkuyl, 1999).

Given their semantics, I assume that resultative and conclusive aspects are those aspects that trigger a telic reading of the predicate as they set an endpoint to the event,

---

[53] Even so called "complete" verbs in Ainu literature can be argued to have at least one argument which is syntactically incorporated but which retains its argument function semantically (see §5.4.3).

while progressive and purposive aspects erase this endpoint, changing the predicate's telicity to atelic. The terminology used here is meant to describe the aspectual semantic domains that are mirrored in separate formal encodings in Ainu. Although the language most likely distinguishes further aspects (both conceptually and formally), I focus here on the aforementioned four as they are the ones which co-occur with evidential forms and thus are those which are relevant for the analysis of information source.

6.7.3 Tense reference

When discussing the tense of Ainu predicates, I will refer to Reichenbach's (1947) Reference Tense Theory (RTT). This Theory rests on a definition of tense in reference to three moments in time, defined by Reichenbach (1947: 290) as E (the event), R (the point of reference), and S (the point of speech), which are connected via different temporal ordering relations. In this sense, tense is understood as the absolute-relative tense in Comrie (1985). The temporal relation subsisting among these points can be one of contemporaneity, posteriority or anteriority and, on the basis of this, a present, past or future tense reference for the predicate is derived. The possible relations are formalized through the use of "," to signal contemporaneity or "_" to signal either posteriority or anteriority, which are told apart by the linear ordering of E, R and S. Table 9 summarizes the set of relations among E, R and S as outlined by Reichenbach (1947, 297), with names to illustrate the kind of tense reference implied by each of them.

Table 9 – Reichenbach's E, R and S relations

Structure	Name
E_R_S	anterior past
E,R_S	simple past
R_E_S R_S,E R_S_E	posterior past
E_S,R	anterior present
S,R,E	simple present
S,R_E	posterior present
S_E_R S,E_R E_S_R	anterior future

226

S_R,E	simple future
S_R_E	posterior future

Reference Tense Theory will be useful to discuss Ainu inferential evidentiality in §7.3 as we can compare the different phases of information acquisition to the three separate moments in time postulated by Reichenbach.

6.7.4 Perfectivity and event perspective

Following Borik and Reinhart (2004), I assume that perfectivity constitutes a system independent from telicity. While telicity has to do with the existence of a natural end point for a certain event (§6.7.2), perfectivity is concerned with the way of looking at a certain event, namely the speaker's perspective or her viewpoint (Borik and Reinhart, 2004: 30). The speaker may either have an internal or external perspective of an event, which respectively depend on the overlapping or non-overlapping of the moment of speech (the focal point of speaker's perspective) with the reference point for the event.

In Borik and Reinhart's (2004: 28) analysis, this reference point is understood as subsuming the event, since the reference point is assumed to always have a relation of inclusivity with the event itself.[54] The speaker's internal perspective of the event triggers an imperfective reading of the relative predicate encoding that event, while an external perspective triggers a perfective reading. In order to formalize this relation between the moment of speech and reference time, Borik and Reinhart (2004: 28) resort to Reichenbach's Reference Tense Theory (§6.7.3). Imperfectivity is represented by an overlapping of the points in time S (i.e. moment of speech) and R (i.e. reference point in time) ($S \cap R = \emptyset$), while perfectivity is represented by the non-overlapping relation of the same two points ($S \cap R \neq \emptyset$).

In my approach, I will follow Borik and Reinhart in assuming that perfectivity can indeed be formalized in terms of an R-S relation within the framework of RTT. However, I do not postulate an inclusivity relation between reference point and event – that is, R may or may not include E or intervals of E and vice versa (see §7.3). Despite this, the S-E relation (and thus the speaker's perspective on the event itself and not just on a reference point) is secured on a pragmatic basis. This pragmatic basis always

---

[54] Borik and Reinhart (2004: 26) take temporal expressions like 'last week' as not representative of the R itself, like otherwise assumed by Reichenbach. Rather, they identify R as a set of sub-intervals of a broader interval denoted by the temporal expression. In order to have a reference point for an event *e*, this *e* must hold in at some temporal interval *E* which is included in R. They formalize this relation as $E \subseteq R$.

entails a logical dependency between R and E.[55] For the sake of consistency with the RTT framework I employ here, I prefer to formalize the R-S relations in Reichenbach's way, so that imperfectivity is represented by [S,R] and perfectivity as either [S_R] or [R_S].

6.7.5 TAM categories in previous Ainu studies

The definition of the categories of tense, aspect, and mood for Ainu is still a daunting task. One practical issue that hinders the study of TAM categories is most likely the fact that there is no specialized morphosyntactic device in the language to express them. Rather the encoding of tense, aspect and mood appears to be scattered across other language categories whose primary function is to encode features unrelated to TAM. Furthermore, the retrievability of different TAM categories, even through mophosyntactic strategies, appears to differ. For instance, while we see several periphrastic verbal constructions used as aspectuals or modals, we can hardly find any strategy that can be said to encode specifically tense.

The speculation on Ainu tense is particularly controversial in Ainu studies. It is generally acknowledged that in all Ainu varieties, there is no specialized formal marker to signal verbal tense (Refsing, 1986: 191; Tamura, 2000: 36). In many accounts in fact, tense is not even mentioned as a feature of the Ainu verb (as in e.g. Murasaki, 1976a). The tense reference of the predicate is then understood on the basis of context, which provides the necessary deictic information to place an event into perspective. Some elements like the auxiliary *a*, widespread in Southern Hokkaidō dialects, have been discussed in terms of tense (Tamura, 1960). However, in later works on these dialects, the function of *a* is reconsidered as related to aspect, or "mood of action" (Refsing, 1986: 192). Tamura (2000: 111) also covers this topic, and though she still labels this morpheme as "past", she avoids talking about tense for *a* in Saru Ainu and discusses it among other auxiliaries marking aspect and mood. Her definition of this form also appears to have more to do with aspect, as shown in the following extract and example.

> "This [i.e. *a*] indicates that something has occurred previous to
> the topic (the time of the topic)." (Tamura, 2000: 111)

---

[55] In applying Reichenbach's RTT to Ainu evidentiality, the points R and E are logically understood as inevitably connected, since they are taken as representative of fixed stages in the process of acquisition of information which are theoretically assumed (i.e. the presence of an event and the source through which it is accessed) (see, for example, §7.2).

A-kor	*a*	*seta*	*ne*	*noyne*	*an.*
4S-3SO/have	PRF	dog	3SS/3SO/COP	like.if	3SS/be.PC

'It appears as though this is the dog that we used to have.'[56]

Accounts on Ainu discuss aspect and mood as not morphologically marked directly on the verb, but rather as expressed periphrastically via complex verb constructions (Refsing, 1986: 192-3), the use of auxiliaries (Refsing, 1986; Izutsu, 2004: 35-40; Bugaeva, 2004: 78), or through the use of serial verb constructions (Bugaeva, 2004: 54). Moreover, many of these accounts do not even present these forms expressly in terms of aspect and mood. One such example is Tamura (2000). In her grammar of Saru Ainu, Tamura (2000: 110, 225) indirectly presents aspect and mood while discussing auxiliaries and "methods of expression" in this dialect. In an attempt to discuss separate forms in terms of their syntax and pragmatics, the distinction between aspect and mood is not clearly drawn, although Tamura indeed gives a thorough description of the semantics of such forms. A more consistent approach is found in Bugaeva (2004: 78) and Izutsu (2004: 35). Not only do both these works discuss aspect and modality in their own right, but they also try to give a classification of the aspectual and modal strategies featured in Chitose and Asahikawa Ainu respectively. On the one hand, Izutsu briefly introduces three main kinds of aspect (progressive, perfect, and terminative) by focusing mainly on the semantics of each aspect. On the other hand, Bugaeva examines aspects and four main types of mood (desiderative, intentional, potential, and deontic) by also focusing on the syntactic structure involved. Although she later rejects this proposal (Bugaeva, 2012b), Bugaeva's initial analysis of aspectual constructions like resultative *wa an*, perfective *wa isam* or benefactive *wa kore* as serial verb constructions is the first glimpse into the syntax of Ainu aspectual strategies. Specifically, her observations on argument cross-referencing on verbs is most relevant to the discussion at hand.

The most exhaustive studies on Ainu aspect and mood are however to be attributed to Satō, whose research mainly focuses on the Chitose dialect of HA. By trying to approach the troublesome issue of Ainu aspect and mood in an efficient and systematic way, he operates a comparison between Ainu and Japanese focusing on Japanese constructions that can be regarded as the counterparts of Chitose Ainu

---

[56] Glosses in this example are mine, added for clarity, while the translation is Tamura's.

aspectual and modal strategies. Through a comparison between Ainu's *kor an*, *wa an* and *a*, and the analogous Japanese *-te iru* construction, he highlights how the notional verb's semantics systematically either licences or rules out the use of certain aspectual constructions (Satō, 2006, 2007). Similar observations on verb's semantics and *aktionsart* are also found in Refsing (1986: 193) and Bugaeva (2004: 58-64). Specifically, Satō distinguishes *kor an*, *wa an* and *a* in that they express progressive, stative perfect, and actional perfect aspect respectively. Furtermore, he suggests that semantics provided by context may impose further restrictions on the compatibility of notional verbs with certain aspects. Here, he expressly refers to stative perfect as it may or may not be compatible with the notional verb depending on whether or not it is read as expressing a process or a result (Satō, 2006:65). Although not discussed in such terms, this distinction seems to have to do with predicate telicity.

Satō (2011) otherwise speculates Ainu modality through a comparison between the Ainu *nankor* 'maybe' and the analogous Japanese expression *darō*. Looking at the distribution of *nankor*, Satō discusses the possible (un)acceptability of some kinds of modality in conjunction with aspect or evidentiality. Specifically, he notices how the dubitative *nankor* appears to be rarely permissible with past reference tense, while it is highly compatible with evidentials such as *humi ne* or *ruwe ne*, given its semantic extentions of presupposition and belief (Satō, 2011: 10-16). The proposal that modality is tightly linked to evidentiality is further expanded in Satō (2013). Here, Satō focuses on the uses of the verb *siran* 'to appear' as a polysemous marker of mood, aspect and evidentiality when used as a dependent predication. Looking at the distribution and co-occurrences of *siran* with other aspectual strategies, Satō argues that, although indeed it interacts closely with modality, evidentiality in Ainu appears to be a separate system. Satō's contributions are most valuable in that he underlines semantico-pragmatic features of Ainu TAM categories which were previously unnoticed (e.g. the interaction with the verb's semantic class, telicity, evidentiality). However, research up to now has generally failed to give a satisfying account on the morphosyntax of these categories.

6.7.6 TAM categories and the TI

In this final subsection, I discuss how the TTI adopted in this study can be compared and translated into Reichenbach's Reference Tense Theory (RTT) via a process of analogy that allows us to transpose elements included in the TI into the S, E, R time points postulated in the RTT. Moreover, in this section I discuss how the categories of

modality and perfectivity, as theorized in this chapter, can also be formalized via a relation among S, E, R and thus be cohesively brought together with reference tense, and ultimately I propose that the TTI can be incorporated into Reichenbach's RTT. The discussion to follow will be fundamental for the discussion of the derivation of relative tense for predicates under the scope of inferentiality, especially personal knowledge evidentiality, in Chapter 7.

6.7.6.1 From TI to RTT

In §6.6.3, I argued for the role of social and narrative deixis as the two dimensions that define the TI. These two deictic dimensions are assumed to represent the perspective in which the speaker organizes and relates to other elements that fall within the territory. My argumentation on TAM categories stems from a reconsideration of these two dimensions and, more specifically, a reconsideration of the pragmatic interactions that we have analysed as defining the evidential tone (*EV*) in §6.6.3.3. This discussion is not concerned with the dynamics pertaining to epistemicity or the epistemic tone (*EP*). In other words, we can say that the definition of TAM categories starts from deictic relations and the dynamics of information exchange at the conversational level.

Firstly, let us review the elements involved in the conversational context, whose interaction eventually delineates the evidential tone. These elements are recognized as the entities that are pragmatically needed in a given conversational situation in order for the passing of information to happen – i.e. a source (*S* or *t*), who transmits an information (*I*) to a recipient (*R*). As seen in §6.6.3.5, depending on the kind of statement, *S* or *t* can accordingly cover the role of source.

Once we recognize the characteristics that these elements possess internally to the conversational context, we can widen our perspective in order to describe them in more general terms. The process I assume here is one of correspondence by analogy that allows me to review the definitions for the aforementioned elements (that apply at the speech act level). The deictic center *F* can be redefined from a simple reference to the speaker in the speech act to the general circumstances when the utterance takes place – i.e. the moment of speech (i.e. S). As the gateway to the event on which *F* relies, the source becomes a pivotal reference point (i.e. R), or a connection between the speaker (i.e. the moment of speech) and the event itself. The event *I*, in turn, is not seen specifically as a representation of the content of specific information being transmitted,

but we can see it more generally as the portrayal of an event (i.e. E), that takes place in a certain moment of time.

Given these general definitions for the focal point *F*, the source *S* or *t*, and the information *I*, the conceptual correspondence between the elements involved in information exchange and the entities discussed by Reichenbach (1947) in his Reference Tense Theory (RTT) is clear. In Reichenbach's framework, the point of speech (S), the point of reference (R), and the event (E) constitute the three points in time whose ordering relations are said to indicate the reference tense of a predicate (see §6.7.3). Via this analogy-based approach we can thus project the features possessed by single elements in the conversational context onto the wider dimension of time. Although these two dimensions are unrelated, the maintaining of features thoughout the abovementioned process of analogy ensures a felicitous comparison between them. This approach may present sufficient evidence for the logical correspondence between speaker, source and event with relation to the S, R and E elements in Reichenbach's RTT, but we need to consider one more issue if we want to derive the relative tense of Ainu predicates that fall under the scope of evidentiality. Reichenbach's theory postulates the existence of special ordering relations between the three points in time that eventually indicate the reference tense. While in the case of SA inferentiality the ordering of S, R and E appears evident from the logical process that characterizes the acquisition of information through an indirect sensorial source (see §7.3), the ordering of the three points in time is not obvious for personal knowledge evidentiality. The next step is then to define this relation for the specific case of personal knowledge evidentiality.

6.7.6.2 Points in time of the RTT

While discussing the *EV* of personal knowledge evidential tokens, I described the event and the source as being in a peculiar deictic relation to the speaker (see §6.6.3.3). In fact, narrative deixis was addressed as the relevant dimension relative to *I* which in turns is not sensitive to social deixis. Conversely, social deixis was addressed as the crucial dimension related to the source, whose reliance on narrative deixis is not an issue (despite *t* being sensitive to both kinds of deixis). Now that we refer to the RTT, we can discuss these relations in terms of the deictic closeness of R and E to S.

Following from what I argued about the variables that shape the two kinds of deixis of the TI, we are able to expand this framework to the narrative and social

dimensions (relative to the conversational situation) by projecting them onto the broader dimensions of time. The idea behind this is that, just like variables such as topicality, the level of acquaintance or interpersonal relations put the event and the source into a pragmatic perspective with the speaker, these same variables put R and E in a "now" or "not-now" relation with S. In fact, the deictic closeness of *I* to the speaker means that the speaker relates first-hand to the event itself. In other words, the speaker perceives the event in its present reality as it falls within the set of things she has direct control upon. In contrast, if *I* is deictically distant from the speaker, the event is perceived as an extraneous entity that falls outside of the speaker's control or understanding. Similarly, if the source is deictically close to the speaker, it means that the speaker has an internal perspective of the event. Otherwise, if the source is deictically distant, the speaker has an external perspective of the event.

From a theoretical point of view, we can read this real/not-real perspective the speaker takes towards the event as a realis/irrealis distinction. In §6.7.1, I discussed this distinction as defining modality in my framework for Ainu evidentiality. In a similar way, the internal/external perspective the speaker takes towards the source can be easily related to perfectivity (§6.7.4). What results from this is that we can now theoretically discuss modality, within the RTT, in terms of the relation between S and E, while perfectivity can be discussed in terms of the relation between S and R (as in Borik). More concretely, we can argue that the position of *I* and *S/t* within the TI is our cue for identifying the modality and perfectivity of the event under the scope of the evidential.

6.7.6.3 Modality and perfectivity in the TI

At this point in the analysis, we can easily describe mood and perfectivity in terms of temporal relations between the three points in time assumed by Reichenbach. This is possible on the basis of the values assigned to each element according to it position within the TI (see §6.6.3.1). On the one hand, same-value relations between *F* and *I*, or between *F* and the source, within the TI represent an overlapping relation between points in time within the RTT framework. Following from the abovementioned discussion, the overlapping of S with E, or S with R, respectively defines realis modality and imperfectivity.

$$F=3; I=3 \rightarrow \text{S=E (realis modality)}$$
$$F=3; S/t=3 \rightarrow \text{S=R (imperfectivity)}$$

On the other hand, we interpret a different-value relation between *F* and *I*, or between *F* and the source within the TI, as a non-overlapping relation within the RTT framework. Here the non-overlapping of S with E, or S with R, respectively defines irrealis modality and perfectivity.

$$F=3; I=2 \rightarrow S\neq R \text{ (irrealis modality)}$$
$$F=3; S/t=2/1 \rightarrow S\neq R \text{ (perfectivity)}$$

However, we must also remember the dependency relation holding between event and source that exists in the conversational context. *S* is entailed by *I* in the relation of the speaker with information. This followed from the argument that, pragmatically, the speaker is able to access the event exclusively thanks to the source – her gateway to the content of information (see §6.6.3.3). While discussing the calculation of *EV*, I formalized this pragmatic dependency via the mathematical operation $\frac{I}{S}$, that puts *S* and *I* in a interdependent relation respectfully to *F*. Moreover, the speaker's combined approach to the event which is also comprehensive of the source, was argued to take place before the actual source for that information is recognized and addressed (formalized in §6.6.3.6 as the addition of *S/t* values).

We also need to acknowledge this dependency when we formalize our system of deriving mood and perfectivity. One way to represent this mediator role of the source is to postulate that mood not only subsumes S=/≠E but that it also subsumes E=R. In the process of *EV* derivation, the actual deictic relation the speaker has with the best available source of information is recognized only secondarily, and in turn this specific pragmatic relation has been argued to translate into the RTT approach as defining perfectivity. We must then assume that the application of perfectivity happens as a second step within the process of relative tense derivation – that is, after modality has been defined (see Table 10 in §7.2.7.1). Following from this, we can adjust our formalization of modality as follows, while our formalization for perfectivity remains unchanged.

$$S=R=E \text{ (realis modality)}$$
$$S\neq R=E \text{ (irrealis modality)}$$

With these assumptions in mind, we are ready to proceed to the analysis of SA and HA evidentials with the aim of discussing not only their semantico-pragmatic characteristics, but also of deriving the tense reference of the predicate under their scope.

6.8 Summary

In this chapter, I introduced all relevant concepts and theories that will be needed for the discussion of the semantics and pragmatics of SA and HA evidentials in Chapters 7 and 8. First, I presented the framework I employ for discourse analysis and textual parsing, since these represent a main requirement for a cohesive and felicitous analysis of evidentiality as it is reported in textual resources. The discussion of different kinds of deixis set the ground for the introduction of Kamio's Theory of Territory of Information (TTI), which I revise and adopt as a way to formalize the pragmatic relations among elements involved in information exchange. While deixis and the TTI are specifically relevant for the discussion of kinds of evidentiality like SA personal knowledge, I presented concepts like the hierarchy of sense that are in turn fundamental for the discussion of information acquisition based on a sensorial source – i.e. inferentiality in the case of SA, and HA direct and indirect evidentials. Second, I dedicated the final half of the chapter to the definition of TAM categories relevant to the study at hand. I first provided a theoretical framework for the definition of telicity, tense, modality, and perfectivity. In order to provide a theoretically more cohesive analysis, I translated the abovementioned TAM categories into my revised TTI. This process allows me to better discuss these categories as applied to evidentiality for whose discussion I primarily adopt the TTI. Eventually this approach will provide the tools for the derivation of relative tense reference of the predicate under the scope of evidentiality.

Chapter 7

Sakhalin Ainu Evidentials

7.1 Content of the chapter

Chapter 7 deals with the semantics and pragmatics of evidential forms of Sakhalin Ainu (SA). The chapter is divided into three main sections. In §7.2 I discuss personal knowledge evidentiality, the kind of evidentiality based on direct evidence. In §7.3, I consider inferentiality, or the kind of evidentiality based on sensorial inference. In §7.4, I take into account reportative evidentiality, the kind of evidentiality based on verbal report. The outcomes of the analysis from these three sections suggest that SA evidentials can be organized according to the tone of source reliability they encode. Eventually, I take source reliability to be the underlying aspect that regulates the category of evidentiality in this Ainu variety. To conclude, in §7.5 I consider the cases of double evidentiality encountered sparingly in the reference corpora, while §7.6 and §7.7 highlight some remaining issues and summarize the discussion.

7.2 Personal knowledge evidentiality

The first section of this chapter is dedicated to personal knowledge evidentiality (abbreviated in the remainder of this section as PK), the kind of evidentiality based on direct evidence. The aim of this section is two-fold. Firstly, I introduce the conceptual semantico-pragmatic domain entailed by PK, and I describe the properties of the evidence PK is based upon. I then present the two formal encodings of PK found in SA and, in light of their distribution within the reference corpora, I discuss the underlying factors that regulate their use. Through a brief comparison of tokens of PK found in conjunction with different language categories, I highlight how the alternation of the two forms of PK appears to show a certain systematicity depending on the epistemic overtone retrievable in the sentence. In light of the discrepancies we see in this systematicity, I propose an analysis where the use of personal knowledge forms is equally influenced by evidentiality and epistemic modality.

Secondly, starting from the analysis provided in the first half of the section, I discuss the relevance of PK beyond the domain of information source. Here I argue that, through the application of the same conceptual framework we employ to clarify the use of personal knowledge forms, we are able to define the reference tense of the predicate that falls under the scope of evidentiality. On the formal side, we see how the separate

formal encodings of PK seem to be an indication of the predicate's modality, thus setting the ground for the interpretation of reference tense. The predictions about the predicate's reference tense we are able to make following this approach are felicitous in that they fit in with the temporal frame of events, as we deduce from discourse analysis. Furthermore, this analysis accounts for the distribution of some aspectual forms and dubitative particles, whose use in connection to PK would otherwise remain unexplained.

7.2.1 Basic assumptions for personal knowledge evidentiality

In SA, personal knowledge evidentiality expresses that a speaker has direct evidence for the proposition in her statement or, in the case of an interrogative statement, that the speaker presupposes that her interlocutor has direct evidence for the proposition that is being questioned. This kind of evidentiality is morphosyntactically encoded via clause nominalization (as discussed in §5.2.2) that takes the overt form *-hV* or the non-morphemic form *-Ø*.

(180) *Tah   kahkemah   'an-seturi-hi   ka   siru-siru-**hu***.

    that   young.woman   1P-back-POSS   even   3SS/3SO/rub-rub-PK

    'That young woman rubbed and rubbed my back as well.' (MRA: 70)

(181) *Ećitom óxkajo tarap ekorō!*

    *Ecitom   ohkayo,   tarap   e-koroo-**Ø**?*

    Ecitom   young.man   strap   2SS-3SO/have-PK

    'Young man of Ecitom, have you got a strap?' (PLA: 114)

Direct evidence at the basis of PK results from assimilation of information (either completed or in the process of completion) into the speaker's personal knowledge. The original means through which this information has been first acquired is no longer relevant once information enters the speaker's personal knowledge (§2.2.1.3). The conceptual requirement for the use of PK is then the inclusion of information within someone's personal knowledge.

    As I define it here, PK encompasses one unitary domain of information source – that is, the sharing of information that is based on personal knowledge. Given this

conceptual unity of the domain, we might wonder why in the language we have two separate encodings for PK (i.e. *-hV* and *-Ø*), as illustrated in (182) and (183).

(182) *Ànkonúpuru kusu, tani paxno mójre anhi né manu.*

An-ko-nupuru		*kusu,*	*tani*	*pahno*
1PS-APPL-3SO/find.interesting		because	now	until

moyre-an-[i]-hi	*ne*	*manu.*
be.late-1PS-[0]-PK	COP	REP

'Because I found [that situation] interesting, I was late.' (PLA: 16)

(183) *Tani 'esine   kotan 'ohta   kayki reekoh e-kaana-hci*

Tani	*'esine*	*kotan*	*'ohta*	*kayki*	*reekoh*	*e-kaana-hci*
now	3SS/be.same	village	place+in	too	really	2SO-desire-3PS

yahka	*'ampene*	*'an-e-'oskoro-Ø*
though	really	1PS-2SO-be.possessive-PK

'Now they really wanted you even in our own village, but I am very possessive towards you.' (MRA: 30)

Having two separate forms to mark PK is unexpected on the basis of the typological behavior described by Aikhenvald (2004), where within one domain of information source, formal encoding is usually unique (see §2.2.1). What we can infer from this is that the use of one or the other formal realization of PK may depend on semantico-pragmatic factors. In order to clarify which semantico-pragmatic restrictions apply to PK, I consider the *-hV* and *-Ø* forms in relation to some language categories that are most likely to impose some limitations to the use of either one or the other personal knowledge evidential form.

7.2.2 Distribution of *-hV* and *-Ø* forms

In this subsection, I consider the co-occurrence of the *-hV* and *-Ø* forms with interrogativity, polarity, person, and TAM categories. In light of the following survey, I outline the foundations for the semantico-pragmatic analysis of PK.

7.2.2.1 Co-occurrence with conceptual categories

One possible restriction to the use of either one or the other encoding of PK may come from language categories, which are not necessarily related to source of information, but

that influence the semantico-pragmatic contour of the predicate under the scope of evidentiality. Here I focus specifically on interrogativity, polarity, and person.

When we look at interrogative statements, we notice an almost equal distribution of the forms *-hV* and *-Ø*, with only a slightly higher tendency to find the former used as the preferred marker of PK. Moreover, both forms are found to mark interrogative PK in quite similar contexts. Examples (184) and (185), for instance, show similar cases where the speaker directly asks her interlocutor about a personal fact.

(184) *Ećitom óxkajo tarap ekorō!*

Ecitom	*ohkayo,*	*tarap*	*e-koroo-Ø?*
Ecitom	young.man	strap	2SS-3SO/have-PK

'Young man of Ecitom, have you got a strap?' (PLA: 114)

(185) *Poro*   *'iso*   *'e-nukara*   *ka*   *hanki-hii?*

3SS/be.big	bear	2SS-3SO/see	even	NEG-PK

'Haven't you seen the big bear?' (MRA: 75)

Such use of personal knowledge forms (even within similar environments entailing first/second person local predication) at least initially suggests that interrogativity is not decisive for the encoding of PK.

Polarity presents a similar scenario. The distribution of *-hV* and *-Ø* forms in affirmative and negative sentences appears almost equal, and there is no tendency for one or the other form to appear. Examples (182) (repeated here as (186)) and (187), exemplify affirmative polarity, while (185) (repeated as (188)) and (189), exemplify negative polarity.

(186) *Ànkonúpuru kusu, tani paxno mójre anhi né manu.*

An-ko-nupuru	*kusu,*	*tani*	*pahno*
1PS-APPL-3SO/find.interesting	because	now	until

moyre-an-[i]-hi	*ne*	*manu.*
be.late-1PS-[0]-PK	COP	REP

'Because I found [that situation] interesting, I was late.' (PLA: 16)

(187) *Ínki án-kuru ikamesu?*

      Inki   an   kuru   i-kamesu-Ø?

      what.kind   3SS/exist.PC   person   1PO-3SS/save-PK

      'What kind of person saved us?' (PLA: 209)

(188) *Poro   'iso   'e-nukara   ka   hanki-**hii**?*

      3SS/be.big   bear   2SS-3SO/see   even   NEG-PK

      'Haven't you seen the big bear?' (MRA: 75)

(189) *Kesantehko 'anko 'omanan 'an 'ike 'ankoyaykus.*

      Kesantehko 'an-ko-'omanan   'an   'ike   'an-koyaykus-Ø.

      every.day   1PS-APPL-go.on.trip   PRF   then   1PS-not.be.able-PK

      'Every day I went on a trip but I had no luck.' (PLB: 113)

As illustrated here, we encounter both realizations of PK independently from the first (e.g. (186)), second (e.g. (188)) or third (e.g. (187)) person referents involved. That is, person also does not seem to be a relevant semantico-pragmatic factor that influences the encoding of PK.

One more conceptual domain we could turn to in order to ascertain the use of personal knowledge forms would be TAM categories. Tense, aspect and mood are typologically known to influence the use of evidentiality (see §2.2.3). However, as I mentioned in §1.2, a characteristic of Ainu is that it has little to no overt marking for TAM categories, especially for tense. While sporadic cases of aspectual markings used along with PK are found in the corpora, no clear indication of mood is retrievable and, generally, these cases are too few to advance any hypothesis on how aspect or mood might influence the use of PK.

7.2.2.2 Epistemic overtones

Personal knowledge evidentiality most often displays epistemic overtones of certainty or, more infrequently, surprise (see §2.2.2.1). What appears from the corpora is that these epistemic overtones are most commonly retrievable when the *-hV* form of PK is used. In contrast, they are more rarely attested when PK is encoded by the *-Ø* form. In example (190) the speaker strongly asserts the fact that she did not know the man they are talking about, following from the same remark made by her friend just moments

before. Conversely, in (191) the speaker is simply reporting a fact, signaling no special commitment to it. Although in both cases the speaker is speaking first person about a fact that regards herself directly, the involvement in the reported event is different – that is, the two statements differ in terms of epistemic modality.

(190) *'Anoka   kayki 'ampene   'an-eramiskari-**hi**   nee ko.*

      I   too   really   1SS-3SO/not.know-PK COP FIN

      'I really did not know him either.' (MRA: 80)

      [The speaker is stressing that, like her friend who just finished talking, she did not know who the man, topic of the conversation, was.]

(191) *Oj-an-hecire yayča:kasino anikire.*

      Oy[a]   an   hecire   yaycaakasno

      be.different 3PS/exist.PC   endeavor   hard

      *an-e-ki-re-**Ø***.

      1PS-2SO-3SOI/do-CAUS-PK

      'I pushed you hard to different endeavors.' (WDB: 109)

In light of this evidence, we might wonder whether indeed the use of *-hV* and *-Ø* forms is ruled by the different epistemic overtones present in the sentence. This in turn would possibly undermine our general assumption that *-hV* and *-Ø* in fact encode evidentiality in SA. Nonetheless, although the co-occurence of a certain tone of epistemic modality with one specific encoding of PK shows an undeniable systematicity, there are still cases that do not fit in the pattern. As an example, compare (190) with (183) above. In both these instances the speaker is reporting information in which she is directly involved. Moreover, the speaker's involvement seems to be equally present given the use of the adverb *'ampene* 'really'. On this basis, we expect an equal overtone of certainty that should trigger the use of the same personal knowledge form – namely, according to our understanding, the *-hV* form. However, our prediction fails here, as in (183) the *-Ø* form of PK is found.

7.2.2.3 Summary of problems and proposal for the analysis

By focusing on these few examples I intended to show how, after a first survey of the semantico-pragmatic environments where PK is employed, we cannot find any

significant evidence that the encoding of PK is systematically influenced by some category unrelated to information source. Nonetheless, one of the categories I surveyed has indeed shown a quite direct relation with the encoding of PK: epistemic modality. However, I also highlighted that discrepancies arise in this case, and thus the relation between epistemic modality and the surface realization of PK is all but systematic. At this point we find ourselves in an impasse by which the use of *-hV* and *-Ø* forms seem to depend on neither evidentiality nor epistemic modality.

I argue that, despite the seeming lack of systematicity, the interaction between epistemic modality and the realization of PK should not be discarded as an infelicitous proposal. What needs to be adjusted in order to grasp the nature of this interaction is our understanding of the relation between epistemic modality and evidentiality in the first place. Throughout the remainder of this section, I propose that in the case of PK, epistemic modality, intended as speaker's involvement or commitment towards the information (see §2.2.2), is not merely an additional overtone that can be imposed over evidentiality. That is, epistemic modality is not an accessory to evidentiality, as otherwise discussed in many studies on information source (e.g. Aikhenvald, 2004). Rather, I argue that evidentiality and epistemic modality interact in defining the immediateness with which information is exchanged, though still maintaining their categorial independency. For each personal knowledge statement, the speaker relies both on the objective evidence for the information she utters and also on how much she personally vouches for the truthfulness of the content of said information. It is the different degree of the objectivity of evidence (i.e. evidentiality) and of personal involvement on the speaker's part (i.e. epistemicity) that is eventually signaled in the surface realization of PK via the distinct *-hV* and *-Ø* forms. It is also in light of this equal relation that subsists between evidentiality and epistemic modality that I employ the term "personal knowledge evidentiality" (see §2.2.4) instead of the more theoretically common term "direct evidentiality", widespread in studies on evidentiality.

Now we need a systematic way to measure these evidential and epistemic tones for each instance of PK; a way that allows us to compare a large number of tokens to eventually support our theory that to a higher or lower evidential and epistemic tone corresponds one or the other form of PK. I accomplish this by applying Kamio's (1997) Theory of Territory of Information (TTI). In §6.6.3, I introduced a series of revisions to the original TTI developed by Kamio that affect the theoretical premises the Theory is based upon, and most importantly the formal model of the Territory of Information.

Though this theory is tailored so that the TI is applicable to the Ainu case, in principle Kamio's TTI allows us to grasp and formalize the deictic relations that exist among the different elements involved in the exchange of information (i.e. participants in the conversational context and elements constituting the content of information). In the case at hand, these deictic relations become indicative exactly of the evidential and epistemic tones subsumed in personal knowledge expressions.

As I introduced in §6.6.3.3 and §6.6.3.6, the derivation of the evidential and the epistemic tones depends on two separate sets of elements. One set comprises the source (S), the recipient (R), and the event content of information (I), or the participants in the conversational context. The other set includes the subject (t), the object (o), the location (l), and the cause (c), that constitute the content of information. The derivation also depends on the pragmatic interaction among these elements that I formalize via two distinct mathematical operations – one aimed at obtaining the evidential tone and the other the epistemic tone.

With these assumptions on the TTI in mind, let us consider some practical examples of calculation of the epistemic and evidential tones of personal knowledge expressions. The illustrative examples presented in the following subsections elucidate the process through which the epistemic and evidential tones are obtained for all other instances of PK surveyed in the reminder of the analysis, and generally for all those found in the reference corpora.

7.2.3 Epistemic tone

In this subsection, I address the epistemic tone. The epistemic tone refers to the level of epistemic modality subsumed by a personal knowledge expression, and as such it has to do with how much the speaker vouches for the truthfulness of the information that is being exchanged.

7.2.3.1 Event perspective and elements within the TI

In any given situation, the speaker may vouch for the truthfulness of the information (I) more or less solidly, first and foremost on the basis of how closely she relates to the event. I argue that the level of vouching for the event, which constitutes the content of I, is determined on the basis of narrative deixis (see §6.5). If the event is deictically closer to the speaker F (in terms of topicality and givenness), then she is able to relate to it more steadily, since I pertains to the set of information over which F exerts direct

control. That is, a different narrative deixis clarifies the "familiarity" and thus the reliability of *I* in the eyes of *F*. Examples (192) and (193) provide an example of this. General background context is also given for clarity.

(192) *Ànkonúpuru kusu, tani paxno mójre anhi né manu.*

An-ko-nupuru		*kusu,*	*tani*	*pahno*
1PS-APPL-3SO/find.interesting		because	now	until

*moyre-an-[i]-**hi***	*ne*	*manu.*
be.late-1PS-[0]-PK	COP	REP

'Because I found [that situation] interesting, I was late.' (PLA: 16)

[A husband is explaining to his wife, who asked about his delay, why he was so late.]

(193)
'An-haw-ehe	*nuu*	*yahka*	*wante-**he***	*nee*
1P-voice-POSS	3SS/3PO/hear	though	3SS/3PO/know-PK	COP

nankoo	*nah*	*'an-ramu.*
maybe	COMP	1PS-3SO/think

'I think that even if he hears our voices maybe he will recognize us.'
(MRA: 9)

[Two women are speculating on whether a professor they know will recognize their voices once he listens to the tape that is being recorded as they speak.]

In (192) the *I* 'be late' has been introduced in the previous context (i.e. it is given information) and is now the topic of discussion in the conversation, as expressly addressed by the wife. Conversely, in (193) the *I* 'recognize' is newly introduced in discourse, having not been mentioned before – it now becomes a topic of discussion, but at this point of the conversation it is not-given information. We see that the events in these two examples differ in topicality and givenness (i.e. to the speaker they differ in terms of narrative deixis).

We can graphically illustrate this difference via the following two TIs.

Figure 11 – TI for example (192), positioning of *I*

I = to be late
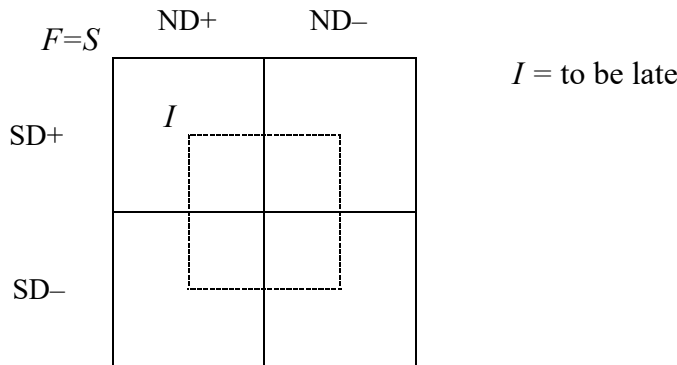
Figure 12 – TI for example (193), positioning of *I*

I = 'recognize'
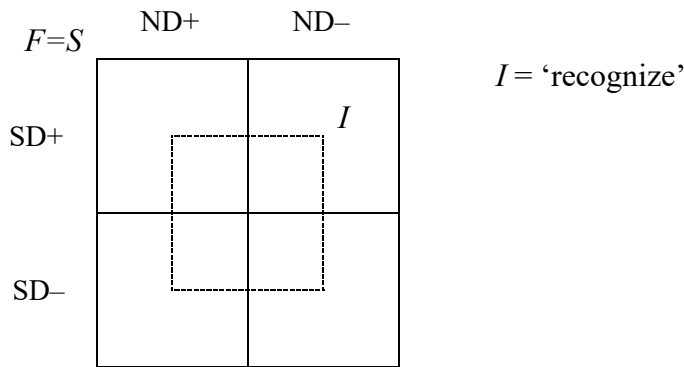
The two schemes illustrate the layout of the TI pertaining to the personal knowledge statements in examples (192) and (193). As the information in each instance has a different deictic closeness with respect to the speaker, the element *I* in the schemes differs in its positioning within the TI. The two different quadrants within which *I* falls are separately marked for high or low narrative deixis (ND+ and ND–). This is representative of how the information differs in topicality and givenness between the two instances taken into account here. In both cases, the speaker *F* overlaps with the source *S*. This is because here the speaker is the entity reporting information via PK.

One important limitation to the positioning of *I* within the TI needs to be addressed at this point. I assume that *I* has the feature SD+ by default – that is, it is always understood as being deictically close to the speaker in socio-deictic terms. In support of this assumption, we can say that, although we can hardly argue that it is sensitive to the restrictions in kinship, gender, or animacy imposed by social deixis (see §6.5), *I* is somehow sensitive to the one socio-deictic feature of level of acquaintance. In fact, since *I* represents the transmitted information itself, we can see its saliency within the given conversational context, as the exchange of information *I* is the reason why the

245

conversation is happening in the first place. The speaker is then intrinsically acquainted with the information I, independently from its inner characteristics or the event it subsumes. This follows since the information is the pivotal portion of the speech act.

In §6.6.3.3 I argued that basing the derivation of the epistemic tone for a personal knowledge statement exclusively on the deictic distance of I from F is reductive. I base this on the idea that the speaker accesses the information not only as a whole, but also as a combination of different elements that make up the inner composition of the information itself (see §6.6.3.1): the subject of the event (t), its object (o), the cause or aim related to the event (c), and the location or time of the event (l). The speaker might relate differently to these elements based on the level of acquaintance, givenness, topicality and so on. As such, the internal components of information may have contrasting deictic relations to each other and with respect to the speaker. As a consequence, once we translate this into our TTI, the internal components of I do not necessarily occupy the same place within the TI as I (i.e. F may relate differently to the separate components of I compared to I as a whole). In contrast to I as a whole, its inner components are sensitive to both social and narrative deixis and can thus fall in any quadrant of the TI.

Figure 11 and Figure 12 below illustrate the TIs for examples (192) and (193), including both I and its components.

Figure 13 – Complete TI for example (192)

$F = S$
I = 'be late'
$t = S$
l = 'until now'
c = 'find it interesting'
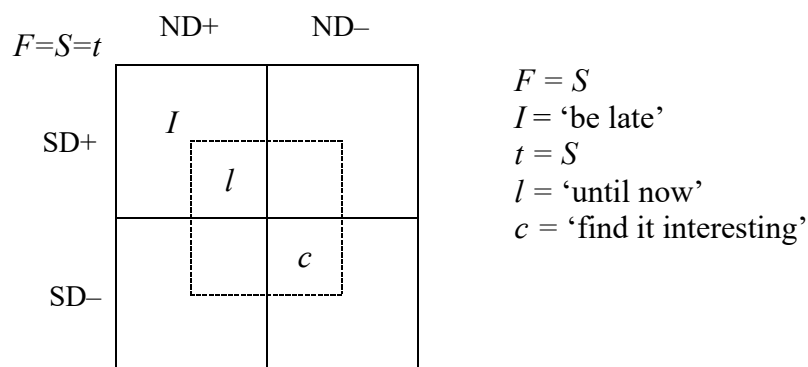
Figure 14 – Complete TI for example (193)
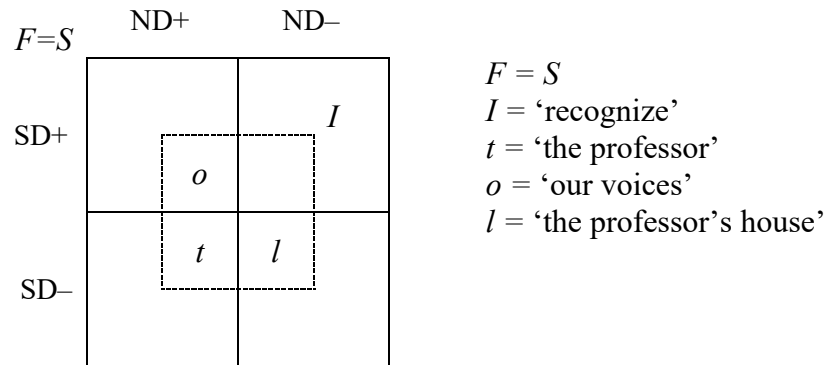
It should be noted here how, in the consideration of the elements to be included in the TI, I take into account components from clauses that are not found within the clause whose verb bears the personal knowledge evidential (e.g. the *o* 'our voices' included in the concessive subordinate introduced by *yahka* in (193)). This is because the information pieces that relate to the "how", "when", "why" and "who" making up the reported event may be found outside of the clause whose verb is marked for evidentiality (see §6.5). Nevertheless, these components, and how the speakers relates to them deictically, are pivotal for the use (and as we shall see the formal encoding) of PK. Therefore we can say that the scope of PK is not limited to only one clause but rather it extends onto the sentential level. The scope of the evidential is of course limited to a defined group of clauses and its extension can be captured via textual parsing (see §6.3.3).

Now that the TI is filled with all the relevant elements to the event context, we can move on to the formalization of their interaction and the derivation of the epistemic tone of the personal knowledge statement.

7.2.3.2 Calculation of epistemic tone

In order to calculate the tone of epistemicity (*EP*) of expressions featuring PK, I resort to a mathematical operation that is meant to be representative of the actual interaction existing among the speaker and elements in the event that represents the content of the information being exchanged. The process by which the speaker *F* relates to the information *I* as a whole, but also as made up of the different elements involved in the described event (*i*), is formalized via the operation I introduced in §6.6.3.6, which I give here again for convenience.

$$EP = I + \frac{i}{x}$$

As I discussed in §6.6.3.1, each quadrant in the TI is assigned a numeric value according to its deictic distance from the focal point F. Once we are able to assign a value to every element according to their position within the TI, we can then easily calculate the EP as shown below for examples (192) and (193).

EP calculation for example (192)

$$EP = 3 + \frac{4}{2} = 5$$

EP calculation for example (193)

$$EP = 2 + \frac{6}{3} = 4$$

A short explanation is in order. For example (192), i includes the values of elements l 'until now' and c 'find it interesting' which are respectively assigned a value of 3 and 1 according to their deictic relation to F (giving i a value of i=4). The variable x has the value 2 – the total number of elements involved. Similarly, for example (193), i includes the values of elements l 'the professor's house', o 'our voices' and t 'the professor' which are respectively assigned a value of 3, 1 and 2 (and so i=6). The variable x here takes the value of 3. It must be noted that for example (192), t was not included in the calculation of EP due to it being co-referential to the source S. I explain this in more detail below in §7.2.4.3 while discussing the calculation of the evidential tone.

The results of these calculations taken as an example are just illustrative of the application of the mathematical formulae and are not significant to our understanding of the differences in the formal encoding of PK if taken in isolation. The calculations become meaningful when we consider all results for all tokens of PK and we put them in relation to each other. Figures B and C in the appendix illustrate the percentage of tokens for different values of EP as resulting from the calculation, respectively in interrogative and declarative sentences. To make these graphs even more salient, and

precisely relevant for clarifying the distribution of *-hV* and *-Ø* forms, we need to add the data relative to the evidential tone. Therefore, next step is to propose a similar calculation for the evidential tone.

7.2.4 Evidential tone

In this subsection I address the evidential tone. The evidential tone refers to evidentiality proper and as such, it is concerned merely with the objective source of the information that is being exchanged. It does not include any indication of speaker's involvement, attitude, or subjective validation of this information.

7.2.4.1 *S* and *t* within the TI

While discussing the evidential tone in §6.6.3.3. and §6.6.3.4, I highlighted how the theoretical understanding of evidentiality assumed for this study can be translated into the TTI by saying that the speaker accesses the information through the source of said information. In other words, the source (*S*) represents the gateway between the speaker (*F*) and the information (*I*). In this subsection, I look at the nature of this source and at its possible positioning within the TI, according to the deictic relations subsisting between the source itself and the speaker.

The primacy of *I* within the domain of epistemicity was quite straightforward, since there is no other element in the TI that can possibly represent what corresponds to the information. However, we face a different situation when it comes to evidentiality, as both the elements *S* and *t* can represent what corresponds to the source in the conversational context. The selection of the source, on the basis of which we define the relation between *F* and *I*, is not always straightforward. Examples (194)-(196) exemplify the positioning of *S* and *t* within the TI. For each example, a scheme of the relative TI is also given.[57]

(194) *'An-haw-ehe*   *nuu*   *yahka wante-**he***   *nee*
       1P-voice-POSS   3SS/3PO/hear   though 3SS/3PO/know-PK   COP

       nankoo   *nah*   *'an-ramu.*
       maybe   COMP   1PS-3SO/think

---

[57] These also include the tone of evidentiality (*EV*) and the overall personal knowledge tone (*PKT*) to be explained in the following paragraphs.

'I think that even if he hears our voices maybe he will recognize us.'
(MRA: 9)

[Two women are speculating on whether a professor they know will recognize their voices once he listens to the tape that is being recorded as they speak.]

	ND+	ND–
F=S		
SD+		*I*
	o	
SD–	*t*	*l*

F = S
I = 'recognize'
t = 'the professor'
o = 'our voices'
l = 'the professor's house'
EP = 4
EV = 2,7
PKT = 6,7

(195) *Tani 'esine   kotan 'ohta   kayki   reekoh e-kaana-hci*
now 3SS/be.same village place+in   too   really 2SO-desire-3PS
yahka   'ampene   'an-e-'oskoro-Ø.
though   really   1PS-2SO-be.possessive-PK

'Now they really wanted you even in our own village, but I am very possessive towards you.' (MRA: 30)

[A father is about to give away his daughter to a sea god after he was challenged to do so by the men of his village. The marriage proposals of these men were previously dismissed by the father, who was too possessive to let his daughter go.]

	ND+	ND–
F=S=t		
SD+	*I*	
	o	
	l	
SD–		

F = S
I = 'be possessive'
t = S
o = 'you (i.e. the daughter)'
l = 'now'
EP = 5,5
EV = 4
PKT = 9,5

250

(196) *Ećitom óxkajo tarap ekorō!*

| *Ecitom* | *ohkayo,* | *tarap* | *e-koroo-Ø?* |
| Ecitom | young.man | strap | 2SS-3SO/have-PK |

'Young man of Ecitom, have you got a strap?' (PLA: 114)

[The question is asked by a woman to the young man in a dream. This is how the conversation in the dream starts, with no previous context available.]

$F = R$
$S =$ 'young man of Ecitom'
$I =$ 'have'
$t = S$
$o =$ 'a strap'
$EP = 3$
$EV = 3,7$
$PKT = 6,7$
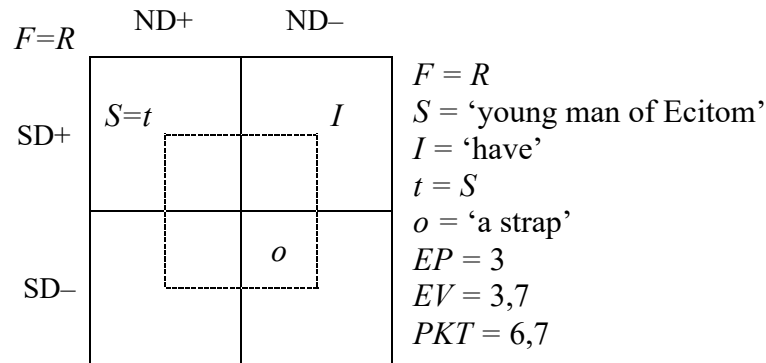
Although both S and t are said to equally encode the source of information into the TI, the pragmatic status of their referents is not exactly the same. In fact, t is invariably an inner component of I (i.e. it is included in i, as discussed in §6.6.3.3 and §6.6.3.6), while S is an entity that can subsist in its own right, externally to the dimension defined by the information I. As we will see in §7.2.4.2, this external status of S may be re-discussed under special circumstances. However, this preliminary comparison of S and t's pragmatic applications is already sufficient to suggest that these participants do not engage in the same kind of relations with F, and that they are thus better examined separately.

As for the possibilities of placement within the TI, t behaves like the other inner components of the event (which are part of i), and is not subjected to any particular deictic restriction. From a pragmatic point of view, t refers to the subject of I which does not necessarily cover any special discourse-related function (unlike S and R). In addition, the speaker relates variably to t, for instance, according to topicality or level of acquaintance. The element t is therefore sensitive to both social and narrative deixis and may occupy any section of the TI.

With regards to the placement of S, on the other hand, we need to operate an initial distinction on the basis of whether S corresponds to F – that is, whether the source is also recognized as the speaker. Examples (194) and (195) illustrate such cases.

Here *F*, who is using PK in her utterance, is also the source for the particular information that is being reported: the speaker is also the entity who possesses personal knowledge about the information. This is recognized as a declarative statement. In contrast, example (196) shows a case where *S* does not correspond to *F*, but rather where *F* is recognized here as the recipient *R*.[58] In these cases, *F* uses PK in her utterance in order to seek information which is based on the personal knowledge of another entity: the speaker does not possess this personal knowledge herself. This is recognized as an interrogative statement. In declarative statements, *S* overlaps with *F* and it is found at the deictic center of the TI, which makes its position within the TI unmistakable. On the other hand, in interrogative statements *S* is within the TI, and its position is subjected to change induced by context and related to the dynamics of the speech act dimension.

A first limitation to the positioning of *S* in the TI resembles the limitation affecting *I*, discussed in §7.2.3. In the same way that *I* is assumed to intrinsically have the feature SD+, *S* is assumed to possess the feature ND+ by default. In support of this assumption, we can say that since it is theoretically recognized as the participant who makes information exchange possible, *S* must relate closely to *F* in terms of topicality and givenness. Even in those cases where *S* is not recognized as the speaker *F*, and where the deictic closeness between the two does not subsist, *S* is a given participant in the eyes of the speaker. Without *S*, the speaker would not be able to access information. On the other hand, *S* is sensitive to social deixis, as the the speaker may relate to the entity encoded in the source differently in terms of level of acquaintance and the other parameters defining this kind of deixis (see §6.5). Another feature affecting the positioning of *S* within the TI is externality, which I discuss in the following subsection.

7.2.4.2 External-*S*

The assumed topicality of *S* with respect to *F* is maintained even when *S* is recognized as an external-*S*. External-*S* is defined as such because the source that possesses information, and towards which the speaker uses PK, does not play an active part in the conversational context, being thus considered external to the process of information exchange. External-*S* is found exclusively in interrogative statements, since in

---

[58] In the schemes above and elsewhere, the recipient *R* is overtly inserted in the TI only when it overlaps with *F* (i.e. in TIs describing an interrogative statement). As for the TI describing declarative statements, *R* is omitted given its exclusion from the calculation processes for epistemicity and evidentiality.

declarative statements *S* corresponds to the speaker *F* and could therefore never be external to the conversational context, and it can be distinguished into the subtypes of rhetoric-*S* and indefinite-*S*. Examples (197) and (198) show both subtypes of external-*S*.

(197) *Hemáta kusu enan śi fúra ani hetaneja.*

Hemata	*kusu*	*enan*	*si*	*hura*	*an-[i]-[h]i*	*hetaneya?*
what	because	such	dung	smell	3SS/exist.PC-PK	FIN

'Why on earth is there such a smell of dung?' (PLA: 160)

[A fox-god is lured into a lavatory by two other deities. He can't see where he is because of the darkness in the room but, to his surprise, he can smell a strong smell of dung.]

F=R ND+ ND−

SD+ I

SD− (S) t c

F = R
S = external-*S*
I = 'be present'
t = 'a smell of dung'
c = 'why'
EP = 4,5
EV = 3,5
PKT = 8
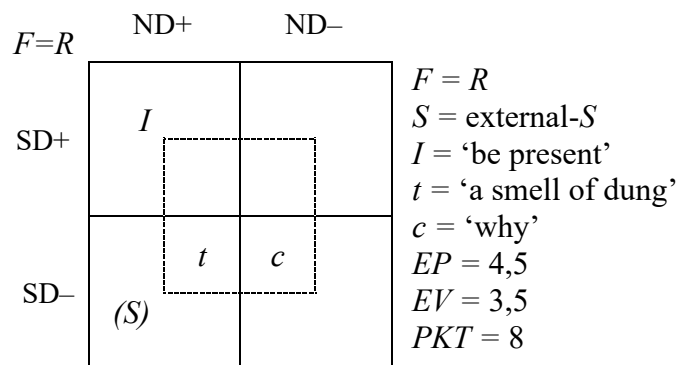
(198)
E-niina		*teh*	*'orowa 'e-'i-wooneka*		*kusu*
2SS-collect.wood	SIM	then	2SS-1PO-situation.look		because

teeta e-san-i-hi		*ne*	*'an*	*ike 'aa?*
here 2SS-descend.SG-0-PK		COP	PRF	FIN

'You collected wood and then you came down here to check on us, right?' (MRA: 3)

[The speaker is commenting on the fact that her friend is now present at her house after she has finished her work. The purpose of her visit is clear and her wood-collecting work has been just mentioned in the conversation.]

```
                  ND+        ND−
   F=R      ┌──────────┬──────────┐          F = R
            │          │          │          S = rethoric-S 'you'
   SD+      │ (S)=t····│······ I  │          I = 'come down'
            │     ┌····│····┐     │          t = S
            │     │ l  │ c  │     │          c = 'check on us'
            │     │    │    │     │          l = 'here'
   SD−      │     └····│····┘     │          EP = 4,5
            │          │          │          EV = 3,7
            └──────────┴──────────┘          PKT = 8,2
```

In example (197), there is no overt participant in the conversational context to fill the role of source, nor a clear referent for this role is retrievable from the wider context. The question is asked in an indefinite way, and no actual response is expected. Nevertheless, the existence of a reliable source that could potentially take part in the speech act and reply to such question (possessing personal knowledge about the information) cannot be dismissed entirely. It is simply incidental that this source is not presently retrievable.

An actual response to the question is not necessarily expected in statements such as (198) either, but here a source that can reply is indeed present. In cases such as this, the speaker either already knows the information content (e.g. thanks to previous acquisition) or acts as if she has personal knowledge, so she reports the information via PK. The formulation of the statement as a question is a hedging strategy, since the source, who undoubtedly possesses personal knowledge about the information at hand, could contrast with this role of the speaker as possessing personal knowledge. The statement takes the shape of a rhetoric question in order not to "invade" the source's personal knowledge.

Given the marginal part played by external-S in the aforementioned environments, why would we argue that it maintains a deictic relation with F? As far as the transmission of information is concerned, the speaker must recognize the source's personal knowledge as this is her only access to the information itself. That is, information sharing at the speech act level cannot disregard the source who shares it, even if this source may not be a part of the conversational context pragmatically. Because its referent is unknown, indefinite-S always has the features [SD−, ND+], while social deixis for rethoric-S may vary on the basis of the referent addressed by the speaker. In (197), for instance, this referent is the interlocutor and a close friend of the speaker, so rethoric-S has the features [SD+, ND+].

I have explained all the possible positions taken by the elements whose deictic interaction with the speaker defines evidentiality, with particular attention to the source *S*. We are now able to turn to the calculation of the evidential tone (*EV*).

7.2.4.3 Calculation of evidential tone

As explained in §6.6.3.6, the calculation of the evidential tone (*EV*) for the tokens of PK contained in the reference corpora is brought out via a mathematical operation analogous to the one employed to calculate the epistemic tone (*EP*). However, one main difference with the *EP* formula must be noted. While for *EP* all the elements of the operation are fixed (including the variable *x* that changes only in value but not in substance), for *EV* we see an alternation between *S* and *t* in the operation's layout. To better remind the reader of this alternation, I present the *EV* operation below.

$$EV = \frac{I}{S} + S/t$$

This operation is meant to represent the pragmatic relation between the speaker and the event, where the speaker accesses the information through the source (see §6.6.3.4). Specifically, the *S/t* portion of the operation refers to the selection of the most reliable source on the speaker's part. Such formalization captures the fact that the speaker selects either *S* or *t* as the best source for the information being exchanged. In §6.6.3.5 I discussed the parameters that make either *S* or *t* the most reliable source, eventually pointing out that the selection is correlated to the kind of personal knowledge statement – in declarative statements the selected participant is *t* and in interrogative ones it is *S*.

As explained in §6.6.3.6, here the fraction $\frac{I}{S}$ represents the information *I* which is accessed through the source *S*. The access to information on the speaker's part is then mediated and strictly dependent on the deictic relation that the speaker has with the source, even in those cases (addressed in §7.2.4.2 above) when *S* is recognized as an external-*S*. By assigning a value to each participant on the basis of their position within the TI, we are able to calculate the evidential tone (*EV*). Calculations are presented below and they are related to examples (192) and (193) given above.

EV calculation for example (192):

$$EV = \frac{2}{3} + 2 = 2{,}7$$

EV calculation for example (193):

$$EV = \frac{3}{2} + 2 = 3{,}5$$

The process of selection described above explains why *t* was not included in the calculation of *EP* (see §7.2.3.2) when it overlaps with *S*. Because of this correspondence with the source, *t* is included in the calculation that defined *EV*, however playing a part in shaping PK. As in §7.2.3.2 above, the results shown here are just illustrative of the application of the mathematical operation for calculating *EV*. The results coming from all tokens of PK in the corpora are summarized in Figures B and C in the appendix that also illustrate the percentage of tokens for different values of *EV*, respectively in interrogative and declarative sentences. Before we move to combining the results of *EP* and *EV* calculations and to explaining how they relate to the use of either *-hV* and *-Ø* in the encoding of PK, let us consider the cases when PK takes a mirative or emphatic function.

7.2.4.4 Mirative and emphatic expressions

In §7.2.1, I singled out some expressions indicating mirativity (*'aa* and *hetaneya*)[59] or, more generically, emphasis (*ko(h)* and *hetaneya*) that are seldom encountered following PK. We can better subdivide these final particles according to whether they are used with declarative PK (*ko(h)*) or interrogative PK (*'aa*, *hetaneya*). The use of these particles is not simply licensed by the use of PK, but rather it depends on the specific pragmatic characteristics of the conversational context in which information sharing takes place.

The one common point shared by all interrogative statements featuring *'aa* and *hetaneya* is the existence an external-*S*, while in all declarative statements marked with the emphatic *ko(h)* the speaker is co-referential with the subject of the event and as the

---

[59] To these I should also add *neya wa*, whose use is hard to determine as it appears only once in my data in relation to personal knowledge evidentiality.

source (i.e. *F=S=t*). The special pragmatic relation that sets the ground for a mirative or emphatic extension thus depends on the type of statement, since for interrogatives there is an externality relation, and for declaratives there is an identity-overlapping relation. From the tokens available, I could find no other consistent or significant correspondence between these sentence finals and any of the other interactions that happen within the TI. Examples (197) (repeated here as (199)) and (200) illustrate two representative cases.

(199) *Hemáta kusu enan śi fúra ani hetaneja.*

Hemata	*kusu*	*enan*	*si*	*hura*	*an-[i]-[h]i*	*hetaneya?*
what	because	such	dung	smell	3SS/exist.PC-PK	FIN

'Why on earth is there such a smell of dung?' (PLA: 160)

[A fox-god is lured into a lavatory by two other deities. He can't see where he is because of the darkness in the room but, to his surprise, he can smell a strong smell of dung.]
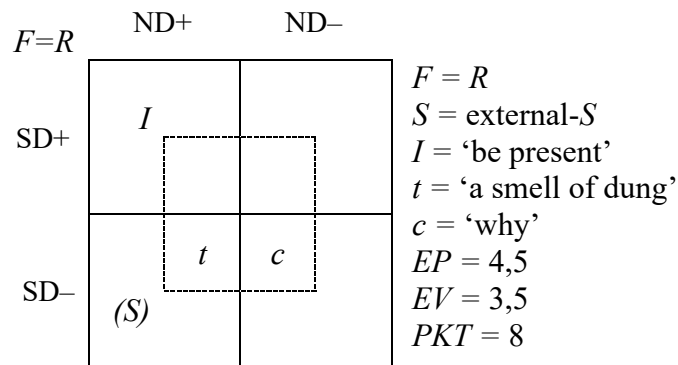
(200) *'Anoka   kayki   'ampene   'an-eramiskari-**hi**   nee   **ko**.*

I	too	really	1SS-3SO/not.know-PK	COP	FIN

'I really did not know him either.' (MRA: 80)

[The speaker is stressing that, like her friend who just finished talking, she did not know who the man, topic of the conversation, was.]

F=S=t   ND+   ND−

SD+ | I | | F = S = t
      |___|___| I = 'not know'
SD− | | o | o = 'the man'
      |___|___| EP = 5
                       EV = 4
                       PKT = 9

Pragmatically, the emergence of a mirative extension for interrogative PK is mainly driven by context. We see from the corpora that, with all mirative instances, the information somehow falls on the speaker (who previously had no knowledge about it) in an unexpected way. This happens either because the content of information does not comply with the contextual or general knowledge possessed by the speaker (i.e. it is perceived as something unheard of or absurd), or because the speaker accesses the content of information in the first person, with no previous knowledge and without the mediation of a source. Mirativity is thus a means for expressing the speaker's new awareness of the event (see §2.2.2.1). Conversely, emphatic *ko(h)*[60] does not seem to be licensed in declaratives on a particular semantic ground. Here, the triggering factor for an emphatic extension is to found in pragmatics, and it can be recognized as the circumstance of a speaker who reports about something she did herself.

7.2.5 Overall personal knowledge tone

As a validation of our initial assumption for this analysis, we should now be able to explain the employment of either one or the other form of PK. I propose that this decision is made on the basis of the evidential and epistemic tone of personal knowledge expressions. The combination of these two tones is overall personal knowledge tone (*PKT*). Since we postulated that epistemicity and evidentiality interact simultaneously in defining PK, we can straightforwardly phrase their interaction with the following operation, where the overall personal knowledge tone of the expression is the combination of the *EP* and *EV* values.

---

[60] The particle *ko(h)* appears only in the corpus of Rayciska Ainu (MRA) exclusively in the speech of one of the two informants. This woman was originally from a smaller settlement by the Rayciska village and it may be that this emphatic inflection is a peculiarity of that area.

$$PKT = EP + EV$$

According to the value resulting from this final operation, we can compare the PK tokens in the reference corpora. Figures D and E in the appendix summarize the *PKT* results for all PK tokens (whose *EP* and *EV* values were given separately in Figures B and C), dividing them according to whether they appear in interrogative or assertive statements. Figure F combines the results of Figures C and D, and ultimately shows the percentage of PK intances marked via *-hV* for different values of *PKT*. Through this comparison we see how, a higher value of *PKT* corresponds to a more frequent use of PK marked with the *-hV* form. Conversely this also means that, the lower the *PKT* value is, the more frequently we find instances of PK marked via the *-Ø* form.

It appears that what we have defined here is a tendency, and that thus our analysis does not provide a clear-cut rule for determining the PK form used based on *PKT* value. That is, there is no actual one-to-one correspondence between a certain value (or group of values) for *PKT* and one personal knowledge form (see concluding remarks in §7.2.6). Nevertheless, this approach to PK succeeds in giving a clearer picture of the distribution and use of *-hV* and *-Ø* forms, which could not be uniformly explained by looking at the co-occurrence of this kind of evidentiality with other different categories such as TAM.

7.2.6 Summary of the use of personal knowledge evidentiality

In the previous sections, I illustrated the uses and meaning of SA personal knowledge evidentiality, or the kind of evidentiality based on direct evidence from personal knowledge. I focused on the two formal devices which encode PK, *-hV* and *Ø*, with the aim of detecting the underlying pragmatico-semantic logic that regulates their use. I accomplished this by assuming two separate domains of information exchange, with each one characterized by specific element-participant interactions. The nature of these interactions where taken as defining the speaker's perspective and access relating to the relevant information. The interactions also served as a basis for framing the different tones of evidentiality and epistemicity involved in personal knowledge expressions through dedicated formulae. The final outcome of the analysis showed that, for a higher overall *PKT*, there is the tendency to find PK marked with the *-hV* form, while for a lower overall *PKT*, there is the tendency to find PK marked with the *-Ø* form.

Figures in appendix §II provide graphic illustations of this tendency. Throughout the analysis in the sections above, I treated declarative and interrogative statements separately given the different pragmatic interactions they subsume. However, despite being different, we saw that both types of statement allow the use of PK in either morphological form. When we look at personal knowledge expressions as a whole, ignoring the declarative-interrogative distinction, the relation between the value taken by *PKT* and the formal encoding of PK is evident (Figure F appx.). Here we see that there is a correlation of *-hV* use and higher PK, but also that there is a positive correlation between the rising value of *PKT* and the percentage of *-hV* marked tokens.

In the analysis I proposed, the speaker's choice between *-hV* or *-Ø* is not clear-cut. That is, there are no specific semantico-pragmatc criteria that disallow or require either one or the other form of PK. The approach I adopted here derives a tendency rather than a fixed rule for the use of personal knowledge forms. There are several reasons why the derivation of a tendency is the best result we can possibly obtain from such an analysis of SA personal knowledge evidentiality. For one thing, the limited number of tokens available indeed limits our scope of analysis. For instance, a higher number of interrogative tokens would most likely provide the necessary evidence for corroboration or improval of my proposal. It may also be the case that there is a general cultural background that influences how events or interpersonal relations are perceived, which cannot be surveyed any longer. Deictic relations are difficult to parse based on the limited conversations I have access to and due to the textual-based nature of the reference corpora. Moreover, especially with regards to social deixis, we should not exclude the possibility that each speaker had a particular relation with other elements or participants (*in primis* the source) which differs from the ones we can infer from context given in the corpora. At present, this is something which is impossible to speculate on further.

7.2.7 Personal knowledge evidentiality beyond information source

Throughout the remainder of this section on SA personal knowledge evidentiality, I concentrate on the relation between PK and TAM categories. As I mentioned in §1.2, Ainu is known for having almost no overt morphosyntactic marking of tense, aspect, and mood. Although some expressions can be relatively safely addressed as markers of aspect and mood, tense as a grammatical category appears to be utterly unspecified in morphosyntax. When even aspectual expressions are missing, that usually help to

temporally locate events in perspective to one another, understanding the tense of a predicate usually depends almost completely contextual interpretation.

Predicates that fall under the scope of PK are no exception. Consider examples (201)-(203) below.

(201) *Hoynu poronno 'e'aykihi 'aa?*

    Hoynu   *poronno*   *'e-'ayki-**hi***   *'aa?*

    pine.marten   a.lot   2SS-3PO/catch.with.hook-PK   FIN

    'You catch a lot of pine martens, don't you?' (PLB: 132)

    [The speaker comments on the activity of a hunter who is presently hunting.]

(202) *'Esinnisahta*   *'e-numa*   *ike*   *hemata*   *'e-kii-**hii***?

     this.morning   2SS-stand.up   then   what   2SS-3SO/do-PK

    'This morning you woke up and what have you done?' (MRA: 3)

    [A woman asks her friend about what she has done in the morning until the moment the collector went to record them.]

(203) *Osikerusi ani echi yanke.*

    Osike[h]   *rus-i*   *ani*   *eci-yanke-**Ø***?

    rabbit   3S/pelt-POSS   with   1SS>2SO-take.out-PK

    'Will I take you out using a rabbit pelt?' (WDB: 12)

    [A carpenter rethorically asks a woodbug how he will be able to take the bug out from the piece of wood he is working on.]

In examples (201), (202), and (203) respectively we see how the predicates under the scope of PK acquire a present, a past, or a future reading, which apparently we are able to induce exclusively on the basis of the general context. No overt morphosyntactic device is present to signal the differences in tense. Furthermore, as discussed in §7.2.1, the alternation between the *-hV* and *-Ø* forms of PK cannot be argued to show any systematic correspondence with tense. As an example, compare (202) with (204) – here both predicates under the scope of PK acquire a past tense reading, and yet the form encoding PK differs.

(204) *Ínki án-kuru ikamesu?*

Inki	*an*	*kuru*	*i-kamesu-Ø?*
what.kind	3SS/exist.PC	person	1PO-3SS/save-PK

'What kind of person saved us?' (PLA: 209)

[Realizing that they did not die, the older brothers in the story ask who saved them.]

My assumption for the analysis to follow is that, by applying the Theory of Territory of Information, we are able to systematically derive the reference tense of the predicate under the scope of PK. This is accomplished on the basis of Reichenbach's (1947) Reference Tense Theory (RTT), introduced in §6.7.3. The definition of reference tense for the predicates is obtained by analogical comparison of the pragmatic features for the speaker, source and information and the three moments in time, which are the foundation of Reichenbach's theory (see §6.7.6.1 and §6.7.6.2). The outcomes of this analysis prove that the TI is relevant for the definition of TAM categories. Furthermore, it appears that the alternation of *-hV* and *-Ø* forms is in line with the different modal characteristics of the scope predicate. In this sense, PK also becomes an indicator of TAM, in addition to being a marker of information source.

7.2.7.1 Derivation of reference tense

In order to define the relative tense of the predicate under the scope of PK, we must look back at the organization of the TI. As I discussed in §6.7.6, we translate Reichenbach's Reference Tense Theory (RTT) into our semantico-pragmatic framework of TTI through analogy. Given the pragmatic function covered by *F* (the speaker), *S* (the source), and *I* (the information) in the process of information exchange, I compare them to the three pivotal points in time which are the foundation of Reichenbach's RTT. As a result, *F*, *S*, and *I* included in the TTI are respectively equal to S, R, and E when translated into Reichenbach's Theory. As I stressed in §6.7.6, although the dimension of conversational context and the wider dimension of time are unrelated, the maintaining of features thoughout the process of analogy ensures a felicitous comparison between them. Further to this, I discussed modality and perfectivity as two distinct relations among the S, R, and E temporal points, redefining these categories in terms of temporal relations within the RTT framework. S, R, and E correspond by analogy to *F*, *S*, and *I* in the TTI, and through this analogy the temporal relations that define modality and perfectivity stem from the deictic relations between these three elements within the TI.

Specifically, the S=R=E and S≠R=E formalizations define realis and irrealis modality, while the S=R and S≠R formalizations define respectively imperfectivity and perfectivity, where '=' and '≠' indicate a temporal relation of simultaneity or non-simultaneity among the three points in time. The simultaneity or non-simultaneity among two or more points in time directly follows from the position of the relative elements *F*, *S*, and *I* within the TI, so that if, for instance, *S* is deictically close to *F* (i.e. if they occupy the same quadrant in the TI, being thus assigned a value of 3) then the correspondent points in time R and S will be considered in a temporal relation of simultaneity. The opposite way, if *S* is deictically distant from *F* (i.e. the two referents occupy different quadrants in the TI, being thus assigned a value of 2) then R and S will be considered in a temporal relation of non-simultaneity.

Using Reichenbach's formalization to indicate the simultaneity or non-simultaneity relation subsisting among the three points in time, I here give a summary table of the derivational process applied for SA. A tentative name for the relative tense categories derived is also given. Furthermore, the following table aims to represent the two steps of relative tense derivation, where the S-R relation subsumed by perfectivity can override the S-E-R relation previously derived via the consideration of modality, as discussed in §6.7.6.3.

Table 10 – S, R, E relations and relative tense

modality	formalization of the relation	perfectivity	formalization of the relation	S-R-E relation(s)	relative tense
realis	S=E=R	imperfective	S=R	S,R,E	simple present
		perfective	S≠R	S_R,E R,E_S	simple non-present
irrealis	S≠E=R	imperfective	S=R	E_S,R S,R_E	anterior or posterior present
		perfective	S≠R	E_S_R E_R_S S_R_E R_S_E	anterior or posterior non-present

The labels for relative tenses are tentative in that they include more than one relative tense category assumed in Reichenbach's (1947: 297) analysis. The only cases that correspond exactly to tense categories present in Reichenbach's work are the simple present and anterior or posterior present.

On the basis of this derivation, we can now predict the modality, perfectivity and, subsequently, the relative tense reference of predicates under the scope of PK. The following examples give an illustration of some predicates that subsume different reference tenses brought out on the basis of the deictic relations among the speaker, the source, and the information. For each case, I report the values assigned to referents *I* and *S* in the TI, that are representative of their deictic relation to *F* (i.e. value of 3 = deictically close, value of 2 = deictically distant). From this, I present the relative modality and perfectivity deriving from these deictic relations with also a formalization using the Reichenbach's labels S, R and E. Justification for this derivation was given in §6.7.6.3.

Let us start with perfective predicates. According to our proposed derivation process, realis perfective predicates encompass a non-present time reference – the posteriority or anteriority relations formalized via the sequences [S_R,E] and [R,E_S] are shown in the two examples below. In both cases the following S-R-E relations are true:

$$I\text{=}3 \rightarrow \text{realis} \rightarrow \text{S=E=R}$$
$$S\text{=}2 \rightarrow \text{perfective} \rightarrow \text{S≠R}$$

Example of [S_R,E] relation:

(205) *Osikerusi ani echi yanke.*

Osike[h]	*rus-i*	*ani*	*eci-yanke-Ø?*
rabbit	3S/pelt-POSS	with	1SS>2SO-take.out-PK

'Will I take you out using a rabbit pelt?' (WDB: 12)

[A carpenter rethorically asks a woodbug (R) how he will be able to take it out from the piece of wood he is working on (S,E).]

$F=R=t$

ND+   ND−

SD+ | I |

SD− | o |

(S)

$F = R = t$
S = rethoric-S
I = 'take out'
o = 'you (= the woodbug)'
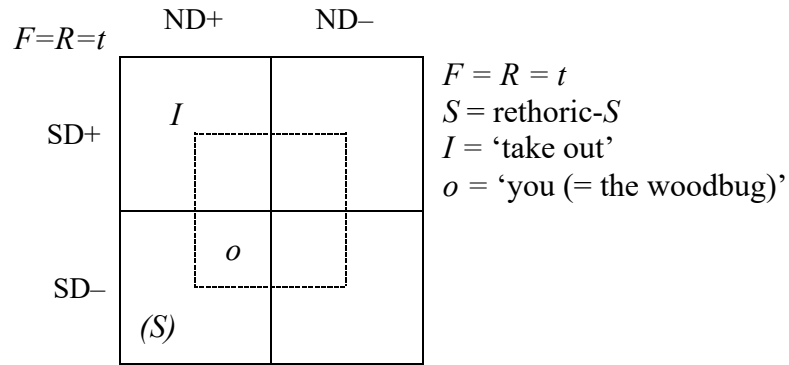
Example of [R,E_S] relation:

(206) *Ínki án-kuru ikamesu?*

Inki	*an*	*kuru*	*i-kamesu-Ø?*
what.kind	3SS/exist.PC	person	1PO-3SS/save-PK

'What kind of person saved us?' (PLA: 209)

[Realizing that they did not die, the older brothers in the story (S) ask an external source (R) who was it that saved them (E).]

$F=R$

ND+   ND−

SD+ | I |
      | o |

SD− | t |

(S)

$F = R$
S = external-S
t = 'what kind of person'
I = 'save'
o = 'us'
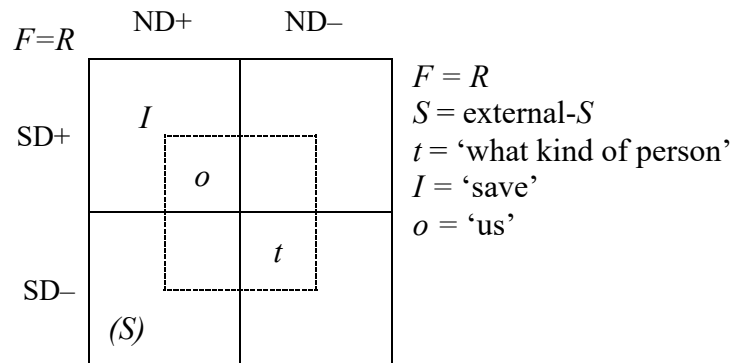
As for irrealis perfective predicates, they are said to encompass an anterior or posterior non-present reference. Two of the four relations lined out by Reichenbach that fall within this description are illustrated in the examples that follow. In both cases the following relation holds:

I=2 ➔ irrealis ➔ S≠E=R
S/t=2/1 ➔ perfective ➔ S≠R

265

Example of [S_R_E] relation:

(207) *Náx án-kusu, temána ankíki pirika hetaneja?*

Nah   *an*   *kusu,*   *temana*

like.this   3SS/exist.PC   because,   how

an-ki-hi   *pirika-Ø*   *hetaneya?*

1PS-3SO/do-NMLZ   3SS/be.good-PK   FIN

'Being it like this, how on earth shall we do?' [lit.: 'Our doing how shall be good?'] (PLA: 21)

[Two parents complain about what their son did. Given the present situation, they wonder (S), addressing no-one in particular (R), if them doing something from there on is going to make them any good (E).]

$F = R = t$
S = external-S
I = 'be good'
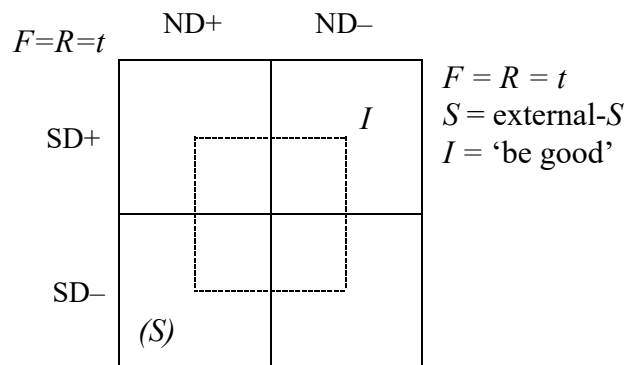
Example of [E_R_S] relation:

(208) *Ánko-jubítari śino hemáta […] koróxćite okajaśi hetanea,*

An-ko-yup-itari   *sino*   *hemata […] koro-hci*

1PS-3PO/have-brother-NMNL   really   what   3SO/have-3PS

teh   *okay-a-hci-Ø*   *hetaneya?*

and   exist.PL-0-3PS-PK   FIN

'What on earth had my brothers got […]?' (PLA: 200)

[The main character of the story (S) wonders (R) what can his brothers have possibly got (E) before they hid it in a pile of stuff in a corner of the house.]

266

	ND+	ND–	
F=R			*F = R*
SD+		*I*	*S* = external-*S*
	t		*I* = 'get'
			t = 'my brothers'
SD–		*o*	*o* = 'what'
	(S)		

As for imperfective predicates, telicity seems to make a crucial difference for the reading of relative tense. This is specifically the case for realis imperfective predicates. I discussed in §6.7.2 how telicity does not depend on a E-R relation within the RTT, but rather the fact that telic/atelic distinction is derived separately from language-specific parameters. Although the derivation for all realis imperfective predicates predicts a present tense reference, with a telic predicate the E which is in a simultaneous relation with S and R is better understood not as the event itself, but rather as its present result. As I show below, this kind of relation can be easily mistaken for a [E_S,R] relation, which in turns pertains to irrealis imperfective predicates. As a way of distinguishing between the two, we can describe their difference in terms of the relevance of E to the discussion at hand. For telic realis imperfective predicates, the E is relevant so that, even though the event has already ended, its results are presently addressed, in order to somehow explain something previously mentioned in context. Consider (209).

Example of [E,R,S telic] relation:

(209) *Poro   'iso   'e-nukara   ka   hanki-hii?*
      3SS/be.big   bear   2SS-3SO/see   even   NEG-PK
      'Haven't you seen the big bear?' ['Is it the case that you have not seen it such that now you say so?'] (MRA: 75)
      [A woman (S) asks her friend (R) if she has not seen a bear (E) that was present at a festival they both went to some time before. Just a moment before this question, the friend alluded to the fact she did not see it.]

ND+ ND–

F=R

S=t
I

SD+

SD–

o

F = R
S = t = 'you'
I = 'not see'
o = 'the big bear'
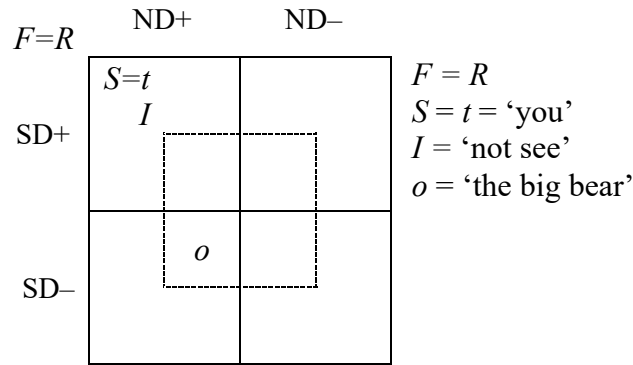
With atelic predicates, we understand the event E is still in process at the time of speech S – i.e. the present tense reading. As an example consider (210).

Example of [E,R,S atelic] relation:

(210) *Hoynu poronno 'e'aykihi 'aa?*

Hoynu   *poronno*   *'e-'ayki-**hi***   *'aa?*

pine.marten   a.lot   2SS-3PO/catch.with.hook-PK   FIN

'You catch a lot of pine martens, don't you?' (PLB: 132)

[The speaker (S,R) comments on the activity of a hunter who is presently hunting (E).]

ND+ ND–

F=R

(S)=t,
I

SD+

SD–

o

F = R
(S) = rethoric-S = t = 'you'
I = 'hunt'
o = 'pine martens'
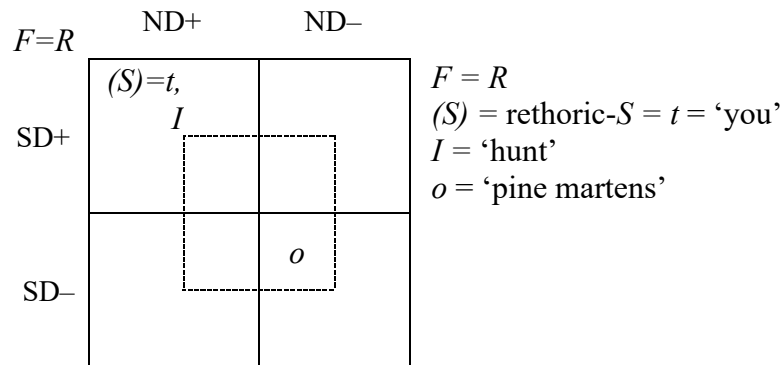
Independently from telicity, in both cases the following relation holds.

I=3 ➔ realis ➔ S=E=R

S=3 ➔ imperfective ➔ S=R

On the other hand, for irrealis imperfective predicates, the E is relevant for the present discussion but there is no direct connection to whatever has been said previously. Here we notice the following relation.

$$I=2 \rightarrow \text{irrealis} \rightarrow S{\neq}E{=}R$$
$$S=3 \rightarrow \text{imperfective} \rightarrow S{=}R$$

Example of [E_R,S] relation:

(211) *'Esinnisahta 'e-numa   ike   hemata   'e-kii-**hii**?*
      this.morning 2SS-stand.up then   what   2SS-3SO/do-PK
      'This morning you woke up and what have you done?' (MRA: 3)
      [A woman (S) asks her friend (R) about what she has done in the morning (E) until the moment the collector went to record them.]

The telic/atelic distinction does not seem to influence the reading of relative tense for irrealis imperfective predicates. Here, in fact, both formalizations of telicity derive a non-present reference tense.

7.2.8 Aspectuals and dubitative expressions explained

On the basis of the derivation process of reference tense I presented here, we are also able to account for the use and distribution of the aspectual *'an* and of the dubitative particle *nanko(o)* 'maybe', which are encountered in rare cases following personal knowledge forms.

269

7.2.8.1 The use of the aspectual *'an*

In contrast to the other aspectual expressions that are found with SA evidentiality, *'an* is attested after PK forms. The possibility of having aspectual expressions placed either after of before an evidential (with no evident change in meaning) is relatively common in Ainu, and this possible double construction seems to especially be a feature of HA evidentiality. This phenomenon is far rarer in SA and it occurs especially with inferentiality (§7.3). What we see from the distribution of *'an*[61] is that it always appears when an anteriority relation between E and S subsists. Specifically, the available tokens are featured with irrealis imperfectives [E_S,R] (as in (212)) and realis perfectives [R,E_S].

(212) *E-niina*   *teh*   *'orowa* *'e-'i-wooneka*   *kusu*
    2SS-collect.wood   SIM   then   2SS-1PO-situation.look   because

    teeta *e-san-i-**hi***   *ne*   ***'an***   *ike* *'aa?*
    here   2SS-descend.SG-0-PK   COP   PRF   FIN

    'You collected wood and then you came down here to check on us, right?' (MRA: 3)

Despite being theoretically possible, no instance of *'an* with irrealis perfectives could be found. This behavior seems in line with the semantic function of the resultative *'an*, which is presenting the results of a concluded event in relation to the present moment (Murasaki, 1976a: 56).

7.2.8.2 The use of *nanko(o)*

Irrealis mood encodes the uncertain attitude of the speaker towards particular events. It characterizes events that have happened or will happen in a moment in point in time detached from the moment of speech and the present reality of the speaker. This uncertain attitude is often borne out by relative tense, and this is especially the case of future tenses that by definition set an event in the out-of-control zone of things that have yet to happen (like example (205) above). In other cases doubt is borne out by the use of separate morphosyntactic material, like adverbs such as *nanko(o)* 'maybe'. This adverb is sometimes found in conjunction with PK. What we would expect here is for *nanko(o)* to appear exclusively with irrealis predicates that intrinsically allow a dubitative reading

---

[61] There are six instances among the total tokens of personal knowledge evidentiality.

of the predicate. Our expectation is actually met for the most part, since out of the 18 PK instances featuring *nanko(o)*, 16 also feature an irrealis predicate.

(213) *'An-haw-ehe*   *nuu*   *yahka wante-**he***   *nee*

       1P-voice-POSS   3SS/3PO/hear though 3SS/3PO/know-PK   COP

       nankoo   *nah*   *'an-ramu.*

       maybe   COMP 1PS-3SO/think

       'I think that even if he hears our voices maybe he will recognize us.'

       (MRA: 9)

Therefore, beside accounting for the occurrence of the dubitative *nanko(o)* specifically with PK, I take the use of this adverb in conjunction to what result to be irrealis predicates as corroborating evidence for the sensibleness of the analysis above. The only two cases that do not meet this prediction involve a first or second person subject on the predicate under the scope of PK. Here it is possible that the use of the dubitative with speech act participants entails some epistemic extensions to the evidential statement that, however, remain hard to define due to the scant number of examples.

7.2.9 Concluding remarks

Throughout the previous two sections, I considered the relevance of PK for the definition of scope verb TAM. The analysis has shown that we can apply the Theory of Territory of Information in order to define temporal relations among the points in time that define relative tense, as postulated in Reichenbach's RTT. This is possible thanks to an analogical comparison between the logical properties of these points in time and the properties of the participants to the exchange of information.

As the main outcome of this analysis, we see that the different deictic relations among speaker, source and information provide a model for defining modality and perfectivity of the predicate under the scope of PK. From the combination of the two, we are able to derive the relative tense reference on the basis of the RTT. However, while the derivation process we saw here does indeed define the (non)-overlapping relations among S, R and E time points, it is not effective as far as indicating the actual ordering of these points with respect to each other (see Table 10). The anteriority or posteriority of S, R and E still mostly rests on interpretation and how one specific event posits itself with respect to the general context.

Although the definition of reference tense is not clear-cut, the derivation process I propose appears to be felicitous in that it correctly predicts the temporal relations existing between the event marked for PK and the present moment of speech based on modality and perfectivity. Furthermore, we notice a correlation between the TAM categories derived via this process and the formal realization of PK. In fact, predicates characterized by a realis modality are marked for PK via the *-hV* form, while irrealis predicates are marked for PK via the *-Ø* form. As we saw in §7.2.6, the distribution of these two forms defines a tendency, so that it is not the case that one form of PK always subsumes the same modality for the predicate it marks. Similarly, it is not the case that statements with a high epistemic or evidential tone can be only marked with the *-hV* form. We can most likely ascribe the discrepancies we notice here to the same issues outlined in §7.2.6, namely an untestable background context or cultural context that influences the position of participants within the TI. Nevertheless, the formal encoding of PK seems to indirectly become an indicator of reference tense in that it provides the reading of modality for the scope predicate. From this the speaker understands the relevant time frame where the event is set.

7.3 Evidence through inference

Moving on from personal knowledge evidentiality, this section discusses inferentiality, or the kind of evidentiality based on inference. When using inferentiality in SA, the speaker bases her statement on a psychophysical stimulus, which either comes directly from or is prompted by an external source. In SA, the formal encoding of this kind of evidentiality is realized in five separate ways, via the forms *ruwehe 'an*, *ruwehe ne*, *sirihi 'an*, *humihi 'an* and *hawehe 'an*. These evidentials have a strong semantic component (see §5.4) that derives originally from the nouns they developed from (i.e. *ru* 'trace', *siri* 'appearance', *hum* 'sound', and *haw* 'voice'). In a parallel way to what we witnessed for personal knowledge evidentiality, the formal encoding of inferentiality in morphosyntax takes separate realizations, which does not seem to be in line with the unitary pragmatic function of this kind of evidentiality. However, what distinguishes inferentiality from personal knowledge evidentiality is that for the former the reason for a formally non-unitary encoding can be ascribed to the aforementioned semantic component of each inferential form.

Throughout the analysis to follow, I propose that the separate formal realizations of inferentiality signal the nature of the stimulus on which evidence is based. In other

words, the noun involved in the origin of inferentials (or the sensorial noun) has the specific function of indicating the channel through which information is acquired. Then, I address the reasons for a speaker's choice among the different available forms of inferentiality. I argue that it is the general physical surroundings in which the conversation takes place, or the background context to it, that licenses certain inferentials depending on the stimulus their sensorial noun entails. These same circumstantial factors may otherwise exclude the use of other sensorial nouns, as the stimulus their sensorial noun entails is incompatible with the described situation. However, after a closer look at the actual distribution of the tokens in the corpora, we notice a number of behaviors of inferentiality that challenge the assumption that the choice of inferential forms is univocally based on the sensorial environment of the event.

Secondly, following from the discussion in §7.2.7, I further consider the interaction of evidentiality and TAM categories. Here, I look at SA inferentials with the aim to show that, similarly to personal knowledge evidentials, their semantico-pragmatic properties help us define the reference tense of the predicate under the scope of evidentiality.

7.3.1 The choice of inferential forms

On a semantic basis, we would expect a distribution of inferential forms to relate to semantic compatibility with the kind of event expressed by the scope verb. The desirable scenario is one where the semantics of the sensorial noun align with either the semantic characteristics of the transmitted event itself or, more generally, with the physical situation in which the transmission of information happens. For example, for each instance of *hawehe 'an* we would expect an event or a situation producing or involving a 'voice' or a sound of some kind. Looking at the corpora, we notice that this expectation is indeed met (at least for the most part). In fact, the use of each specific inferential form appears in direct correlation with the circumstantial situation, that is the setting of information acquisition.

On the basis of quantitative observation, we can then propose a preliminary description of inferentials that stems from their context of use. Furthermore, we can describe inferentials in terms of how their use corresponds to the sensorial stimuli (sight, hearing, etc.) encompassed in these different contexts.

Ruwehe 'an/ne is used when physical circumstances allow the event to be accessed by the speaker through sight or reasoning.

(214) *Hemata   ka   nii   kayki [...]   kehke   wa*

what   even   tree   too   3SS/3PO/break   and

*cokoko   wa isam   **ruwehe 'an**   manu.*

3SS/3PO/fell   CNCL   INF.RSN   REP

'It must have ended up breaking and felling all trees […]' (MRA: 99)

[The speaker, character of the story, cut open the belly of a monster from the inside after having been swallowed whole. Once he gets out, he sees all trees around have been broken and felled down inferring that must have happened during the fight.]

Sirihi 'an is used when physical circumstances allow the event to be accessed by the speaker through sight.

(215) *Too   noski-ke-wa   ke   sine   kamuy reekoh memanke*

lake   3S/center-POSS-from   ?   one   god   really   3SS/float?[62]

*wa   yan   **siri 'an**   manu   ike…*

and   3SS/come.up.PC   INF.VIS   REP   and

'It seemed really that a god came up floating from the center of the lake and…' (TMS: 63)

[The speaker sees from a distance something happening in the center of the lake and infers the god they were expecting is coming.]

Humihi 'an is used when physical circumstances allow the event to be accessed by the speaker through hearing, smell, touch, taste or some kind of internal 'sixth sense' or gut instinct.

---

[62] Tamura herself is not certain about the meaning of this verb that she then translates on the basis of context.

(216) *Sójta aśin turano opóni ájn aśin humhi an manu.*

Soyta	*asin*	*turano*	*oponi*
outside	3SS/go.out.PC	together	from.behind

ayn[u]	*asin*	***humihi 'an***	*manu.*
person	3SS/go.out.PC	INF.FLT	REP

'While going out it seemed a person came out behind him.' (PLA: 100)

[In the attempt of escaping from a demon, a man rushes out of his house. While turning his back to the doorway he has the feeling (or hears like) someone is following him.]

Hawehe 'an is used when physical circumstances allow the event to be accessed by the speaker through hearing.

(217) *Tá oháćisujè śeta húmpa háuhe an.*

Ta	*ohacisuye*	*seta*	*humpa*	***hawehe an***.
that	empty.house.demon	dog	3SS/3PO/crush	INF.HRN

'It seemed that empty-house-demon crushed the dogs.' (PLA: 79)

[Escaping from his control, the character's dogs enter a house possessed by a demon and the speaker hears from the outside the dogs barking and howling as the demon kills them.]

What we notice here is that the stimuli we extrapolate from context is not necessarily exactly the same as the one found in the semantic content of the sensorial noun. The most representative example of this is *humihi 'an*.

(218) *Śine ćéx apuf húmhi am manu.*

Sine	*ceh*	*apuh*	***humhi an***	*manu.*
one	fish	3SS/bite	INF.FLT	REP

'It seemes a fish bit [the bait].' (PLA: 195)

[A fisher infers a fish must have bitten the bait most likely from the pressure on the lure.]

Since in (218) the sensorial stimulus at the basis of inferentiality is touch, it appears that *humihi 'an* is compatible with several stimuli, though its semantic content (i.e. *hum* 'sound') hints solely to hearing.

7.3.2 Internal semantics of inferentials

As we deduce from the examples in §7.3.1, the circumstances of information acquisition limit the sensorial stimuli that are possible routes to accesses information. For instance, in example (217), the event of 'crushing' cannot possibly be accessed through sight, as it is happening within the house and is thus excluded from the speaker's view. In rarer instances, we can recognize the sensorial noun as somehow reflecting the semantic content of the predicate under the scope of inferentiality.[63] Example (217) again shows one such case. Here the semantic content of the verb *humpa* 'crush' specifically encodes a sound (i.e. the sound of crushing), that is semantically echoed by *haw* 'voice' in the inferential form.

We could argue that it is this compatibility between the semantic content of the verb and the semantics of the sensorial noun *haw* the reason for the use of this particular inferential form. However, while this is true in several instances, this correspondence is not at all systematic. In light of the actual use of inferentials in the corpora, the need to operate a distinction between their semantic and functional characteristics is necessary. The following table summarizes the sensorial stimuli characterizing inferential forms on both semantic grounds (the stimulus encoded by the sensorial noun) and functional grounds (the compatible stimuli derived from circumstances).

Table 11 – Semantic and functional stimuli of inferentials

	ruwehe 'an/ne	*sirihi 'an*	*humihi 'an*	*hawehe 'an*
function-related stimuli	sight	sight	non-sight	hearing
semantics-related stimuli	sight	sight	hearing	hearing

This two-directional approach takes into account the functional extensions of inferentiality beyond what would be semantically determined by the sensorial noun. This approach specifically succeeds in highlighting the underlying difference that subsists between *humihi 'an* (compatible with all stimuli that are not sight) and *hawehe 'an* (compatible just with hearing).

However, this approach is still insufficient in obtaining a systematic organization of inferentiality. On the one hand, we see that the underlying differences of a seemingly

---

[63] I addressed this same possibility and the issues connected to a morphosyntactic analysis of inferentials in §5.4.

identical stimulus encompassed by sensorial nouns still remains too vague. Similar circumstantial situations, hinting to the presence of a certain kind of sensorial stimulus available to access information, are in fact encoded via different inferential forms that nevertheless subsume the same sensorial stimulus. This applies specifically to the case of sight (encoded via either *ruwehe 'an* or *sirihi 'an*), as in (214) and (215) above, and hearing (encoded via either *humihi 'an* or *hawehe 'an*). In both (214) and (215) information is seemingly accessed through sight in an analogous way – i.e. the sight of the felled trees all around or (supposedly) the sight of the lake's bubbling water.

On the other hand, circumstantial situations that are not just similar but quite identical (i.e. with functional equivalence) exhibit different inferentials. Compare (219) and (220):

(219) *Útara tēkoro tóxśeno húmhi am manu*

Utara	*teekoro*	*tohseno*	***humihi 'an***	*manu.*
people	really	3PS/sleep.deeply	INF.FLT	REP

'It seemed [those] people were really sleeping deeply.' (PLA: 184)

[The scene takes place at night. The character waits in the dark for everybody in the house to be asleep to act.]

(220)

Reekoh	*etooro-hci*	*'ani*	*mokoro*	***hawehe-hcin 'an***
really	snore-3PS	while	3PS/sleep	INF.HRN<PL>INF.HRN

manu.
REP

'It seemed they were really sleeping while snoring.' (MRA: 45)

[The scene takes place at night. The character is awake in the dark waiting to catch a mouse-demon, as she knows it comes out when everybody is asleep.]

As we will see in the following subsection, an analysis of inferential forms that takes into account semantic content exclusively only partially explains the variation we witness in the formal encoding of inferentiality. Moreover, since formal encoding is also assumed to represent the internal organization of inferentiality as a whole, this approach fails to give us any deeper understanding of the underlying logic of inferentiality.

7.3.3 Sense hierarchy

In order to obtain a systematic organization of inferentiality, I argue in favor of recognizing the higher or lower saliency of a certain inferential form compared to others'. This ranking of inferentials according to saliency rests on the hierarchy of senses I postulated in §6.4, that arranges senses, or the means with which the speaker processes psychophysical stimuli coming from the external world, by ranking them according to higher or lower reliability.

Sight > Smell/Taste - Touch > Hearing

Referring to some kind of saliency would allow us to put inferential forms in a hierarchical relation with each other, and the nature of this saliency would clarify the parameters to which SA inferentiality is sensitive. On the basis of this hierarchy of senses, we can project SA inferential forms onto a similar hierarchy. In this process, I consider the senses involved in information acquisition that are encompassed by both the sensorial nouns' semantics and the functional application of inferentials as a whole (as in Table 11).

We understand both *ruwehe 'an/ne* and *sirihi 'an* as equally related to sight, since we cannot make any more specific distinction on the sole basis of their semantic-functional characteristics. On the other hand, *humihi 'an* and *hawehe 'an* can be easily put into a hierarchical relation with each other as the senses encompassed by the former (i.e. hearing, smell, taste and touch) are more reliable than the one encompassed by the latter (i.e. hearing). However, the fact that hearing is nonetheless a sense relevant for both forms suggests that this approach to senses is effective only to a certain extent. Moreover, the reference to the abovementioned hierarchical organization does not shed any light on the presence of two separate formalizations of inferentiality encompassing sight. This formal dichotomy thus remains still an unresolved issue.

The one value this approach has, however, is that it provides the ground to argue for a higher saliency of some inferentials compared to others – namely the higher saliency of *ruwehe 'an/ne* and *sirihi 'an* compared to *humihi 'an* and *hawehe 'an*. This is easily recognizable as a visual versus non-visual distinction, and gives us some organization of SA inferentiality, although it is not exhaustive in highlighting its most specific characteristics.

Visual	>	Non-visual
ruwehe 'an		*humihi 'an*
sirihi 'an	>	*hawehe 'an*

The next step is to try and obtain a more fine-grained organization of inferentials that goes beyond the general visual versus non-visual distinction.

7.3.4 Perception and processing of sensorial stimuli

In light of the issues identified after the postulation of a sense hierarchy, we understand that the encoding and organization of inferentials cannot be based exclusively on the physical evidence retrievable from the circumstances of information acquisition, nor from a superficial consideration of the semantic content of inferential nouns.

We must seek discriminating factors through deeper consideration of the semantics of the sensorial nouns and through a closer consideration of the nature of the senses involved in the acquisition of information. What I propose is that, within the visual and non-visual domains, what differentiates the apparently identical sense encompassed by inferentials (which in turn implies a doubling of formal encoding) is the processing of the sensorial stimulus. As my main assumption regarding SA inferentiality, I have stated above that each form involves a psychophysical stimulus that either *comes directly* from or is *prompted* by external circumstances. To say that a stimulus can be prompted by a situation in the outside world means that, although the event, or content of information, pertains to a dimension external to the speaker that acquires it, the sense through which such information is acquired is internalized, and it thus pertains to a dimension internal to the speaker.

I introduced the concept of speaker's internal or external perception of the source in §2.2.1.2, developed on the basis of Squartini's (2008) proposal for inferentiality. Inferentiality in SA represents one example where Squartini's theory is applicable as the difference in the externality of perception has repercussions on the formal encoding used to mark inferentiality. Moreover, it also explains the occurrence of non-inferential overtones (in the case at hand, mirative and epistemic overtones) within inferential expressions. It must be remembered that the one difference between my proposal and Squartini's is that the process of observing an event always follows the physical input coming from the source of said event. That is, the physical source precedes whatever kind of speaker's observation of an event.

The most straightforward example of this difference is the pair *ruwehe 'an/ne(e)* and *sirihi 'an*. Both forms subsume the use of sight in accessing information content. However, while *sirihi 'an* refers to a view that solely relates to an external dimension, *ruwehe 'an/ne(e)* refers to a view that from the external dimension gets internalized by the speaker and thus becomes part of her internal dimension. The semantics of the sensorial noun is indicative in this case, since the meaning of *ruu* 'trace' hints at a fixed and internalized state of sight. It is obvious that we cannot provide satisfactory evidence of which inferentials do and do not entail processing of the stimulus only on the basis of their internal semantics. However, we can resort to other approaches in order to argue in favor of stimulus internalization, and subsequently for its importance for the organization of inferentiality.

The analysis in the remainder of this subsection stems from the assumption that *ruwehe 'an/ne* and *humihi 'an* encompass processing (i.e. internalization) of the stimulus, as opposed to *sirihi 'an* and *hawehe 'an* that do not. I support this assumption through a comparison of each form in these pairs with its sense-analogous counterpart in the other pair (i.e. sight-related *ruwehe 'an/ne* and *sirihi 'an* versus non-sight-related *humihi 'an* and *hawehe 'an*). Besides taking into account features like the alternation between *'an* and *ne* with *ruwehe* and the pragmatic extensions taken by *hawehe 'an*, for sight-related evidentials I address the occurrence and types of epistemics encountered with them. By doing so I do not intend to say that either one or the other of these evidentials encode an epistemic meaning nor that they have an intrinsic epistemic overtone. Rather, I take the acceptability of specific epistemics (i.e. epistemics of certainty or doubt) with *ruwehe 'an* and *sirihi 'an* as a piece of evidence that the evidentials have different reliability, which exactly permits the speaker to corroborate or doubt the sensorial evidence, subsequently meaning that the sensorial stimuli that originate these evidentials have different ontological statuses, by which one is more salient than the other. Finally, this will help us refine our organization of inferentials.

7.3.4.1 Sight-related inferentials

First let us consider the sight-related inferentials *ruwehe 'an/ne* and *sirihi 'an*. Epistemics (in the shape of adverbials) are sometimes used in conjunction with *ruwehe 'an/ne* and *sirihi 'an* but their meaning is utterly different. With the former inferential we find, for instance, adverbs like *sino* or *sonno* 'really', while with the latter adverbials like *neeno* 'as if' normally appear.

(221) *Annukara manújke, śino anáxne inúnpe iɓe né-ruhe am manu.*

A-nukara	*manu*	*ike,*	***sino***	*anahne*	*inumpe*
1PS-3SO/look	REP	and	really	EMP	silver.colored

ipe	*ne*	***ruwehe 'an***	*manu.*
food	COP	INF.RSN	REP

'When I looked, it really was a silverfish.' (PLA: 195)

[The speaker, who is fishing, notices that the fish he has just caught is indeed a silverfish when it surfaces from inside the water.]

(222) *Tuhso **neeno** 'an puy ahun **sirihi 'an** manu.*

cave	as.if	3SS/exist.PC	hole	3SS/enter.PC	INF.VIS	REP

'It seemed a hole like a cave opened [but it could have been something else]' (MRA: 95)

[The speaker climbs a mountain to go kill a demon that lives there – he walks until he thinks he recognizes the cave where the demon is.]

The epistemic overtones of certainty and doubt borne out by the adverbials used in these instances are evident. The physical circumstances in which the acquisition of information happens comply with the occurrence of such epistemic overtones, so that we contrast (221) and (222) in terms of their different tone of reliability. However, we should not think that the presence of epistemics directly influences the formal realization of inferentiality. This would in fact mean we intend epistemicity to apply simultaneously with evidentiality, and that formal encoding depends on the interaction of both of these categories (as it was for personal knowledge evidentiality, see §7.2). However, this is not the case for inferentiality.

More accurately, we can say that epistemicity is central in the understanding of inferentiality in that it provides important insights regarding the reliability of the sensorial stimulus. The event, that is accessed through sight and encoded via *sirihi 'an*, can be questioned by the speaker in terms of her attitude towards it (i.e. its truth value). This questioning means that the stimulus of information acquisition has a somewhat low reliability. In other words, the visual stimulus still relates to a speaker external dimension and thus allows the speaker to doubt the information conveyed. In contrast, this does not happen for *ruwehe 'an/ne*. With this inferential we do not encounter

281

expressions of doubt, but rather of certainty. Here, the fact that the speaker can vouch for the event accessed through sight and then encoded via *ruwehe 'an/ne* means that the stimulus of information acquisition has a high reliability. In other words, the stimulus accessed through sight now belongs to a speaker internal dimension and thus allows the speaker to be certain towards the informational content conveyed.

Another piece of evidence comes from the formal *'an/ne* alternation that concerns the final verb within inferential forms. In §3.2, we saw how this peculiarity is limited exclusively to *ruwehe* while all other inferentials only feature *'an* as the final verb. What we first notice about tokens of *ruwehe ne* is that they appear to encode a subtype of inferentiality that resembles evidentiality based on a direct source more than it resembles evidentiality based on inference. The tone of directivity borne out by these expressions is so strong that we can hardly argue there is any inference involved (especially in cases where a speech act participant is also included in the transmitted event). Rather, the circumstances understood from the context present a situation where the event is indeed accessed directly by the speaker. Let us consider example (214) above (repeated here as (223)) and example (224).

(223) *Hemata   ka   nii   kayki […]   kehke   wa*
      what   even   tree   too   3SS/3PO/break and

      *cokoko   wa isam   **ruwehe 'an**   manu.*
      3SS/3PO/fell   CNCL   INF.RSN   REP
      'It must have ended up breaking and felling all trees […]' (MRA: 99)
      [The speaker cut open the belly of a monster from the inside after having been swallowed whole. Once he gets out, he sees all trees around have been broken and felled down inferring that must have happened during the fight.]

(224) *Pon náj oxta ifuráje rúhe né.*
      *Pon   nay   ohta   i-huraye   **ruwehe ne**.*
      3SS/be.small   river   place+in 1PL.OBJ-3SS/wash INF.RSN
      'She washed me in a small river.' (PLA: 227)
      [The speaker discusses an event he lived through.]

Our initial assumption for this analysis was that in SA the possessive form of *ruu* 'trace' followed by a verb is used to express evidence based on inference but, from these observations, we should possibly revise our statement and say that *ruwehe 'an/ne*

is polyfunctional since it expresses inferentiality and personal knowledge evidentiality. However, this would create a problem of formal categorization in that a whole separate formal encoding for direct evidentiality has already been detected and discussed. What would be the reason for two different encoding of the same kind of evidentiality? Leaving aside this issue for the time being, at this stage of our analysis we can deduce that *ruwehe 'an* must encode a proper inference based on an (unprocessed) visual stimulus, while *ruwehe ne* must encode inference coming from a somewhat "direct" stimulus, whose directiveness we can ascribe to a completed processing of the original visual stimulus. That is, the latter would indicate an evidential that is a more "reliable" counterpart of the former.

Given the properties of the two forms, we could think that what we claim for *ruwehe 'an* would also apply for *sirihi 'an*, since both forms encode inference based on a sight stimulus. However, there is a second characteristic of *ruwehe ne(e)* that must be addressed. This form in fact is only featured in East Sakhalin Ainu corpora, while it is completely absent from West Sakhalin Ainu corpora. In an analogous way, *sirihi 'an* is only accounted for in West Sakhalin dialects, while it never appears in East Sakhalin dialects. Therefore, we do not see an overlapping of values that results in two evidential forms entailing the same sensorial stimulus with the same processing. We can make sense of this behavior by saying that the presence of a form *ruwehe ne(e)* in East Sakhalin Ainu, that differentiates itself from *ruwehe 'an*, compensates for the absence of *sirihi 'an* (which possibly never developed as an evidential in this variety). In these dialects, it is *ruwehe 'an* that entails a less reliable (unprocessed) visual stimulus while *ruwehe ne(e)* has developed to entail a more reliable (processed) visual stimulus. In contrast, in West Sakhalin Ainu, where an inferential *sirihi 'an* has developed, the function of *ruwehe 'an* has settled to enatail a more reliable visual stimulus.

7.3.4.2 Non-sight-related inferentials

We turn now to the non-sight-related inferentials *humihi 'an* and *hawehe 'an*. I compare them in terms of 1) the nature of the sensory stimuli they are connected to and 2) the pragmatic extensions they may take.

We saw in §7.3.2 that *humihi 'an* semantically and functionally relates to a larger number of senses (hearing, taste, smell, touch and internal 'sixth sense') than *hawehe 'an* does (only hearing). The first argument I propose to show that the former supersedes the latter in terms of reliability takes into account the concrete nature of the

sensorial stimuli it is connected to. Taste, touch and smell are three senses that need concrete contact with the external entity that triggers the stimulus, while in contrast hearing does not entail such contact with the entity that produces a sound. The physicality of the stimulus then makes a crucial difference in that perception through certain senses concretely interacts with the speaker's individuality – that is, certain senses physically link the external world to the speaker.

Furthermore, we notice the peculiar behavior of *hawehe 'an* that is in line with our deduction that it encodes a non-visual stimulus that has not been internalized. That is, the use of *hawehe 'an* to express hearsay.

(225) *Tani ne-ámpe tékoro pírikahno utara okaj háuhe an.*

Tani neampe   tekoro pirika(h)-no   utara okay   hawehe an.

now TOP   really be.good-ADV people 3PS/exist.PL   INF.HRN

'Now they say those people lived very wealthily' (PLA: 128)

Although the occurrences of hearsay *hawehe 'an* are scant in the corpora (and like *ruwehe ne(e)* appear exclusively in East Sakhalin dialects), this pragmatic extension that is unmet for *humihi 'an* seems to support our claim that these two inferentials differs in terms of processing of the sensorial stimulus.

7.3.4.3 Sensorial saliency

At this point of the analysis, we can revise the hierarchical organization of inferentials according to their saliency, which is defined in terms of sensorial saliency and internal processing of the stimuli they are semantically and functionally connected to. The following table summarizes the organization.

Table 12 – Organization of inferential forms

processed visual stimulus		unprocessed visual stimulus		processed non-visual stimulus		unprocessed non-visual stimulus
ruwehe 'an / ruwehe ne	>	*sirihi 'an / ruwehe 'an*	>	*humihi 'an*	>	*hawehe 'an*

With such an organization of inferentials, we successfully bypass the issues coming from apparently identical sensorial stimuli formally encoded in different ways. Nonetheless, as a collateral effect, the approach I present here has revealed a number of

oddities that seem to work against our aim to organize SA inferentiality into a unitary system. For one thing, the analysis up to this point leaves open questions regarding the seeming polyfunctionality of *ruwehe* and *hawehe* respectively as inferential-direct and inferential-hearsay. Furthermore, at a closer look to the tokens in the corpora, a direct function for *ruwehe* is retrievable in West Sakhalin dialects as well. This function is encoded via the only available form for this evidential, with the final verb *'an*. Consider (226).

(226) *Tan húśko karàutó an rúhe am manuj.*

Tan	*husko*	*karauto*	*an*	***ruwehe 'an***	*manuy.*
this	3SS/be.old	box	3SS/exist.PC	INF.RSN	REP

'There was this old box.' (PLA: 200)

In addition to this issue, the same polyfunctionality of *ruwehe 'an* we witness in West Sakhalin Ainu unexpectedly shows in East Sakhalin dialects too, despite the alleged specialization of *ruwehe 'an* to express inference on the basis of an unprocessed visual stimulus and of *ruwehe ne(e)* to express inference on the basis of a processed visual stimulus. This appears clearly from examples (221) and (224) above.

In order to solve these issues, in the next subsection I specifically address the following:

- What property of the verbs *'an* and *ne(e)* causes the direct-inferential dichotomy in the first place?
- Why does a similar inferential/non-inferential dichotomy show for *hawehe* as well, though the no form **hawehe ne(e)* is retrievable?
- What causes the direct-inferential dichotomy among instances encoded via *ruwehe 'an* in both West and East Sakhalin Ainu dialects?

As we will see, the answers to these questions not only clarify the organization of inferentiality itself, but also give us a broader perspective on the overall organization of evidentiality in SA as a whole.

7.3.5 Event perspective and telicity: the case of *ruwehe ne(e)* and *hawehe ʻan*

In order to answer the questions regarding *ruwehe ne(e)* and *hawehe ʻan* pointed out at the end of the previous subsection, I consider here both the verb present in these two inferential forms (i.e. the copula *ne(e)* and the intransitive *ʻan*) and on the predicate falling under the scope of inferentiality. The focus here is on perfectivity and telicity as entailed respectively by the two verbal constituents of inferential expressions.

7.3.5.1 Event perspective

With regards to *ruwehe*, I propose that the reason for the pragmatic inferential/non-inferential distinction lies in the speaker's internal or external perspective of the event. In §7.3.4 above, I discussed how inferential forms may or may not entail a processing of the stimulus used to access the information content. Here, on the other hand, the issue is not the stance of the speaker towards the stimuls that conveys the event, but rather her stance towards the event. I am not talking in this case about the attitude of the speaker towards the event in terms of how much she vouches for the truthfulness of the informational content (i.e. this argumentation is unrelated to epistemic modality), rather I am referring to the "point of observation" taken by the speaker towards the event.

From a theoretical point of view, the perspective taken by the speaker towards a certain event can be said to define perfectivity (see §6.7.4), where an internal perspective triggers an imperfective meaning for the event and an external perspective triggers a perfective meaning for the event. For the case at hand, we seem to have an overt lexical cue that allows us to understand what kind of perspective the speaker takes towards the event – the verb within the inferential form. I argue that the occurrence of the verb *ʻan* within the inferential form signals that the speaker has an external perspective of the event (i.e. of the the information content), while the occurrence of the copula *ne(e)* signals that the speaker's perspective is internal. A piece of evidence in support of the internal perspective encompassed by the copula *ne(e)* comes from the presence of first or second person referents for one of the arguments of the verb under the scope of evidentiality. Pragmatically, this signals that inferentiality applies to an event that includes one of the speech act participants as seen, for instance, in example (224) above. Hence the internal perspective on the information content. Among the 12 tokens of *ruwehe ne(e)* attested in the corpora for East Sakhalin, the involvement of a speech act participant referenced by a first or second person agreement marker on the verb is featured 10 times (83% of the tokens). In contrast, the involvement of a speech

act participant in conjunction with the use of *ruwehe 'an* is not only far rarer (3 out of 44 instances for a 7% of tokens), but we also obtain a strong mirative reading of the expression. This nuance of the speaker's unawareness of the event appears to clearly suggest an external perception of the event itself.

(227) *Oropékano ínkar ajjáko, osóma ćiśe oxta ahupánte, okajan rúhe am manuj*

   Oro-peka-no   inkar-an   yako, osoma cise   ohta
   place-through-ADV   look-1PS   when? feces house place+in

   *ahup-an   te[h] okay-an **ruhe an**   manuy.*
   enter.PL-1PS   RSLT-1PS   INF.RSN   REP

   'When I looked around, (I realized) I must have entered a privy.' (PLA: 160)

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

   Dedicated studies on Ainu perfectivity are presently utterly absent and would certainly be useful to support my claim about the imperfective/perfective reading of the copula *ne(e)* and *'an* 'exist'. Nevertheless, the preliminary obervations on these two latter verbs and their co-occurrence with speech act participant arguments suggests that the copula *ne(e)* entails an internal perspective on the event on the speaker's part (i.e. it is an imperfective verb), so that the form *ruwehe ne(e)* bears out a direct evidential meaning. Conversely, the verb *'an* entails an external perspective on the event on the speaker's part (i.e. it is a perfective verb) – that is, the form *ruwehe 'an* bears out an inferential meaning. Therefore, the property of *ne(e)* and *'an*, in connection with *ruwehe*, that causes the direct-inferential dichotomy seems to be the perfectivity entailed by these two verbs.

7.3.5.2 Predicate telicity

As for the inferential/non-inferential distinction we witness among the instances of *ruwehe 'an*, the discriminant obviously cannot be ascribed to the perfectivity features of the verb within the inferential form (i.e. *'an*). We must then turn to considering the features of the predicate under the scope of the inferential form. Since perfectivity has already proved to play a substantial role in the definition of the inferential forms' pragmatics and semantics, we would expect that here too perfectivity is the discriminant

factor that explains the inferential/non-inferential distinction for *ruwehe 'an*. However, this seems not to be the case. As examples like (226) (repeated as (228)) illustrate, perfectivity of the predicate under the scope of inferentiality appears to be overridden by some other feature of that predicate.

(228) *Tan húśko karàutó **an rúhe am** manuj.*

Tan	*husko*	*karauto*	*an*	*ruwehe 'an*	*manuy.*
this	3SS/be.old	box	3SS/exist.PC	INF.RSN	REP

'There was this old box.' (PLA: 200)

The perfective *an* 'exist' is the predicate under the scope of inferentiality and the expression has a direct reading – this can be easily compared with (221), repeated as (229), where the imperfective copula *ne(e)* is the scope predicate and the expression is equally interpreted with a direct meaning.

(229) *Annukara manújke, śino anáxne inúnpe ibé né-ruhe am manu.*

A-nukara	*manu*	*ike,*	*sino*	*anahne*	*inumpe*
1PS-3SO/look	REP		then	really EMP	silver.colored

ipe	*ne*	*ruhe an*	*manu.*
food	COP	INF.RSN	REP

'When I looked, it really was a silverfish.' (PLA: 195)

[The speaker, who is fishing, notices that the fish he has just caught is indeed a silverfish when it surfaces from inside the water.]

There is some feature that is decisive for the inferential or non-inferential reading of the expression. The changing feature of the scope predicate is telicity. We seem to notice a direct correlation between atelic predicates and personal knowledge readings of the evidential expression on one hand (which is why *ruwehe 'an* has a personal knowledge meaning in both examples above given that the scope verbs are the atelic copula and the verb *'an* 'exist'), and between telic predicates and inferential readings on the other hand (as for the telic predicate *'ahupan the 'okayan* 'I had entered' in example (227)).

Differences in scope predicate telicity seem to felicitously explain the inferential/non-inferential variation of *ruwehe 'an*, but there is a chance for this same variation to be determined on semantic basis, as suggested by the case of *hawehe 'an*.

Example (225) showed an instance of *hawehe 'an* with a non-inferential, hearsay reading – this particular example features the atelic verb *'an* as the scope predicate. However, other equally atelic predicates found under the scope of this same evidential do not seem to bear out this hearsay meaning, but rather they express inference based on hearing. The discriminant here may be the semantics of the predicate as indicating position or state, but unfortunately the very scant occurrences of *hawehe 'an* with such predicates do not allow us to pursue this matter further.

7.3.6 Summary of inferentiality

In this first half of the analysis of SA inferentiality, I focused on the semantico-pragmatic characteristics of inferential forms. Starting from a consideration of their inner semantics, I discussed SA inferentials in terms of the sensorial stimuli they subsume as the source of information. Based on this semantic approach, I highlighted the fact that not only do inferential forms clearly encompass quite different sensorial stimuli, but also that these sensorial stimuli, with their ontological characteristics, place the relative inferential forms of SA into a hierarchical relation. This hierarchy of inferentials is ultimately based on source reliability and allows us to make sense of the variety of formalizations we see within the domain of inferential evidentiality.

7.3.7 Inferentiality beyond information source

Similarly to what I proposed for personal knowledge evidentiality, I argue for the relevance of inferentiality in bringing out the TAM characteristics of the scope predicate that may not overtly surface at the morphosyntactic level. As with *-hV/-Ø*, one of the categories determined via inferentiality is tense, or reference tense. Here, I show how reference tense is borne out by an interplay between the ontological status of the sensorial stimulus entailed by the inferential form and the telicity value of the scope predicate. The interplay of these features eventually translates into a temporal relation that connects 1) the moment of evaluation of the source, 2) the time span in which the sensorial stimulus persists and 3) the occurrence of the event in a relation of simultaneity or anteriority. I then formalize such temporal relation by resorting to Reichenbach's Theory of Tense Reference.

7.3.8 Ontological status of the source

Before we discuss the derivation process of relative tense, we must provide a definition of "ontological status of the source". This term refers to the possibility for the sensorial stimulus of the inferential source to endure and maintain its existential status, independently from the presence of the event it originated from. In §7.3.2, I discussed the inner semantics of inferential forms. We now need to address the original semantics of this sensorial noun in its own right.

If we look back at the morphosyntactic structure of inferentials (see §5.4), we can decompose the inferential forms into possessive constructions whose semantics we can loosely render as follows.

ruwehe 'an/ne(e)	< 'there is/it is the trace of…'
sirihi 'an	< 'there is the appearance of…'
humihi 'an	< 'there is the sound of…'
hawehe 'an	< 'there is the voice of…'

This literal rendering of inferential forms suggests a dependency of the sensorial noun on the event being described. In other words, for inferentiality expressed via *humihi 'an* we can assert that if at the moment of speech there is (*'an*) a sound (*hum*) on which we can base our inference, there is an event from which this sound originates. Once we take such a semantics-oriented approach to inferential forms, we soon realize a crucial difference in the existential properties subsumed by the separate sensorial nouns within inferentials. In fact, only the noun *ruu* can be argued to have the properties of endurance relative to the ontological status; all other inferential nouns do not possess such properties.

Let us consider the inferentials that entail the sensorial nouns *siri* 'appearence', *hum* 'sound', and *haw* 'voice'. As long as the event (or the circumstances it takes place in) is preserved, the 'appearance', 'sound' or 'voice' that is the source to access it, subsists as well. However, the moment this event (or the relative circumstances) cease to exist, the 'view', 'sound' or 'voice' connected to it are inevitably bound to end as well. Simply put, for instance, there can be no 'sound' of something if that something does not exist anymore. A different situation shows for *ruu* 'trace'. As long as the event (or its circumstances) are preserved, the 'trace' that originates from it also persists. In this sense *ruu* is no different from the other inferential nouns. However, even in the

eventuality that an event ceases to exist, the status of the 'trace' connected to that event may still hold, though its origin has disappeared. In other words, there can still be a 'trace' of something despite the non-existence of this original something. The ontological status of sensorial nouns then differs strikingly, as the endurance of the stimulus of *siri*, *hum* and *haw* is intrinsically dependent on an originating event, while the one of *ruu* has its own independency.

7.3.9 Relative tense derivation

Starting from these assumptions on semantics, I argue that the variables we need to take into account in the derivation of reference tense are the ontological status of the stimulus entailed by the sensorial nouns on inferentials and the telicity features of the predicate falling under the scope of inferentiality. Through a process of analogy similar to what we applied for personal knowledge evidentiality (see §7.2.7), I show how the participants and elements involved in information exchange that happens through inferentiality can be translated onto the temporal dimension. Here they are found to represent separate phases of information acquisition and are put into a relation of posteriority, anteriority or contemporaneity with each other. On these grounds, we are able to formalize temporal relations existing among the separate phases via Reichenbach's RTT, and to work out reference tense for the scope predicate.

7.3.9.1 Application of RTT

I shall start with a brief review of the three main elements involved in the acquisition of information through inference. These are the information itself, the source (the sensorial stimulus through which the event is accessed), and the speaker (who bases her inference on the sensorial evidence given by the source).

(230) *Tá oháćisujè śeta húmpa háuhe an.*

Ta	*ohacisuye*	*seta*	*humpa*	***hawehe an***.
that	empty.house.demon	dog	3SS/3PO/crush	INF.HRN

'It seemed that empty-house-demon crushed the dogs.' (PLA: 79)

p= 'the empty-house-demon crushed the dogs'

STIM= 'there is the voice of p'

EV= speaker infers that p from STIM

291

By a process of analogy, we can compare these three elements to three separate phases in time in which the inferential acquisition of information happens. First, the information corresponds to event, that constitutes the meaningful content the speaker accesses through evidentiality. Second, the sensorial stimulus is the reference point for the event that relates the event to the moment of speech. Third, the moment of speech represents the speaker.

At this point we can re-discuss these temporal phases present in the acquisition of information as the E, R, S points in time as proposed by Reichenbach. From here, we can assume a fixed ordering relation for these three points in time, that we derive on the basis of the logical process subsumed in the acquisition of information through inferentiality. In fact, inferentiality logically requires a psychophysical stimulus to either coexist with or follow its originating event. No inferential statement would be possible if either the event or a sensorial evidence to access this event were not present. It follows that the moment of speech may never come before the event has happened. It would be impossible to utter an inferential statement about an event that has yet to happen, or to hypothesize the presence of a stimulus connected to an event that has not yet occurred. When we translate this logical dependency into the RTT, we obtain a relation of posteriority by which E precedes R that precedes S.

$$E > R > S$$

This dependency gives us the first rule for the derivation. We now have a fixed ordering for the three moments in time from where to shape relative tense.

What we need to establish now is whether these moments overlap, as this crucially distinguishes present and past time reference. On a theoretical basis, we can argue for the overlapping of S with R. Inferentiality in fact expresses evidence from a sensorial stimulus which is available at the moment of speech. If no stimulus (i.e. no source) is available at the moment of speech, there would be no basis for any inference.

(231) *Hemata*	*ka*	*nii*	*kayki [...]*	*kehke*	*wa*
what	even	tree	too	3SS/3PO/break	and
cokoko	*wa isam*		*ruwehe 'an*	*manu.*	
3SS/3PO/fell	CNCL		INF.RSN	REP	

'It must have ended up breaking and felling all trees […]' (MRA: 99)

[The speaker, character of the story, cut open the belly of a monster from the inside after having been swallowed whole. Once he gets out, he sees all trees around have been broken and felled down inferring that must have happened during the fight.]

p= 'it ended up breaking and felling all trees'

STIM= 'there is the trace of p'

EV= speaker infers that p from STIM

From this, we infer a relation of contemporaneity between S and R (i.e. S=R).

As for the E-R relation, we need to operate a further distinction. We saw how, in the case of *sirihi 'an*, *humihi 'an* and *hawehe 'an*, the ontological status of the sensorial stimulus source of inferentiality does not allow it to exist independently from the event that originates it. The sensorial stimulus and the event exist at the same time. When we translate this dependency into the RTT, we obtain a contemporaneity relation between E and R (i.e. E=R). Consider example (230) above.

In contrast, for *ruwehe 'an/ne(e)*, the ontological status of the stimulus may allow it to exist independently from the event that originates it (see §7.3.8). Given this possibility for the sensorial stimulus of 'trace', we translate the relation between E and R as one that allows both contemporaneity and non-contemporaneity (i.e. E=/≠R). As a comparison consider examples (231), where the trace refers to an event is not in progress, and (232), where the trace refers to a presently evolving event.

(232) *Neja iréśḱe ćká, tani śirúkunni kusu, utóxśeka rúheśin án.*

Neya	*i-reske*	*c[i]ka[h],*	*tani*	*sir(u)kunni*
that	1PO-3PS/bring-up	bird	now	3SS/be.dark

kusu,	*utohseka*	***ruhe*-*hcin an*.**
because	3PS/sleep	INF.RSN-<PL>-INF.RSN

'Now, because it was late, those birds that raised me must have been asleep.' (PLA: 21)

[Being late at night, the speaker infers that the birds are sleeping.]

The discriminant here rests in the scope predicate telicity. In (231) the predicate *cokoko wa isam* 'end up felling' is telic as it describes an event which is concluded at the moment of speech (this is also clearly signaled by the conclusive aspectual *wa isam*).

Conversely, in (232) the verb *utohseka* 'sleep' is atelic and describes an event that is ongoing at the moment of speech.

What follows from this is that, with atelic predicates, the moment of speech is included in the moment when the event takes place. In our framework, this means E=S. With telic predicates, the moment of speech is clearly posterior to the moment when the event happens. We represent this in our framework as E≠S. The fact that predicate telicity defines the E-S relation only follows from the fixed temporal ordering of E-R-S imposed by the logic of inferential acquisition of information we discussed.

7.3.9.2 Deriving relative tense

Resorting to these rules, we are now able to derive the relative tense of the scope predicate. Table 13 summarizes the derivation by steps, from left to right, to end with the derived reference tense. Starting from the features superimposed by virtue of the logic at the basis of inferentiality, it summarizes the influence of scope predicate telicity relevant for *ruwehe 'an*, the E-R relation subsumed by stimulus ontology and the possible relevance of perfectivity (for *ruwehe ne(e)*). Looking at the outcomes, we can summarize SA inferential forms by dividing them into those that intrinsically trigger a present time reference (*ruwehe nee, sirihi 'an, humihi 'an* and *hawehe 'an*), and those that may trigger either a present or past time reference (*ruwehe 'an*).

Table 13 – Derivation of reference tense

Form	Superimposed features	Scope predicate telicity	Stimulus ontology	Perfectivity	S-R-E relation	Reference tense
ruwehe ne(e)		obsolete	obsolete	E=S	E,R,S	present
ruwehe 'an	E>R>S R=S	telic E≠S	E=/≠R	obsolete	E_R,S	past
		atelic E=S			E,R,S	present
sirihi 'an				obsolete		
humihi 'an		obsolete	E=R			
hawehe 'an						

One objection to this proposal could be that the imposition of the S=E relation by the copula in *ruwehe ne(e)* on the basis of its perfectivity is found to override all S-E-R relations imposed by other variables. Moreover, the imposition of a S≠E relation we would logically expect by the imperfectivity of *'an*, as found in other inferential forms, does not happen. Why is the internal perfectivity of the inferential relevant for tense derivation for *ruwehe ne(e)* but not for *ruwehe 'an*? This should probably be seen as a result of what seemingly was an ongoing process in the language, involving the development of a functionally specialized *ruwehe ne(e)* from the original *ruwehe 'an*. We can hypothesize that the use of the copula as the final verb in this inferential form is aimed at eroding the dichotomy borne out by *ruwehe 'an* as a means to make telicity obsolete.

7.3.10 Summary

In this second half of the analysis on SA inferentiality, I considered the possible function of this kind of evidentiality as an indicator of tense reference for the scope predicate. I delineated a process of reference tense derivation based on Reichenbach's RTT after I translated the properties of the elements and participants involved in information exchange into his Theory by analogy (§7.2.7.1). This was accomplished starting from the logical phases of information acquisition subsumed in inferentiality, and in light of the inner semantics of inferential forms themselves. The outcomes of the derivation show that some SA inferentials (namely, *ruwehe nee, sirihi 'an, humihi 'an* and *hawehe 'an*) can be recognized as tense reference markers for the predicate, in that they systematically entail a present tense reading. In other cases (i.e. *ruwehe 'an*) the inferential forms set the temporal frame relevant for the reading of the predicate's reference tense, which is then determined on the basis of its telicity.

7.4 Reportative evidentiality

I now turn to reportative evidentiality, the kind of evidentiality based on reported information. When using reportative in a statement, the speaker signals that she does not have first-hand access to information, which has been accessed indirectly through somebody else's words. The reportative form of SA on which I focus here is the final particle *manu*.

Reportative evidentiality includes both hearsay and quotative. Hearsay reportative entails that the information was acquired through verbal report either wilfully or forcedly, and whose source is left unspecified.

(233) *Koro*   *kun*   *mah*   *'isam*   **manu**.

3SS/3SO/have   obligation(?)   woman   3SS/not.be   REP

'[They say] he has no wife.' (MRA: 84)

With quotative reportative, on the other hand, the information was acquired through verbal report whose source is overtly specified and indicates the original purveyor of the reported information.

(234) *Kijáne aj-juphi eićárare manu: "Ene pahno kamúi utara…"*

Kiyane   *an-yup[i]-hi*   *eicarare*   **manu**:

3SS/be.of.old.age   1P-elder.brother-POSS   3SS/doubt   REP

"Ene   pahno kamuy utara…"

  such until   god   people

'My eldest brother did not believe [and said]: "Such mighty gods…"'
(PLA: 209)

Manu is also found with another meaning in traditional folklore. Here, it signals traditional knowledge coming from shared or traditional knowledge. When using *manu* in this context, the speaker is somehow implicating that she has acquired the information through verbal report and that the original source for this information is either no longer retrievable or that is not relevant for the purpose of information sharing. Example (235) shows the incipit of a tale.

(235) *Án-kor hénkihi iréśke manu…*

An-kor   *henki-hi*   *i-reske*   **manu***…*

1PL-have   old.man-POSS   1PO-3SS/bring.up   REP

'I was brought up by my grandfather…' (PLA: 149)

296

As it is traditionally an oral language, it is not surprising that Ainu has developed such a use of the reportative evidential, which has allegedly developed to report traditional knowledge pertaining to the general cultural background of the community.

In the remainder of this section, I consider the possible shift of *manu* from a marker of proper reportative evidentiality (hearsay and quotative) to a specialized marker of evidence coming from traditional or shared knowledge. Evidence for this alleged shift of *manu* comes from its distribution both across genres (especially traditional narratives as opposed to conversation) and within the same genre but across different dialects. The final outcome seems to suggest that the shift of *manu* might be an areal feature. The diachronic characteristics of this shift are hardly possible to speculate at all, given the different times in which the reference data were collected. However, I advance some proposal on its synchronic development in a dedicated section below.

7.4.1 Reportative proper – hearsay and quotative

Examples (233) and (234) above show the use of *manu* as a marker of hearsay and quotative reportative. This use is rare in conversations and direct discourse in general. In fact, it is far more common to find *manu* accompanied in these environments by a lexical reinforcement – an overt nominal or verbal constituent whose function is the one to overtly mark the specific or unspecified source for the reported information.

(236) *Neja mánka kíren tán pá né pákhe ráj manu, nú manu.*

Neya	*manka*	*kiren*	*tan*	*pa*	*ne*
that	3SS/be.rich	tungus	that	year	COP

pakhe	*ray*	***manu***	***nu***	*manu.*
spring	3SS/die	REP	3SS/3SO/hear	REP

'They said that rich Tungus had died that spring, [so] he heard.' (PLA: 139)

(237) *Suu   naa   oypeh naa   kara-hci   ranke [...]   suye-hci*

pot	even	vessel	even	3PO/make-3PS	ITR	3PO/cook-3PS

ne	***manu***,	*an-unu-hu-hcin*	***nah***	***ye-hci***.
?	REP	1P-mother-POSS-PL	COMP	3SO/say-3PS

'It is said they made pots and vessels and cooked, so my parents said.' (TMK: 34)

In (236) the hearsay function of *manu* is highlighted by the lexical reinforcement of *nu* '[so] he heard' as to signal that there is no clear source for the information. In (237), the quotative function is brought out by the construction *nah ye* 'say that' and the source of the information is overtly marked via the constituent *anunuhuhcin* 'my parents', argument of the verb *ye* 'say'. Given this use of lexical reinforcements, we see that, while the *manu* formally encodes only reportative evidentiality, its hearsay or quotative functions are pragmatically implicated through the use of other lexical items in the clause.

7.4.2 Reportative as traditional knowledge

We observe the tendency that, when accompanied by lexical reinforcements, *manu* functions as a marker of reportative evidentiality, while in narrative genres it is largely found to mark traditional knowledge coming from tradition (as in (235) above). In this function it is never found to co-occur with lexical reinforcements. This phenomenon is a case of shift, where a formerly indirect evidential is used as a marker of direct evidentiality. An evidential shift allegedly happens here thanks to the processing of information – that is, once the information previously acquired through an indirect source is processed by the speaker and enters the set of things he possesses knowledge about, this information can be shared again by the speaker via direct evidentiality (see §2.2.1.3).

In the case of SA, the phenomenon of shift seems then to be triggered by the process by which knowledge becomes a part of the speaker's cultural background, traditionally transmitted orally and thus through hearsay. Formally, the shift we witness in SA differs from other better known cases of shift due to information assimilation (e.g. evidential shift in Turkish as in Aksu-Koç and Slobin, 1986). In the case at hand, in fact, we do not see any formal change in the shape of the evidential, which would be expected as a way to signal that assimilation has occurred. In SA *manu* remains unchanged even after the functional shift happens. As I will show in Chapter 8, this constrasts with what we see in Hokkaidō Ainu, where the shift from reportative evidential to direct evidential based on traditional knowledge does entail a formal change of the evidential form (from *hawas* to *ruwe ne*). One reason to treat *manu* as a marker of traditional knowledge in these instances is its complementary distribution with the HA form *ruwe ne* found in the same function (see §8.3). Moreover, the

systematic absence of lexical reinforcements when *manu* fulfills a traditional knowledge evidential function indicates a process of specialization of the reportative form that never resulted in a formal change, as theoretically expected, but that is nevertheless (un)marked formally in the language. Again, the traditional knowledge marker function of the reportative *manu* is pragmatically implicated.

7.4.3 Traditional knowledge *manu* as an areal feature

The phenomenon of shift is limited to the genre of narration and as such it is a very limited environment that gives us an insight into the possible reasons for the use of lexical reinforcements with *manu* in order to express hearsay and reportative.

The phenomenon of shift is not present in all reference corpora in the same degree. We also see considerable variation in the use of *manu* as a marker of direct evidence coming from traditional knowledge within dialects of SA (i.e. Western Sakhalin and Eastern Sakhalin Ainu). Interestingly, we notice how the emergence of the use of *manu* as a direct evidential seems to be an areal feature that spreads throughout geographically adjacent villages (see Figure G in appx.). In the dialects where *manu* is systematically used as a direct evidential and in those where the phenomenon of functional shift appears to be in an intermediate stage, we see the systematic use of lexical reinforcement with hearsay and quotative *manu*. My deduction here is that the overt marking of proper hearsay via lexical reinforcement is a way to formally distinguish hearsay and quotative from the instances where *manu* is used as a marker of traditional knowledge. Conversely, in those dialects where few examples of traditional knowledge *manu* can be found, there is no need to highlight its function via lexical reinforcements when *manu* expresses proper reportative, since there is no possibility for misunderstanding.

The Rayciska and Ussoro sub-dialects of West Sakhalin represent the possible final stage of the process of shift we argued for. In these sub-dialects *manu* is used almost exclusively as a direct evidential for information shared as traditional knowledge, while it is hardly ever used as a proper reportative expressing hearsay or quotative. However, a satisfying diachronic analysis of this alledged development of the phenomenon of shift is practically impossible to pursue in light of the very different times in which the reference data were collected. That is, a comparison between Western Sakhalin dialects and Eastern Sakhalin dialects, where the use of *manu* as a reportative is far more common, is unfeasible.

7.5 Double evidentiality

In this section, I briefly consider the cases where two evidential forms are used simultaneously on the same predicate. Cross-linguistically, double evidentiality is claimed to express subtle nuances relating to types of information source, that can be interrelated or independent from one another (Aikhenvald, 2004: 88). Having two markers of evidentiality for one statement seems to have a pragmatic function such as separating the speaker's source of evidence from the original source possessed by someone else who previously reported the same information, or signalling two separate and yet complementary sources of evidence (Aikhenvald, 2004: 93). As I show below, while the typological tendency for separate evidentials to mark separate complementary sources might be a sensible conclusion for SA double evidential constructions, there are also cases where one of the evidentials loses its original function, seemingly retaining only an epistemic value.

Double evidentiality is overall rare in SA. By comparison, the occurrence of more than one evidential form on the same predicate appears to be far more common in HA (see Chapter 8). Though few in number, the tokens of double evidentiality featured in the reference corpora are sufficient for a brief investigation into the semantic and pragmatic constraints that influence the co-occurrence of two evidentials.

One instance of double evidentiality sees personal knowledge evidentiality appearing in conjunction with inferentiality. In such instances, personal knowledge evidentiality always appears marked via -*hV* and inferentiality takes the shape of either *ruwehe 'an* or *sirihi 'an*. Syntactically, personal knowledge evidentiality is found to precede inferentiality, which is expected considering the nominalizing function of -*hV* (see §5.2.2). A reversed ordering of evidential forms such as **ruwehe 'an-i-hi* is never encountered. On the semantic side, it appears that, when personal knowledge evidentiality is used along with inferentiality, the former loses its evidential force and conveys only an epistemic meaning. personal knowledge evidentiality can be thus seen as falling under the semantic scope of inferentiality, whose evidential function is clearly retrievable.

(238) *Ćiśe oxmaxta śine hójnu ikòkajohó né-ruhe an.*

Cise	*oh-mah-ta*	*sine*	*hoynu*	*i-ko-kayo-**ho***
house	3SG/place-behind-in	one	pine.marten	1PO-APPL-3SS/call-PK

ne	***ruhe an***.
COP	INF.RSN

'Surely one pine marten must have called me [from] behind the house.'

(PLA: 115)

[A man wakes up after a vision and, looking around, understands that the voice he heard while unconscious was the one of a pine marten that wished to kill him.]

Pragmatically, the occurrence of personal knowledge evidentiality with inferentiality expressed via *ruwehe 'an* or *sirihi 'an* is no surprise either. These two forms in fact were shown to encode (within the scope of inferentiality) source of information based on a highly-reliable sensorial stimulus (§7.3.3). Moreover, I discussed *ruwehe 'an* as encompassing a processing of the stimulus, which brings the content of information closer to the speaker's dimension. Although not necessarily originating from the same kind of source, personal knowledge evidentiality and *ruwehe 'an* inferentiaity are brought together in terms of how they subsume a process of assimilation. Interestingly we notice how personal knowledge evidentiality is never encountered in conjunction with *humihi 'an* or *hawehe 'an*, which eventually suggests that instances of double evidentiality like the one in (238) are licensed on a pragmatic basis.

The only evidential that systematically appears to form double constructions with all other evidential forms is the reportative *manu*. In all the instances featured in the texts, *manu* syntactically follows the evidential it accompanies. Furthermore, in almost all cases, *manu* is recognized as having undergone the process of shift so that it functions as a marker of direct evidence coming from traditional or shared knowledge. Exceptions to this are three isolated cases found in MRA, where a reportative *manu* follows personal knowledge evidentiality marked via *-hV*.

(239)

Haciko	*or-o-wa*	*ohta*	*'an*	*cise*
3SS/be.small	3S/place-POSS-from	3S/place+in	3SS/exist.PC	house

*e-horokaramu-**hu***		*nee*	***manu**, nah*	*ye-hci.*
APPL-3SS/3SO/miss-PK		COP	REP ADV	3SS/say-3PO

'It seems [that bear] in fact missed the cage where it had been since it was little.' (MRA: 76)

We can propose that the two separate evidentials in instances like (239) are used to separately mark the speaker's evidence and the original evidence for the event possessed by the character that first reported the information. However, the reason for such an overlapping of forms that encode such different sources of information is not entirely clear. A higher number of instances of double evidentiality would generally be beneficial to our understanding the dynamics that cause and regulate the co-occurrence of more than one evidential form. Further research on this topic would especially clarify cases like (239) which are at odds with the assumed organization of SA evidentiality (see §7.7).

7.6 Remaining issues – scarcity of tokens and predicate telicity

Throughout the analysis I presented above, I discussed the formal encodings of evidentiality in connection to the semantico-pragmatic characteristics subsumed by this category in the specific case of SA. In light of the outcomes, I can propose an organic categorization of evidentials for this Ainu variety (see §7.7), but some issues may be the cause of some discrepancies in the analysis.

One first issue has to do with the scarcity of tokens for some kinds of evidentiality. This is especially the case of *hawehe 'an* in Western Sakhalin dialects, where this form is used commonly but with a very limited range of predicates and in analogous or identical contexts. Similarly, the scarcity of interrogative tokens of personal knowledge evidentiality was addressed as a problem for supporting the derivation of personal knowledge forms' evidentiality and epistemicity (§7.2.9).

One other issue concerns predicate telicity. In the case of verbs of motion, state and possession in particular, we see how their (a)telicity cannot be safely determined within the theoretical framework based on event decomposition that we adopted for this particular category (see §6.7.2). Depending on the case, motion verbs like *eh* 'come' seem to focus either on the path or the goal of movement, while verbs denoting possession like *koro* 'have' may stress the process of acquiring something or its final result. This happens independently from the inner incrementality of arguments or from the aspectual expressions that may appear together with these verbs. In this respect, a

more fine-grained definition of telicity for SA based on the incorporation of further tokens contining these verbs would indeed benefit future analyses of evidentiality.

7.7 SA evidential system

In light of the analysis presented in the previous sections, I propose an organization of SA evidential forms according to the tone of reliability of source they encompass. This is summarized in the following scheme.

Table 14 – Organization of SA evidentials

REL+						REL–
-hV > -Ø > ruwehe ne(e) > ruwehe 'an > sirihi 'an > humihi 'an > hawehe 'an > manu						

There are two main reasons for such an approach to the overall organization of SA evidentiality. Firstly, reliability of the source has proved to be the one feature that systematically corresponds to the formal variation we witness at the morphosyntactic level. Secondly, source reliability, as the underlying characteristic that shapes SA evidentiality and regulates its surface realization, overcomes the otherwise inevitable problems that would arise if we were to try and fit the case of SA into alternative schemes, such as a direct/indirect or a visual/non-visual organization (see §2.2.1.1). Avoiding these options that are incompatible with the case at hand, the organization of SA evidentiality is based on a continuum of source reliability that goes from a most reliable source (encoded via *-hV* personal knowledge evidentiality) to a least reliable source (encoded via *manu*).

Chapter 8
Hokkaidō Ainu Evidentials

8.1 Content of the chapter

Chapter 8 deals with the semantics and pragmatics of evidential forms in Hokkaidō Ainu (HA). The chapter is divided into three main sections. In section §8.2, I present the formal linguistic devices that are employed as direct and indirect evidentials in this Ainu variety, considering once more their origin and historical development. In light of the common origin of direct and indirect forms, I set the foundation for the analysis to follow by addressing specifically the semantico-pragmatic characteristics of the nominal and verbal constituents that constitute these forms, and the characteristics possessed by the evidentials as a whole. Sections §8.3 and §8.4 are respectively dedicated to direct and indirect evidentials, considered separately following the observations outlined in the preceding section.

The outcomes of these three sections suggest that HA evidentials can be organized according to the level of source reliability they encode (thus being analogous to SA evidentials) but also according to event accessibility. Furthermore, the analysis shows how, with regards to direct evidentiality, the theory of territory of information applied to SA personal knowledge evidentiality (see §7.2) does not provide an adequate framework for HA. I dedicate subsection §8.6.2 to discuss the reasons why this is the case. Eventually, I take source reliability and event accessibility to be the two variables that regulate the category of evidentiality in HA. To conclude, §8.5 deals with the cases of double evidentiality encountered in the reference corpora, while §8.6 and §8.7 highlight some remaining issues and summarize the discussion.

8.2 HA evidentials – an overview on semantics, pragmatics, and functions

The aim of this section is to introduce the formal linguistic devices employed in HA to encode direct and indirect evidentiality. In §8.3 and §8.4, I separately address these two conceptual domains of evidentiality and their forms separately, but before this is presented, I discuss some common semantico-pragmatic characteristics of these forms that provide the grounding for the discussion to follow.

Direct and indirect evidentiality in HA is encoded via eight separate forms – *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne* (that belong to the domain of direct evidentiality) and *siri an*, *siri ki*, *humi as*, and *hawe as* (that belong to the domain of indirect

evidentiality). As I mentioned in §5.3 and §5.5, these evidentials have historically developed from four nouns that semantically entail a certain kind of sensorial perception: *ru* 'trace', *sir* 'appearance', *hum* 'sound', and *haw* 'voice'. Therefore, in this respect, HA evidential forms resemble SA inferentials which share a common origin. However, differently from what is true for SA, where the contribution of sensorial perception nouns in the formal encoding of evidentiality is restricted to the domain of inferentiality, in HA *ru*, *sir*, *hum*, and *haw* are involved in the formal encoding of evidentials in both direct and indirect evidentiality. Indeed the similarities with the cognate forms of SA are numerous on semantico-pragmatic grounds, but we also recognize some peculiar features of HA evidentials that sharply distinguish them from those of SA. This ultimately suggest the need for a different overall organization of evidentials in HA.

I begin by providing some illustrative examples. Examples (240)-(243) show those evidential forms falling under the conceptual domain of direct evidentiality – *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne*. *Ruwe ne* is used when the speaker bases her statement on direct evidence coming from a visual source or from a reasoning process. In the latter case, the original stimulus that first aided information acquisition is often backgrounded and direct evidence comes from information having entered the speaker's personal knowledge – that is, a process of assimilation has taken place (see §2.2.1.3). For further details on assimilation concerning *ruwe ne*, see §8.3.1 below.

(240) *Tane anakne*   *yuk*   *cikoykip*   *kamuy cikoykip*
now   TOP   deer   animal   bear   animal

kap-uhu   *poronno*   *cise*   *esik*   *kane (ne)*
3/skin-POSS   a.lot   house   be.full   ADV

a-sat-ke   *wa*   *a-kor*   **ruwe ne**   *korka, ...*
4S-3PO/be.dry-CAUS   and   4S-3PO/have   DIR.RSN   but
'Now the house is full of many skins of deers and bears, I dried and kept them but…' (NKG: 228)
[The speaker summarizes what he did after the hunting season, having killed many animals.]

Siri ne is used when the event is accessible to the speaker through sight.

(241) *Sinuma* *ka* *ko-ray-niwkes*   ***siri ne***

   he even APPL-3SS/3SO/die-be.difficult DIR.VIS

   noyne *iki* *a.*

   as.if do PRF

   'It was like he too could not [separate from me].' (KAY: 19-5,13)

   [The speaker comments on a situation where she and another person are hugging each other.]

Humi ne is used when the event is accessible to the speaker through hearing, smell, touch, taste or some kind of internal 'sixth sense'.

(242) *Usa* *sisakpe* *a-i-y-e-re* ***humi ne*** *ya…*

   be.various delicious.food 4S-4O-0-eat-CAUS DIR.FLT INT

   'Whether I was given various delicious foods…' (TMA: 42)

   [The speaker surveys the pros and cons of her staying at somebody else's house, including the way she was fed.]

Hawe ne is used when the event is accessible to the speaker through hearing.

(243) *I-y-erampokiwen* *a* *nispa* *poka,* *sone* *siknu*

   4O-0-3SS/feel.pity PRF noble.man at.least truly 3SS/be.safe

   wa an ***hawe*** *he* *an?*

   RSLT DIR.HRN <FOC> DIR.HRN

   'Truly at least the man who has had pity for me has survived?' (TMB: 12)

   [The speaker asks about a man, whose passing away would be reported to her via verbal report.]

Examples (244)-(249) illustrate the evidential forms falling under the conceptual domain of indirect evidentiality – *siri an*, *siri ki*, *humi as*, and *hawe as*. *Siri an* is used when physical circumstances allow the event to be inferred by the speaker on the basis of reasoning or through sight.

(244) *Epitta   siwnin   sinrus ne   a   p   anakne,   easir*

all   be.green   moss   COP   PRF   NMLZ   TOP   really

*ka,   so-ho   a-kar   apekor   **siran**.*

even 3/floor-POSS 4S-3SO/make   just.like   IND.RSN

'It was all (covered) in green moss but really it seemed just like a carpet

had been unrolled.' (TMB: 54)

[The speaker is describing the scenery he sees once he gets to the top of the mountain

he was climbing.]

Siri ki is used when physical circumstances allow the event to be inferred by the speaker

through sight.

(245) *A-yup-ihi   ek   kor an   i-y-ekari*

4-older.brother-POSS   3SS/come.PC   PRG   4O-0-towards

*ki   **siri iki**.*

do   IND.VIS

'Toward me it seemed my older brother was coming.' (TMB: 60)

[The speaker sees his brother coming his way from the distance.]

(246) *Ineap suke   tom-te   wa   **sir-ki**   ya*

INTJ   cooking   3SS/3SO/shine-CAUS and   appearence-be INT

ka   a-eramiskari   no   suke   kor an.

even 4S-3SO/not.know   ADV   3SS/3SO/cook PRG

'She was cooking so skilfully that I was surprised [lit.: as I did not even

know whether it appeared so.]' (KAY: 5-8,7)

[The speaker is commenting on the cooking abilities of a woman that are beyond his

expectations and unlike anything he has ever seen before.]

Humi as is used when physical circumstances allow the event to be inferred by the

speaker through hearing, smell, touch, taste or some kind of internal 'sixth sense'.

(247) *Tane i-ci-re*   *noyne* **hum-as**   *pe   ne   kusu,*

now   4O-3SS/burn-CAUS   as.if   IND.FLT   NMLZ   COP   because

ar-kimatek-ka   *a-ki.*

CMPL-SLV/3SO/be.surprised-TR   4S-VO/do

'Now because it did seem like he grilled me, I was really surprised at that.' (KAY: 19-4,27)

[The speaker utters this sentence from inside a pot where he was put by a god.]

Hawe as is used when physical circumstances allow the event to be inferred by the speaker through hearing or, more commonly, when an event is reported verbally.

(248) *Inne*   *topa-ha*   *i-kesampa*

people.be.numerous 3S/group-POSS   4O-chase

wa   arki   **hawe-as**.

and   come.PL   IND.HRN

'It seemed a large group of people came chasing us.' (NKC: 118)

[The speaker utters this sentence while escaping and hearing loud voices approaching.]

(249) *Okkayo*   *haw [...]*   *"Ahun-ke*   *yak*

young.man   voice   2SS/3SO/enter.PC-CAUS   if

pirka   *wa"*   *sekor* **haw-as**   *wa*

3SS/be.good   FIN   ADV   IND.HRN   and

haw-e   *a-nu.*

voice-POSS   4S-3SO/hear

'"You may let him come in" it was said and I heard [that] voice.' (BUG: 257)

[The speaker is outside of a house and is waiting for the people inside to give him the permission to enter, which he eventually hears being uttered by the master of the house.]

Let us start our overview of semantics and pragmatics by examining the building blocks that constitute the evidential forms taken into account, which we can separate into nominal and verbal constituents. Recall that direct and indirect evidentials are formed from sensorial perception nouns, but we notice an important difference among

indirect evidentials, namely the lack of the noun *ru* 'trace'. This noun in fact only takes part in the formal encoding of direct evidentials (i.e. *ruwe ne*) but not in the one of indirect evidentials. It is never encountered within the domain of indirect evidentiality, either in its possessive or in its non-possessive form that are both attested possibilities in the formation of indirect forms (see §5.5).

In §8.4.1, I better address the semantic reasons behind this discrepancy in what otherwise would be a one-to-one correspondence of forms between direct and indirect evidentials (e.g. *humi ne >< humi as*, *hawe ne >< hawe as*). In contrast, the employment of *sir* 'appearence', *hum* 'sound', and *haw* 'voice' in both direct and indirect evidentials indicate that the same sensorial stimuli are equally involved in the two separate domains of HA evidentiality for which I present below a clear-cut theoretical distinction with regard to the immediateness and more generally to the dynamics of information acquisition. Furthermore, as for SA inferentiality (see §7.3), for HA evidentials too we must address the issue of semantic compatibility between the stimulus subsumed by the sensorial noun and the event expressed by the scope predicate, as the two might not make reference to the same kind of sensorial perception. For example, consider (242) above where the auditory stimulus entailed by *hum* 'sound' in the evidential *humi ne* contrasts with the gustative perception semantically subsumed by the scope predicate *usa sisakpe aiyere* 'I was given delicious food'.

Formal encoding gives us further insight into the semantico-pragmatic properties of HA evidentials. With regard to the verbal constituents that constitute the evidential forms under investigation, we notice that the copula *ne* appears within direct forms, while in indirect forms the verbs vary among *ki/iki* 'do', *as* 'stand' and *an* 'exist', and with none of them in common to all four indirect forms. With the one important exception of *an* 'exist' (which I discuss in §8.3), none of the verbs featured in indirect forms is encountered in direct forms and vice versa. This suggests that it is possible that some property of these verbs plays a decisive role in discerning between the direct and indirect function of HA evidential forms.

Finally, example (246) highlights an outstanding characteristic of HA indirect forms, namely their use with a non-evidential function. In fact, the form *sirki* in (246) above is better seen as an aspectual, though it is structurally and semantically fully equivalent to *siri iki* in (245) that fulfills a strictly evidential function. I already mentioned the possible non-evidential use of some Ainu evidential forms or even their use as independent predication, especially while discussing SA inferential *sirihi 'an* (see

§7.3). However, in contrast to what we have seen for SA, this phenomenon in HA is far more widespread and articulated and requires further attention.

From these preliminary observations, we obtain an unclear picture of HA evidentials' usage, meanings, and functions. Therefore, in the following four subsections, I further expand on the issues noted in this introduction in order to shed light on the following issues: 1) the semantico-pragmatic factor which makes evidentials related to a specific sensorial stimulus compatible with certain events, 2) whether it is the semantic properties of the evidentials' verbal constituents that distinguishes the direct or indirect function of the forms, 3) the non-evidential functions of evidential forms, and 4) the pragmatic factor that ultimately justifies diversification of evidential forms in HA.

8.2.1 Nominal constituents

Given the strong semantic component that HA evidentials possess by virtue of the sensorial nouns from which they develop, we would expect the use of evidential forms to depend on a semantic compatibility between the sensorial stimulus encompassed by the sensorial noun and the inner semantics of the event described by the scope predicate, the content of information, or at least the circumstantial physical situation in which information acquisition happens. For instance, for each occurrence of *siri ne* or *siri ki* we would expect the event to describe a situation that is visible or that involves the sight of something, such that the speaker can physically access content of information through this particular sense.

At the same time, we understand that the inner semantics of the event or the circumstances of information acquisition may impose limitations on the sensorial stimuli that can possibly be taken as access to said information. Consider example (247). Given the specific circumstances of information acquisition here, the speaker cannot possibly access information through sight because the speaker is inside of a pot and the event related to the information at hand is happening out of view. We might argue that it is indeed the semantic compatibility between the sensorial stimulus encoded by the evidential form and the inner semantic contour of the event described by the scope predicate that accounts for the use of one or another evidential form. However, the correspondence we assume is not systematic, since there are several cases where this stimulus-event semantic correspondence does not hold.

Evidentials developing from *hum* 'sound' provide a good example of this. Let us consider again *humas* in (247) or *humi ne* in (242). It is true that sight in both circumstances of information acquisition illustrated in these examples is not an available stimulus to access the event (and therefore that the use of evidentials containing the noun *sir* would be inappropriate). It is also true that the events described by the scope predicates, *cire* 'grill' and *ere* 'feed', do not comply with the sensorial stimulus semantically encompassed by *humas* and *humi ne*, that is 'sound'. In fact, for (247) we understand that the speaker bases his inference on a tactile stimulus (most likely deriving from the burns caused by the fire), while for (242) information acquisition happens via a gustative stimulus.

In light of these discrepancies, it is quite obvious that we need to operate a distinction between the semantic and the functional characteristics of direct and indirect forms. With this approach, all evidentials become compatible not only with the sensorial stimulus that is encompassed semantically by the relevant sensorial noun, but also with other sensorial stimuli defined by the circumstances of information acquisition. These may or may not differ from the stimulus entailed by the sensorial perception noun. I define which are these compatible stimuli through empirical observation of evidentials in context. Table 15 summarizes the semantics-relevant and functional-relevant stimuli that characterize HA evidentials.

Table 15 – Semantic and functional stimuli of HA evidentials

	ruwe ne	*siri ne, siri an, siri ki*	*humi ne, humi as*	*hawe ne, hawe as*
function-related stimuli	sight	sight	non-sight	hearing
semantics-related stimuli	sight	sight	hearing	hearing

At this stage of the analysis, we find ourselves facing the same scenario described for SA inferentials in §7.3.2. The two-directional approach that considers both the inner semantics and the functional applications of direct and indirect evidentials succeeds in explaining some underlying differences that exist among forms developing from semantically equivalent sensorial perceptions nouns, namely *humi ne*/*humi as* (compatible with all stimuli that are not sight) and *hawe ne*/*hawe as* (compatible just

with hearing). Nevertheless, the approach is faulty in other respects. In fact, it does not provide any relevant insights on the reasons behind a double formal encoding for direct evidentiality that equally refers to information acquisition based on sight, namely *ruwe ne* and *siri ne*. As a consequence, differentiating between semantic- and function-driven compatibility ultimately does not effectively explain why we have such variety of formal encoding for evidentiality in HA.

With regard to the overall organization of evidentiality in HA, we can refine our analysis by arguing for the higher saliency of certain evidentials compared to others. Again as I proposed for SA inferentials in §7.3.3, assuming some kind of saliency (based on sense reliability) allows us to organize HA evidentials into a hierarchical relation. At the same time, it allows us to define the semantico-pragmatic parameters related to HA evidentiality. The hierarchy I refer to in this instance is a hierarchy of senses (see §6.4) that arranges the senses with which the speaker processes psychophysical stimuli coming from the external world according to their higher or lower reliability. This same hierarchy was applied to the case of SA inferentiality (see §7.3.3) and it is repeated below for convenience.

<center>Sight > Smell/Taste - Touch > Hearing</center>

With reference to this hierarchy, we can arrange HA evidentials by taking into account both their inner semantics and their functional application as summarized in Table 15 above. The picture we obtain is the following, showing the higher saliency of evidentials that include the nouns *ru* 'trace' and *sir* 'appearence' compared to those that include the nouns *hum* 'sound' and *haw* 'voice'. This is easily recognizable as a visual versus non-visual distinction.

Visual	>	Non-visual
ruwe ne		*humi ne*
siri ne	>	*humi as*
siri an		*hawe ne*
siri ki		*hawe as*

Since we are not able to derive any further specification from their semantic and functional character, we can group together the direct evidentials *ruwe ne* and *siri ne*, and the indirect evidentials *siri an* and *siri ki* as sight evidentials. As for the evidentials developing from *hum* 'sound' and *haw* 'voice', we could argue that *humi ne* and *humi*

<center>312</center>

as place higher in the hierarchy with respect to *hawe ne* and *hawe as* as the senses encompassed by the former (i.e. smell/taste and touch) are more reliable by virtue of their functional application than the latter evidentials only related to hearing. However, the fact that both evidentials pairs indeed relate to hearing makes this conclusion only partially accurate, as it is not entirely clear why (as in the case of *ruwe ne* and *siri ne*) information acquisition based on the same sensorial stimulus is formally encoded in the language via two separate forms. That is, no safe hierarchical relation among *humi ne*, *humi as*, *hawe ne*, and *hawe as* can be proposed at this stage.

The semantico-functional approach and the postulation of a sense hierarchy, though effective to a certain extent, fail to explain important behaviors of HA evidentials. Specifically, we have yet to solve the impasse as to why evidentials within an evidential subdomain that seemingly relates to the same sensorial stimulus or stimuli can display separate formal realizations (e.g. *ruwe ne* >< *siri ne*). Furthermore, we need to understand why evidentials that either semantically or functionally are compatible with the same stimulus or stimuli (e.g. *humi ne* and *humi as*) are equally employed to mark direct and indirect evidentiality, two domains of evidentiality theoretically in contrast with regards to the process and dynamics of information acquisition. While I address the former issue in §8.3 and §8.4, I solve the latter one by addressing the properties of verbal constituents of HA evidentials in the next subsection.

8.2.2 Verbal constituents

In light of the observations on nominal constituents provided in §8.2.1, we reached the preliminary conclusion that all evidential forms that developed from the same sensorial perception nouns, and that as a consequence are brought together on the basis of the stimulus involved in the acquisition of information, are equivalent in terms of the kind of evidentiality they encode. From this perspective, as far as the overall organization of HA evidentiality is concerned, evidential forms are arranged as in the hierarchy depicted above, which is based on semantico-pragmatic parameters that take into account the properties of sensorial perception nouns and the properties of the scope predicate.

However, evidentials in use disprove this conclusion. As the examples in the opening of this section illustrate, evidentials encompassing the same sensorial perception noun are employed in HA to encode kinds of evidentiality that pertain to separate conceptual domains – namely direct and indirect evidentiality. With the

exception of *ru* 'trace' that takes part only in the encoding of direct evidentiality as *ruwe ne*, all other sensorial perception nouns exhibit evidential forms that differ in terms of immediateness of information acquisition, if not in terms of the kind of source involved in the acquisition of information.

In this subsection, I propose that the immediateness of acquisition depends on the internal or external perspective the speaker has on the event and that it is this difference in perspective that defines the direct or indirect reading of the evidential form. Moreover, I argue that the perspective taken by the speaker and the direct or indirect function of evidentials is formally mirrored in the encoding of evidentials via distinct verbs. The overt formal difference helps to discern the function of those evidentials that develop from the same sensorial perception nouns.

I introduced the concept of speaker's perspective in §7.3.5.1 when discussing SA inferentials that, specifically in the case of *ruwehe 'an/ne(e)*, display a direct-indirect polysemy analogous to the one I address here. Like in the case presented in Chapter 7, the speaker's perspective does not relate to how the speaker vouches for the truthfulness of the content of information or her personal stance towards it, but rather it relates to her "point of observation". Theoretically, I discussed perspective towards an event as the feature that defines perfectivity (see §6.7.4). In §7.3.5.1, I argued that SA provides a lexical cue to whether speaker's perspective is internal or external, and this is morphosyntactically signaled by the verb used within evidential forms. On the one hand, the perfective verb *'an* 'exist' signals a speaker's external perspective, and on the other hand the imperfective copula *ne(e)* signals an internal perspective. Based on the semantic interaction that exists between these verbs and the sensorial perception nouns which form inferentials, and in light of further evidence coming from the use and distribution of first and second persons as opposed to third persons with these inferentials, the final outcome was that the use of the copula *ne(e)* is a characteristic of direct evidentiality while the presence of *'an* 'exist' is a characteristic of indirect evidentiality (in the SA case, inferentiality).

Keeping in mind the analysis proposed for SA inferentials, I approach the discussion of HA direct and indirect evidentials in §8.3 and §8.4 with the assumption that these latter evidentials present a case analogous to the SA one. In light of the fact that the copula *ne* consistently appears within direct forms, while other verbal constituents are present in indirect forms (such as the one-place verb *an* 'exist'), I argue that in this Ainu variety there also exists a distinction between external and internal

speaker's perspective towards the content of information. This distinction proves to be both conceptual and formal. Furthermore, this distinction allows us to improve our understanding of the semantico-pragmatic organization of HA evidentiality, since it underlines how the pivotal parameter for the definition of this category in this Ainu variety is not just source reliability (as in SA) but also event accessibility.

8.2.3 Poly-functionality of evidential forms

Before I procede onwards, I shall first focus on the poly-functionality that indirect evidential forms show in this Ainu variety. In particular, I give an overview of their use as dependent predication with an aspectual function and their use as independent predication with the function of lexical verbs. Throughout the remainder of this section, I will refer to *siri an*, *siri ki*, *humi as*, and *hawe as* as sensorial perception predicates (SPPs), a term I already introduced in Chapter 5. This allows me to discuss these four formal devices without resorting to the term "evidential", which would be inappropriate given their functions surveyed here. For the purpose of the present analysis, the term SPP is limited to the four abovementioned forms, differently from how I use it in Chapter 5 where it also includes the HA forms that encode direct evidentiality.

8.2.3.1 Dependent predication SPPs as aspectuals

Beside that of evidential markers, SPPs of HA fulfill an additional function when they are a dependent predication in the sentence: they are aspectual markers. SPPs employed in an aspectual function make up 23% of the total tokens of *siri an*, *siri ki*, *humi as*, and *hawe as* in my corpora. Although for these tokens we indeed recognize a function that is not restricted to information source, they nonetheless systematically retain an evidential overtone that essentially makes them aspectual-evidentials. In other words, at least in the language depicted in my reference corpora, there is no SPP with an exclusively aspectual function. This overlapping of functions is addressed by Satō (2013) who specifically focuses on the aspectual-modal-evidential properties of *siri an* that he defines as essentially polysemous, in light of its versatility. Although the scope of Satō's study is limited to the Chitose dialect of HA, his observations are applicable to *siri an* and to the other SPPs encountered in the other dialects considered in this study. Supporting or disproving Satō's analysis falls out of the scope of the present investigation, so I limit myself to considering the aspectual uses of *siri an*, *siri ki*, *humi*

as, and *hawe as*. I leave further investigation of SPP characteristics and of the interaction among different verbal categories and SPPs to future research.

Satō's (2013) main focus on *siri an* is not surprising, as this is the SPP with the most varied aspectual functions. Together with a notional verb this SPP forms a periphrastic or complex verb contruction and it can express resultative and progressive aspect. In these instances it is found in the variant *siran* with the non-possessive form of the sensorial noun *sir*. With this function, *siran* is linked to the notional verb most commonly via the conjunctions *wa* 'and' or *kor* 'while, when', and as such becomes analogous to the resultative and progressive constructions *wa an* and *kor an* (see e.g. Tamura, 2000: 185-6; Bugaeva, 2004: 58-64). This analogy is not casual, as the verb *an* 'exist' that semantically provides the resultative or progressive meaning is present in both cases. In the words of Tamura (2000: 186), *siran* in these constructions "expresses an unspecified or vaguely defined condition". This definition seems to address *siran*'s overtone of doubt and thus its relation with epistemic modality and can be seen as an attempt to report the evidential extention retained by aspectual constructions like *wa siran* and *kor siran*. The following example illustrates this and shows both constructions used within the same context.

(250) *Kotan-kor-nispa*   *sake-kor*   *hine*   *sir-an*
       village-have-noble.man   3SS/sake-have and.then   appearence-be

       hike, rapok-ke-ta,   *sake-kor*   **wa**   **sir-an**   *tane*
       then   3/middle-POSS-in   3SS/sake-have and   appearence-be now

       maratto-an **kor**   **sir-an**   *korka, ...*
       feast-be   while   appearence-be   but

       '[It seemed] the village chief had gotten the sake, then, in the meanwhile, he had gotten the sake [and] now a feast was being held, but …' (TMB: 70)

       [The character of the story enters the house of the village chief and infers what had happened before his arrival from what is happening.]

The conjunction *hine* 'and then' does not usually form the resultative construction together with *an* 'exist'. However, in this instance *hine* can form a resultative construction in all similar to *wa siran*, which is even seen to directly follow in (250) above. The same can be said for the adverbial *kane* that can be used to express the

resultative aspect together with *siran* (as *kane siran*), being thus functionally equivalent to the resultative *wa an*. In my data *wa/hine/kane* plus *siran* are seldom encountered with atelic predicates which trigger a progressive meaning for this construction. This aspectual meaning in connection to predicate telicity has been noted also for *wa an* (Bugaeva, 2004: 64), so we see how *wa siran* is functionally equivalent to *wa an*, with regard strictly to its aspectual properties.

Another aspectual construction that features not only *siri an* but also the other three SPPs of HA is the construction involving an interrogative subordinate clause governed by the verb *eramiskari* 'not have done, not know'. Consider (246) repeated here as (251) showing *siri ki* in this function.

(251) *Ineap suke   tom-te   wa   **sir-ki**   ya*

INTJ cooking   3SS/3SO/shine-CAUS and   appearence-do INT

ka   a-eramiskari   no   suke   kor an.

even 4S-3SO/not.know   ADV   3SS/3SO/cook PRG

'She was cooking so skilfully that I was surprised [lit.: as I did not even know whether it appeared so.]' (KAY: 5-8,7)

[The speaker is commenting on the cooking abilities of a woman that are beyond his expectations and not like anything he had ever seen before.]

The aspectual function here is brought out by the SPP used together with a notional verb. The SPP is syntactically linked to this verb through a conjunction. The conjunction found in these cases is consistently *wa* 'and'. Once again the aspect encoded via this kind of construction appears to be either progressive (as in the example given here) or resultative depending on the telicity properties of the notional scope predicate. This construction also has a strong evidential overtone that is borne out by the SPP. The SPP in turn indicates that the event expressed by the notional verb is experienced indirectly. Furthermore, the verb *eramiskari* 'not have done, not know' adds a mirative extension to the expression. This construction only appears in BG, NKA-M, and KAY, suggesting that it is probably a peculiarity of the Chitose and Biratori dialects.

8.2.3.2 Independent predication SPPs as lexical verbs

All four SPPs of HA can be used as an independent predication and serve as lexical verbs. *Siri an* is the most polysemous among SPPs, meaning 'be like, appear' for situations and circumstances, or 'pass' for temporal descriptions.

(252) *To   okari   **sir-an**   ruw-e*
      lake   around   appearence-be   trace-POSS(NMLZ)
      a-e-rayap.
      4S-APPL-3SO/be.surprised
      'I was surprised at the fact that the lake's surroundings were like that.'
      (TMB: 56)

(253) *A-mac-ihi   ka   tane   ray   wa   ohonno*
      4-woman-POSS   even   now   3SS/die and   some.time
      ***sir-an**.*
      appearence-be
      'Now even my wife died and some time passed.' (TMB: 10)

Siri ki as a lexical verb takes the meaning of 'be so, be like' for situations and circumstances.

(254) *E-hekote   kamuy opitta a-ko-caranke   wa   ene*
      2SO-3SP/turn god   all   4S-APPL-3SP/complain and   like.this
      ***sir-ki**   hi   e-nukar   kusu ne   na   hani.*
      appearence-do   NMLZ   2SS-3SO/see INTN.FUT   FIN   FIN
      'You will see (the fact that it is such a situation) that they complain towards the gods that protect you.' (NKM: 193)

Humi as has the meaning of 'sound, resound' or, far less commonly, 'feel, perceive'.

(255) *Oka-an   ruwe ne   aku[su],   esoyne **hum-as**   ruwe ne.*
      exist.PL-4S   DIR.KNW   while   outside sound-stand DIR.KNW
      'While we were [waiting] there was a noise outside.' (KAY: 21-6,21)

Finally, *hawe as* as a lexical verb has the meaning of 'make a voice, speak' or 'sound, resound'.

(256) *Hetak,*   *tane*   *eci-hotke*   *wa*   *neun*   *hum-as*
     INTJ   now   2PS-lie.down   and   what.kind   sound-stand
     hene   **haw-as**   *hene*   *iki*   *yakka, ...*
     DUB   voice-stand   DUB   3SS/do though
     'Come on, now you go to sleep and whatever kind of sound or voice there [might] be …' (KAY: 23-8,5)

Among all SPPs, *hawe as* is the one found least commonly used as a lexical verb.

8.3 Direct evidentiality

In this section, I address HA direct evidential forms. The analysis I present is two-fold. Firstly, starting from the discussion in §8.2.1, I focus on sight-related and non-sight-related evidential forms in order to explain the underlying pragmatic difference between evidentials that entail the same (or an analogous) sensorial perception as the source, that eventually prompts distinct formal encodings. Here too I address the occurrence of these evidentials with epistemics of certainty and doubt. As in for SA inferentials in §7.3, I do not intend to say that these evidentials encode an epistemic meaning nor that they have an intrinsic epistemic overtone. Rather, I take the acceptability of epistemics, specifically with *ruwe ne* and *siri ne* as a piece of evidence that the sensorial stimulus that originates these evidentials have different ontological statuses, or different reliability, and therefore that ultimately the evidential forms themselves have different saliency. Secondly, I discuss the semantic properties of the copula *ne* as the verbal constituent of direct forms and contrast them with the ones of *an*. I do this focusing on the use of *an* not just within indirect forms, but also within direct evidentials when employed in interrogative and exclamative sentences.

8.3.1 Sight-related direct evidentials

Epistemics are sometimes used in conjunction with direct evidentials and all direct evidentials are compatible with epistemics. However, the epistemics occurring with *ruwe ne* and *siri ne* seem indicative of a difference in source reliability underlying these

two forms. In fact, *ruwe ne* is most commonly found with epistemics such as *p(e) ne* 'indeed' or *easir* 'really', that express certainty.

(257) *Wentarap   otta   poka   i-nukar   ka*
      dream   place+in   at.least 4O-3SS/see   even

      *eramiskari   oasi   **p**   **ne**   **ruwe ne**   na.*
      SLV/VO/not.be.able   become   NMLZ   COP   DIR.RSN   FIN

      'He [will] become unable to see me even in [his] dreams.' (KAY: 4-4,10)

In contrast, *siri ne* is most commonly accompanied by epistemics expressing doubt or a semblative meaning, such as *noyne* 'as if'. Consider (241) repeated as (258).

(258) *Sinuma   ka   ko-ray-niwkes   **siri ne***
      he   even   APPL-3SS/3SO/die-be.difficult   DIR.VIS

      ***noyne**   iki   a.*
      as.if   do   PRF

      'It was like he too could not [separate from me].' (KAY: 19-5,13)

In (258) the event is accessed through sight and encoded with *siri ne*, but this visual evaluation can be questioned by the speaker through the use of epistemics. The epistemics that express her uncertain attitude towards the event, indicates that the stimulus has a low reliability. I argue that this is because the visual stimulus encoded by *siri ne* still pertains to a dimension external to the speaker and thus allows the speaker to doubt the information content conveyed through this stimulus. The situation is different for *ruwe ne*. Certainty epistemics widely found to co-occur with this evidential suggest that the speaker is able to vouch more steadily for the content of information, which means that the stimulus has a high reliability.

   I would argue in this case that *ruwe ne* not only subsumes a processing of the sensorial stimulus (which thus separates it from *siri ne* for which I discuss the presence of an unprocessed visual stimulus) but it also entails information assimilation (see §2.2.1.3). The behavior that most efficiently brings out this function of *ruwe ne* is its use in narrative literary genres as a marker of direct knowledge. Here, it is a marker of direct evidence for events not directly experienced nor witnessed by the speaker herself

(in this case, events that are part of the traditional shared knowledge), but that have been reported through generations via verbal report.

(259) *Sino   nispa   a-ne   hine   an-an   **ruwe ne**.*
      really   noble.man   4S-COP and.then   exist.PC-4S DIR.KNW
      'I lived being a really wealthy man.' (KAY: 4-2,1)

In SA we found the reportative *manu* used in this function of verbal report (see §7.4.2). In the SA case, the choice of the evidential to fulfill the function of direct knowledge evidential complies with the actual process of information acquisition that is involved in the passing of traditional knowledge. Nevertheless, in those instances *manu* loses its reportative function and is a full-fledged direct evidential specialized in marking knowledge coming from tradition. In HA, a similar process can be assumed, where information originally acquired via verbal report (that as such would probably be shared via *hawe as*) is reported via direct evidentiality once it enters the personal knowledge of the speaker. What is different from the SA case is that in HA assimilation results also in a formal change that sees the alleged form *hawe as* being substituted by *ruwe ne*.

As a way to conclude my analysis, I address the extended function of *ruwe ne* to indicate assimilation of information as one further piece of evidence for its higher saliency compared to *siri ne*. The fact that *ruwe ne* is systematically employed to mark speaker's personal knowledge, or information over which the speaker exerts direct control, is a sign that this evidential entails a higer reliability in comparison to *siri ne*.

8.3.2 Non-sight-related direct evidentials

As for the non-sight-related direct evidentials *humi ne* and *hawe ne*, I contrast them in terms of the nature of the sensorial stimuli they are connected to. I resort to the same approach I employed for SA inferentials in §7.3. Similarly to the indirect evidentials *humi as* and *hawe as* (see §8.4.2.1), I propose that *humi ne* overranks *hawe ne* in terms of source reliability on the basis of the concrete nature of the sensorial stimuli it entails. Taste, touch and smell, senses functionally encoded by *humi ne*, need a concrete contact with the external entity that triggers the stimulus. In contrast, hearing, the only sense semantically and also functionally encoded by *hawe ne*, does not entail such a contact with the entity that produces a sound. The physical way in which the sensorial stimuli related to *humi ne* interact with the speaker's individuality entails a processing of the

sensorial stimulus. The formal separate encoding of the forms *humi ne* and *hawe ne* can then be accounted for as a distinction between direct evidentiality subsuming a processed or unprocessed non-visual stimulus respectively.

8.3.3 The copula *ne* as marker of internal event perspective

In §7.3.5, I analyzed the properties borne out by the copula *ne(e)* and the one-place verb *'an* 'exist' that alternate within the SA inferential form *ruwehe ne(e)/'an*. I proposed that the two possible realizations this evidential can take are an alternation that reflects the speaker's perspective towards the reported event – while the copula *ne(e)* entails an internal perspective, the verb *'an* entails an external perspective. Ultimately, I recognized this distinction as an encoding of event perspective related to perfectivity and I also proposed that it is this factor which determines the direct and inferential function respectively of *ruwehe ne(e)* and *ruwehe 'an*.

In the present analysis, I take this same approach and I assume that the copula *ne*, found in all HA direct evidentials, provides the evidentials *ruwe ne*, *siri ne*, *humi ne*, and *hawe ne* with a direct meaning in functional terms. On the formal side, the presence of *ne* serves as an indication of the speaker's internal perspective towards the reported event. In turn, the copula overtly signals a difference in event perspective (i.e. in perfectivity) of the abovementioned forms with other evidentials that develop from the same sensorial perception nouns involved in direct evidentiality and that, in contrast, fullfil an indirect evidential function. As one piece of evidence in support of the perfectivity features possessed by the copula *ne*, I compare the use and functions of copular direct evidentials with the direct forms where *ne* is substituted by the verb *an* 'exist'. I claim that the presence of *an*, a perfective verb, within some evidentials (e.g. *siri an*) is connected to the derivation of an indirect evidential function (see §8.4.1) and I also claim that the *ne*-to-*an* shift affecting the verbal constituent within direct forms is linked to pragmatic functions attributable to speaker's external perspective towards the event.

Most of the illustrative examples of direct evidentiality provided in this chapter up to this point feature the copula *ne* as the verbal constituent – these represent declarative statements with direct evidentials. Direct evidential expressions of HA can otherwise be made interrogative or exclamative. Differently from negative polarity, the formal indication of interrogativeness or the indication of an exclamative (either declarative or interrogative) statement is found within the evidential form and it surfaces as a change

in the verbal constituent used. The change concerns the copula *ne* that is replaced by the verb *an* 'exist'.

(260) *I-y-erampokiwen   a   nispa   poka, sone siknu*
      4O-0-3SS/feel.pity PRF   noble.man   at.least truly 3SS/be.safe

      *wa an   **hawe**   he   **an**?*
      RSLT   DIR.HRN   <FOC>   DIR.HRN
      'Truly at least the man who has had pity for me has survived?' (TMB: 12)

(261) *A-kor   pon   cape   ne   akusu,   kamuy ne*
      4S-3SO/have   be.small   cat   COP   because   god   COP

      *an   wa   ene   i-nunuke   **ruwe an**   hi   an!*
      PRF   and   like.this 4O-3SS/respect DIR.RSN   NMLZ   3SS/exist.PC
      'Though [I thought] it was my small cat, he has been a god [all along] and he indeed respected me!' (KAY: 1-8,12)

(262) *Heru   ear-a-nukar   a-ona-ha   ki   kor   ora*
      only   once-4S-3SO/see   4-father-POSS   do   when   then

      *i-hoppa   **siri an**?!*
      4O-3SS/leave   DIR.VIS
      'Only once I see my father and then he leaves me?!' (TMA: 42)

One piece of evidence for the external perspective towards the event borne out by the verb *'an* in SA is that the inferential *ruwehe 'an* has a mirative overtone when a first or second person speech act participant referent is involved (see §7.3.5.1). However, in the HA case, we cannot rely on the kind of referents engaged in the event in order to support this same assumption regarding the external perspective entailed by *an*. This is because direct forms featuring *an* are equally attested whether the event includes speech act participant referents (as in (262)) or not (as in (260)). Nevertheless, the feature of externality surfaces through the meanings that direct evidentials containing *an* have become to express. In fact, exclamative statements like (261)-(262) show a mirative overtone, similar to the one already seen in SA, which suggests the speaker's unawareness and thus an external perspective of the event. In the same way, externality for interrogative statements like (260) can be understood as the speaker's attitude

towards new information – by using interrogative direct evidentiality, the speaker requests information that does not pertain to her personal knowledge and, as such, information that she is (at least partially) external to.

What these behaviors suggest is that in HA, the verb *an* has specialized within the domain of evidentiality and expresses external event perspective. This then surfaces as an interrogative or exclamative meaning for direct evidential expressions. This specialization of *an* by contrast highlights the fact that the copula *ne* entails an internal perspective towards the event. The copula *ne* is consistently found in direct evidentials used in declarative statements, as opposed to indirect evidentials that in declarative statements invariably display *an* and other verbs as the verbal constituent. Therefore, the domain of direct evidentiality is characterized by the feature of internal event perspective, which is otherwise recognizable as high accessibility of information content on the speaker's part. As I discuss in the following section, this differs from the external event perspective entailed by indirect evidentials which is connected to a low accessibility of information content.

8.3.4 Summary of HA direct forms

In this section, I further addressed HA direct forms, by clarifying some of their semantico-pragmatic characteristics. With reference to the processing of the sensorial stimulus (access to the informational content), I operated a distinction between the pairs of *ruwe ne* and *siri ne*, and *humi ne* and *hawe ne*. I argued that *ruwe ne* and *humi ne* entail a higer source reliability in comparison to the other evidential form semantically analogous to them, in that they imply stimulus processing. Moreover, I singled out the function of *ruwe ne* as a marker of personal knowledge in narration as one more piece of evidence for its high level of reliability. Adding to the preliminary outcomes outlined in the earlier sense hierarchy, we can refine our analysis of direct forms by saying that the different formal encodings are representative of a difference in source reliability. We can thus organize HA direct evidentials as follows – from the more reliable *ruwe ne* to the less reliable *hawe ne*.

Table 16 – Organization of direct forms

ruwe ne	>	*siri ne*	>	*humi ne*	>	*hawe ne*

In order to complete the analysis on HA evidentials, let us now proceed to our discussion of indirect forms.

8.4 Indirect evidentiality

We now return to the consideration of HA indirect evidential forms. After the preliminary observations outlined in §8.2, we obtained a defective profile of *siri an*, *siri ki*, *humi as*, and *hawe as*. Many preliminary aspects of the semantico-pragmatic characteristics of these forms fail to account for the formal diversification witnessed in the encoding of indirect evidentiality in the language. Specifically, two main issues are still under investigation: 1) the reasons for a separate encoding of indirect evidentiality that encompasses the stimulus of sight (i.e. *siri an* and *siri ki*) and 2) the underlying difference between *humi as* and *hawe as* that ultimately prompts the formal separation of two evidential forms that entail analogous stimuli as the source. The more general outcome of the analysis is the definition of the semantico-pragmatic factors that account for the formal encoding of indirect evidentials and, subsequently, their organization. Eventually, the results of this section will complement the preliminary organization outlined for direct forms in §8.3 and give a conclusive picture of HA evidential system (see §8.7).

8.4.1 The difference between *siri an* and *siri ki*

Identifying the semantico-pragmatic characteristics that distinguish *siri an* from *siri ki* is a difficult task if we base our analysis on the same criteria adopted to explain the difference and formal encoding of the direct forms *ruwe ne* and *siri ne* in §8.3.1. If we consider the occurrence of epistemic expressions with *siri an* and *siri ki* as a way to detect how the semantic properties of these epistemics may mirror a different source reliability of these two indirect evidentials (as in §8.3.1 above), we find an almost equal correspondence. In fact, both these indirect evidentials appear with epistemics like *neno* 'like', *noyne* 'as if' (263), or *anki* 'as if' (264) that convey a semblative or dubitative overtone.

(263) *Pet   put   an   **noyne sir-an**   wa ...*
      river mouth 3SS/exist.PC   as.if   IND.RSN   and
      'It seemed like there was the mouth of the river.' (BUG: 319)

325

(264) *Ukuran   ka   yaanipo   isam   anki   sir-ki*.
be.evening   even   almost   3SS/not.be   about IND.VIS
'Even in the evening it seemed he was almost about to die.' (TMA: 14)

The overtones borne out by these epistemics are in line with the inferential function covered by *siri an* and *siri ki*. In contrast, these evidentials co-occur with certainty epistemics such as *p(e) ne* 'indeed' or *easir* 'really' only in isolated cases. Even the sporadic use of a certainty epistemic like *p(e) ne* is not very informative for our purpose, since with both evidentials, in a combination of contrasting values, it is almost always found along with *noyne* 'as if' like in (265). It is thus impossible to safely argue for a preference for certainty epistemics with either *siri an* or *siri ki*.

(265) *Poronno,   ne   to   or-ta   okay   pe   ne*
a.lot   this   lake   place-in   3PS/exist.PL   NMLZ   COP
noyne   siri ki.
as.if   IND.VIS
'Indeed it seemed like there were a lot [of fish] in that lake.' (TMB: 54)

At the same time, we cannot legitimately consider the processing of stimulus and use this as an explanation for the separation of *siri an* and *siri ki* given that, both on the semantic and on the functional side, either form entails the same sensorial stimulus. In this instance, there is no evidential form encompassing the stimulus of sight that develops from *ru* 'trace' to formally hint at a pragmatic distinction based on stimulus processing (see §8.3.1 above). One could motivate the absence of the sensorial perception noun *ru* 'trace' from indirect evidentials of HA by saying that this noun, when employed within the domain of evidentiality, might have developed a function strictly connected to information assimilation (as pointed out in §8.3), which is a hallmark of direct evidentiality. Considering this specialization, it would follow that the employment of *ru* in the domain of indirect evidentiality is excluded. While this may be a sensible conclusion for the dialects of HA surveyed in this study, it is far from being true for HA as a whole. In Central-Western dialects such as Asahikawa or Shiranuka, in fact, the form *ru an* is found, apparently with an inferential function analogous to the one of SA *ruwehe 'an*. A a first glance, *ru an* is in complementary distribution with the

siri an encountered in the Chitose, Saru, and Biratori dialects. A study scoping over a larger number of HA dialects would definitely improve our understanding of the pragmatic characteristics of *ru* 'trace' when used to form evidentials, and eventually it would improve the tentative explanation proposed here. This is left for future research.

Despite its formal absence from the domain of indirect evidentiality, even in the dialects taken into account here the sensorial noun *ru* 'trace' shows a correlation with *siri an*. Despite the limitations imposed by the consulted data, I argue that this correlation is indicative of the higher saliency of *siri an* compared to *siri ki*. The correlation I mention is clearer in the instance of double evidentiality, when an indirect evidential (including *humi as* and *hawe as*) co-occurs with a direct evidential, which relates to the indirect evidential in terms of the sensorial stimulus entailed. For example, the direct form accompanying *hawe as* would be *hawe ne* as in (266).

(266) *Sermak-a*   *a-kor*   **haw-as**   **hawe ne**.
protective.god-POSS 4S-3SO/have IND.HRN   DIR.HRN
'It seems I indeed had a protective god.' (KAY: 2-6,14)

However, with *siri an* and *siri ki* the stimulus correspondence between evidentials in double-evidential expressions differs. With *siri ki* we encounter *siri ne* as expected, but with *siri an* the direct form that appears is *ruwe ne*.

(267) *Pa*   *wen*   *pekor*   **siri ki**   **siri ne**   *a*
year 3SS/be.bad just.like   IND.VIS   DIR.VIS   PRF
ne *a*.
COP PRF
'It seemed indeed just like the year kept on being bad.' (TMA: 48)

(268) *Supuya*   *at*   *kor*   **sir-an**   **ruwe ne**   *anan*.
smoke   3SS/rise   while appearence-be DIR.KNW   ADM
'(It seemed) smoke was rising!' (NGF: 176)

It is true that *ruwe ne* rarely appears as the direct evidential in these constructions even when the indirect form is *siri ki* or *hawe as*, but what is more relevant is that, in contrast, *siri ne* nor any other direct form is never encountered in my data along with *siri an*.

Indeed a more in-depth study on *siri an* is needed to obtain a more satisfying account on this form, but at present I take this systematic correlation with *ruwe ne* (that entails the highest level of source reliability among direct evidentials) as one piece of evidence for the fact that *siri an* outranks *siri ki* in terms of source reliability. One additional item in need of further explanation is the use of *ki/iki* 'do' as the verbal constituent in *siri ki*. Most likely this is merely a formal way of differentiating two evidentials with separate functions (i.e. *siri (i)ki* and *siri an*), that otherwise would have been indistinguishable given that their nominal constituent is structurally identical. However, the reasons behind the choice of this specific verb remain unclear, as its semantics are not even analogous to the one of *an* 'exist' in *siri an* and we cannot hypothesize some kind of alternation based on equivalent meaning (as for *an* and the copula *ne*).

8.4.2 *Humi as* and *hawe as* – between inferentiality and reportative

In order to highlight the semantico-pragmatic differences intervening between *humi as* and *hawe as*, I address 1) the processing of the stimulus subsumed by these two evidentials, and 2) the reportative function most common for *hawe as* but never attested for *humi as*. In the second half of the subsection, I also focus on the quotative and hearsay functions that *hawe as* displays.

8.4.2.1 Semantico-pragmatic differences of *humi as* and *hawe as*

We saw in §8.2.1 that, together with the direct *humi ne*, *humi as* semantically and functionally relates to a larger group of sensorial perceptions (i.e. taste, touch, smell, and hearing) than *hawe as* does (only hearing). Again my first argument for proposing that *humi as* outranks *hawe as* in terms of source reliability is the concreteness of the sensorial stimuli it is connected to, based on the contact entailed by the former but not by the latter. In this sense, with the exception of hearing, the stimuli subsumed by *humi as* entail an internalization on the speaker's part, while the lack of concreteness of hearing makes the speaker relate to an external stimulus.

Furthermore, we notice a function of *hawe as* that is in line with our assumption that it encodes a non-visual stimulus that has not been internalized. That is, the function of *hawe as* as a reportative evidential.

(269) *Toop*   *oyak-ke-ta*   *ray*   *pe*   *aynu* *ne*
there.afar   other.place-POSS-in   3PS/die NMLZ   person COP

sekor **haw-as**   *[h]i* *a-nu*   *p*   *ne*   *kusu, ...*
ADV IND.HRN   NMLZ 4S-3SO/hear   NMLZ COP   because

'Because I heard that they say that the ones that die [and go] to a far-away place are people, …' (NKB: 87)

(270) *Okkayo*   *haw [...]*   *"Ahun-ke*   *yak*
young.man voice   2SS/3SO/enter.PC-CAUS   if

pirka   *wa"* *sekor* **haw-as**   *wa*   *haw-e*   *a-nu.*
3SS/be.good FIN   ADV   IND.HRN   and   voice-POSS 4S-3SO/hear

'"You may let him come in" said the voice of a man and I heard [that] voice.' (BUG: 257)

The reportative functions of hearsay (269) and quotative (270) are attested for *hawe as*. Among the tokens available, this form retains an inferential function only in limited cases. In contrast, *humi as*, at least in the dialects I surveyed, is never attested as a reportative, but rather it is employed consistently as an inferential. This function of *hawe as*, that does not belong to *humi as*, seems to support our claim that these two inferentials differ in terms of processing of the sensorial stimulus, a difference that may have ultimately prompted the specialization of *hawe as* as a reportative.

As a way to conclude the discussion on the semantic features of these evidentials, I shall briefly comment on the use of *as* 'stand' as the verbal constituent in *humi as* and *hawe as*. The presence of the one-place *as*, though not entirely clear as also are the reasons for a change in the verbal constituents among indirect evidentials more generally, seems more motivated than the presence of *ki/iki* 'do' in *siri ki*. The verb *as* in fact is often found in verb phrases and compounds to form expressions that describe an impermanent state. Sometimes this impermanent state concerns a transitory situation, as in *asur as* 'be the rumor that [lit.: rumor stand]' or *sayosakas* 'be out of food [lit.: stand not being rice]'. In a more relevant example for the present discussion, the impermanence refers also to natural states and conditions which are transitory by definition, like *apto as* 'rain [lit.: rain stand]' or *rera as* 'be windy [lit.: wind stand]'. The transience of the sensorial stimuli encoded by the nouns *hum* 'sound' and *haw* 'voice', as well as their relation to the natural sphere, might be what selects *as* as the

verbal constituent of these indirect evidentials. Moreover, the semantic assumptions ragerding *as* 'stand' that I make are in line with the meaning taken by *humi as* and *hawe as* when used as independent predication lexical verbs (see §8.2.3.2).

8.4.2.2 *Hawe as* as a reportative

When *hawe as* is used in a reportative function, the only overt formal indication of whether the evidential expression has a quotative or hearsay meaning seems to be the presence or the absence of the source of verbal report respectively. For quotative reportative the source is usually expressed via a nominal constituent which is overtly retrievable from the immediate context (see (270) above) or specified just before *hawe as*, as in (271). In this function, *hawe as* most frequently takes the realization *hawas* and the quotation is introduced by the adverbials *sekor* or *sekor kane*.

(271) *"Tunas,*   *ahun-ke*   *ora* *ki",*   ***sekor***
     be.quick   2SS/3SO/enter-CAUS   thus 2SS/3SO/do   ADV

     kane *caca*   *itak*   ***haw-as****.*
     ADV old.man   speech   IND.HRN

     'Quick, do let him in' the voice of an old man said. (NKC: 122)

When the source is not specified in any way, the expression takes a hearsay reportative meaning.

(272) *Nispa-utar*   *nisatta*   *ekimne*   *sekor*
     noble.man-people   tomorrow   3PS/go.to.mountain   ADV

     haw-as   *pe*   *ne*   *kusu, ...*
     IND.HRN   NMLZ COP   because

     'They said the rich men [would] go to the mountains the following day,
     so …' (BUG: 377)

Quotative and hearsay reportative are otherwise expressed in HA via evidential strategies composed by the adverbial *sekor* or complementizers such as *yak*, *kuni*, or *kunak*, that introduce the content of the verbal report. They are also formed by verbs of saying or of cognition such as *ye* 'say', *itak* 'speak', *ramu* 'think', *yaynu* 'think', and *eraman* 'know' among others. Again, what differentiates between the two functions of

the evidential at hand seems to be the presence of an overt lexical cue to the source of the report.

8.4.2.3 Summary of HA indirect forms

In this section, I addressed the issues regarding the semantics and pragmatics of HA indirect evidentials that remained from the analysis in §8.2. By addressing the correlation of the direct evidential *ruwe ne* with *siri an*, I argued that this latter evidential subsumes a higher level of source reliability than *siri ki* does, though both indirect forms semantically entail the same sensorial stimulus. Moreover, I argued for the higher saliency of *humi as* compared to *hawe as* in light of the fact that the former subsumes a processing of the sensorial stimuli through which the speaker accesses the content of information. On the other hand, *hawe as* has almost completely specialized into a marker of reportative evidentiality. Adding to the preliminary outcomes outlined on the basis of the sense hierarchy, we can refine our analysis of indirect forms by saying that the different formal encodings are representative of a difference in source reliability, and thus organize HA indirect evidentials as follows, from the more reliable *siri an* to the less reliable *hawe as*.

Table 17 – Organization of indirect forms

siri an	>	*siri ki*	>	*humi as*	>	*hawe as*

As a way to conclude, in §8.7 I complement the results of this analysis with the ones coming from the discussion of direct evidentials. Before this, let us consider double evidentiality in the following section.

8.5 Double evidentiality

In this section, I briefly consider the cases where two evidential forms are used simultaneously on the same predicate. On average, double evidentiality is a far more common phenomenon in HA than it is in SA (see §7.5). In this Ainu variety too, there seem to be two main pragmatic motivations for marking a statement with two separate evidential forms. Double evidentiality is apparently used to mark two separate sources for one piece of information, and these are complementary to each other. As noted previously, this behavior has been reported in typological studies on evidentiality (Aikhenvald, 2004: 93). The best (and possibly only) example of double evidentiality

331

being used with this purpose are constructions with *ruwe ne* used as a marker of direct evidence coming from traditional knowledge following another evidential, usually an indirect form like in (273).

(273) *... sekor   hawean   kor   ran   hawe as*

        ADV   3SS/say   when 3SS/descend.PC   IND.HRN

ruwe ne.

DIR.KNW

'Saying so [the crow] seemed to come down.' (KAY: 24-2,7)

Here the inferential *hawe as* marks an indirect information source on the part of the character of the story, while *ruwe ne* reports information directly as part of shared knowledge from the narrator perspective.

      Double evidentiality can otherwise be used with what appears to be an epistemic function. In these instances we see an indirect form that retains its original evidential function accompanied by a direct form that, in contrast, fulfills more of a reinforcing function for the indirect evidential. That is, the direct form does not impose its evidential function over the indirect function of the other evidential. What we notice about these double-evidential constructions is that the direct form used in support of the indirect evidential and the indirect evidential itself are semantically compatible in relation to the sensorial stimulus involved in information acquisition. Examples (274) illustrates this correspondence, showing the indirect *siri ki* supported by the direct *siri ne*. It is worth noting that in such cases of double evidentiality, we can observe the *siri an-ruwe ne* correlation I addressed above (see §8.4.1), as the direct form in the function of epistemic found to occur with *siri an* is systematically *ruwe ne* and not *siri ne*.

(274) *Pa   wen   pekor   siri ki   siri ne   a*

        year 3SS/be.bad just.like   IND.VIS   DIR.VIS   PRF

ne   a.

COP PRF

'It seemed indeed just like the year kept on being bad.' (TMA: 48)

      While *siri an*, *humi as*, and *hawe as* consistently show a systematic semantic correspondence with their analogous direct form (i.e. *ruwe ne*, *humi ne*, and *hawe ne* respectively), in a couple of instances in my reference data *siri ki* is attested with *ruwe*

ne as the support direct form. Syntactically, the direct form tends to follow the indirect form, but constructions with a reverse order are also encountered.

(275) *Hinak-un*   *maw-ko-hopunpa-an* ***humi ne***   ***humi as***.
where-to   wind-APPL-fly.PL-4S   DIR.FLT   IND.FLT
'It seemed indeed we were swept away to somewhere by a wind' (KAY: 2-4,9)

Double evidentiality involving two indirect forms being employed simultaneously is never attested in my data. However, in isolated cases, double direct evidentiality is found. In this case, the second evidential that appears syntactically in the construction is again *ruwe ne* that again fulfills an epistemic function, while the other direct form is either *siri ne* or *hawe ne*; no instances of *humi ne* in such constructions are found.

(276) *Aysirkamuy*   *e-pirma*   ***hawe ne***
protective.god   APPL-3SS/3SO/secretly.let.know   DIR.HRN
nankor   ***ruwe ne***.
maybe   DIR.RSN
'Maybe [my] protective god has indeed secretly let [me] know about it.'
(KAY: 16-10,19)

It is worth noting that *ruwe ne* with an epistemic function is found to occur with those direct evidentials that entail a low reliability of the source by virtue of the unprocessed sensorial stimulus they subsume (see §8.3.1 and §8.3.2). This can be a way to further validate a direct statement without resorting to direct evidential forms that would possibly be at odds with the actual evidence available for the statement itself. The scarcity of tokens of this kind of double evidential constructions do not allow me to pursue this matter further.

8.6 Remaining issues

In this first conclusive section, I consider some remaining issues regarding the use of double evidentiality and, on a more theoretical perspective, the unfeasibility of employing the theory of territory of information to HA direct evidentiality.

8.6.1 Double evidentiality and clause dependencies

Throughout the analysis presented above, I highlighted some main semantico-pragmatic characteristics of evidential forms found in HA. Specifically, I focused on the reasons behind the diversification we witness in the formal encoding of this category. I eventually proposed that formal distinctions among evidential forms mirror underlying semantico-pragmatic differences in source reliability and event accessibility. These differences in turn are what regulates the organization of the evidential category in HA (see §8.7 below).

Nevertheless, some functions of HA evidentials remain unclear from the above analysis due to the scarcity of examples available from the reference corpora I used for this study. In this section, I briefly consider one of these functions that can be noticed despite the limited number of tokens in which it occurs, namely the alleged biclausal characteristics of some indirect evidential constructions.

In §8.2.3, I pointed out that the sensorial perception predicates (SPPs) *siri an*, *siri ki*, *humi as*, and *hawe as* are not employed in HA strictly as markers of indirect evidentiality, but they also cover aspectual functions or can be used as independent lexical verbs. More precisely, I underlined how the aspectual function and the of lexical verb function seem to surface in conjunction with the presence of a clausal linker that intervenes between the SPP and the preceding verb. In contrast, SPPs that are syntactically adjacent to this preceding verb are systematically found to have an evidential function. With an SPP in an evidential function, this preceding verb would be understood as the scope predicate, expressing the event accessed via indirect evidentiality. Since the non-evidential, or aspectual-evidential, function arises whenever a syntactic linker intervenes, we might induce a relation between clausality and the retrievability of an evidential function for the SPP involved in the construction. That is, we would explain the variation in SPPs' functions according to their scope restrictions. For monoclausal constructions, where the SPP is adjacent to the preceding verb, the semantic properties of the former have scope over the latter and thus the pragmatic evidential function is triggered. For biclausal constructions, where the SPP is separated from the preceding verb by a linker, the semantic properties of the SPP do not have (direct) scope over the verb and thus it is more difficult or entirely impossible for the SPP to develop an evidential function.

Presented as such, this generalization is simplistic and indeed not safe from criticism. First, even from a preliminary observation of the tokens, we see that the

relation between the retrievability of an evidential function and the mono- or biclausality of the construction is far from systematic. On the one hand, the well-attested case of aspectual-evidential expressions (addressed above in §8.2.3.1) represents a notable halfway situation that does not support this relation as encoding a clear-cut correspondence of functions and syntactic structures. Furthermore, the syntactic linkers involved in these constructions expand beyond *wa* 'and' and *kor* 'when' that I named above, and also include connecting words such as *hine* 'and then', *kusu* 'because', and the adverbials *sekor*, *kane*, and *no*. Although some tendencies can indeed be noted, the distribution of each one of these connective words does not necessarily correspond with an evidential or non-evidential function for the SPP that follows them. That is, not only is the mono- or biclausality of the construction not fundamentally a diagnostic of the SPP's function, but also SPPs within biclausal constructions featuring the same syntactic linker show clear functional discrepancies. Second, from a more theoretical perspective, this idea of a functional-structural relation is based on the assumption that, in HA more generally, a verb's scopal properties are sensitive to syntactic dependencies – a farfetched conclusion considering our still limited understanding of the syntax and semantics of clausal dependencies in Ainu. Although this would indeed be an interesting field to survey in future research, more preparatory study needs to be done on Ainu syntactic linkers and on the notion and characteristics of clausality in this language.

8.6.2 Inapplicability of the Theory of Territory of Information

In this second subsection dedicated to the remaining issues that concern HA evidentiality, I briefly comment on the inapplicability of the Theory of Territory of Information (see §6.6) to the case of HA direct evidentiality. While I employed the TTI to discuss SA personal knowledge evidentiality (see §7.2), this approach fails to be effective for HA for a number of reasons.

A first hint to the inapplicability of the TTI comes from the formal encoding of HA direct evidentials which suggests that information acquisition for this subdomain of evidentiality depends on separate sensorial stimuli – something that is later corroborated through the observation of evidentials in use (see §8.3). That is, although this subdomain of HA evidentiality is cohesive with regrads to the "mode of knowing" (as defined in §2.2.1.2), there is no consistency in the "source of evidence". Separate sources of evidence are distinctly encoded via different direct evidential forms. This

contrasts with what we see in SA, where the only two separate formal encodings of personal knowledge evidentiality refer to the same mode of knowing and also to the same source of evidence, that is personal knowledge deriving from information assimilation. As both the original TTI and the model tailored for the purpose of this analysis are meant to be a way to formalize sharing of personal knowledge, the application of the the Theory does not appear felicitous in principle.

Nonetheless, there is indeed one direct form of HA that has proven to be consistently connected to information assimilation and personal knowledge – that is, *ruwe ne* (see §8.3.1). We would incur in a series of problems even if we were to adopt the TTI as a way to compare the use of *ruwe ne* with the one of other direct evidentials, that do not subsume personal knowledge, with the aim of understanding what pragmatic factor (if any) triggers the choice of the evidential form. For one thing, the TTI provides no solid evidence to say whether epistemicity systematically plays a role in the choice of the direct form, so that we cannot safely ascribe separate formal encodings exclusively to changes in the evidential tone of an expression (see §6.6.3.3). Furthermore, textual parsing fails to highlight relevant differences in context, and specifically in the relations among participants to the event with regards with new versus old information, that can be systematically linked to formal changes in the encoding of evidentiality. Therefore, the psychological distance among participants and event is difficult to infer with the framework in use for this analysis and suggests that a revision of the assumptions regarding textual parsing and (possibly) deixis is also needed in order to tailor the TTI to the case of HA evidentials. Similarly, there is no evidence showing that external-*S* (see §7.2.4.2) triggers special mirative meanings as it was the case for SA personal knowledge evidentiality – this again suggests that the deictic relation (as far as we measure it and understand it to be) between the speaker and the source of information is meaningless as far as the formal encoding of evidentiality is concerned.

Given the distribution of direct forms in context, that is not straightforwardly ascribable to changes in the discourse structure, it is likely that the choice of direct evidentials is driven by semantic criteria that (at least at the present stage of the research) escape our understanding. It is possible that specific events, or events involving specific participant, are culturally perceived in a way by which the support of a certain source of evidence is preferred or even required, possibly in a mutually exclusive manner. Separate approaches to psychology and cognition would most likely

be needed to further survey this complex issue, that appears even more complicated when we consider the impossibility of testing the speaker's attitude towards information through active elicitation.

Ultimately, these observations suggest that the version of the TTI I employ in this thesis represents a too limited approach to fully capture the dynamics of information acquisition through a direct source present in HA. However, it is not the case that the TTI, with further reworking and improvement, could be applicable to HA as well and become a way to cohesively discuss Ainu direct evidentiality at once. At the moment, it seems that the first aspect to take into account, should one begin to work in this direction, is the differentiation of the stimuli embedded in the source of information of HA direct evidentials. To reconcile this characteristic with the TTI would be the main challenge for future studies approaching evidentiality from the perspective I took in this work.

8.7 HA evidential system

As a way to conclude the analysis presented in this chapter, I propose an organization of HA evidential forms based both on the level of reliability of the source (similarly to what we saw for SA in §7.7) and on the higher or lower accessibility to the reported event on the speaker's part that these forms entail. See the following scheme.

Table 18 – Organization of HA evidentials

	REL+						REL–
ACCES+	*ruwe ne*	>	*siri ne*	>	*humi ne*	>	*hawe ne*
ACCES–	*siri an*	>	*siri ki*	>	*humi as*	>	*hawe as*

In Table 18, the organization of HA evidential forms is schematized taking into account source reliability (REL) and event accessibility (ACCES). In the analysis above, I have shown these to be the two semantico-pragmatic features that account for the variation in formal encoding of evidentials we witness in the language. On the one hand, event accessibility accounts for the separate direct and indirect functions taken by semantically analogous evidentials, such as *siri ne* and *siri ki*, which in turn is formally mirrored via different verbal constituents in those forms. On the other hand, source reliability justifies the four-way formal distinction among forms that equally encode the same event accessibility. If we acknowledge the accessibility-based dichotomy, that ultimately defines the functional direct/indirect distinction, typologically HA then

337

becomes most similar to other languages for which we can recognize an overall direct/indirect organization (see §2.2.1.1). However, from a narrower within-language perspective, HA also shows clear analogies with SA since this variety as well exhibits evidentials within both domains of direct and indirect evidentiality that can be arranged on a scale of source reliability that goes from *ruwe ne* and *siri an* (encoding a most reliable source) to *hawe ne* and *hawe as* (encoding a least reliable source).

Chapter 9
Conclusions

9.1 Content of the chapter

In this concluding chapter, I summarize the outcomes of the analysis presented in Chapters 7 and 8. In section §9.2, I summarize my findings on evidentiality in SA and HA. I provide a general overview of the main commonalities and differences that were uncovered with regards to the basic semantico-pragmatic features that regulate the evidential systems of these two Ainu varieties, and the features that ultimately define their formal organization. In §9.3, I outline the main implications that this study has for Ainu studies with regards to not only evidentiality itself, but also other categories related to it such as tense and aspect, and the morphosyntactic aspects discussed throughout the two previous chapters. In §9.4, I then survey the main typological and theoretical implications of my study which are relevant for cross-linguistic studies of evidentiality. Finally, in §9.5 I point out some issues that remain unresolved from the proposed analysis and I underline the resultant limitations on the outcomes of my study.

9.2 A summary of SA and HA evidential systems

In this section, I summarize the main similarities and differences between SA and HA evidential systems and highlight what characteristics of evidentiality in these two varieties of Ainu show, as well as discrepancies with cross-linguistic typological trends.

9.2.1 Similarities and differences between SA and HA evidentials

The overall feature that regulates the use, formal encoding, and ultimately the organization of evidentiality in both SA and HA is source reliability (see §7.7 and §8.7). In both varieties considered in this study, evidentials formally encode the higher or lower reliability entailed by the source of information, or the gateway through which information is acquired or shared by speakers. As I stressed in Chapters 7 and 8, source reliability has nothing to do with the speaker's involvement in the event that constitutes the content of the information, nor with how she vouches for the truthfulness of the information itself. In other words, source reliability is unrelated to epistemic modality. Therefore, in both SA and HA the formal encoding of evidentiality not only mirrors whether the channel of information acquisition is, for instance, direct or indirect, but it also specifies the psychophysical circumstances in which acquisition takes place and

339

that ultimately make acquisition possible. We can look at SA inferentiality as a clear example of this. Here the four inferential forms are each specialized in marking evidence through inference based on specific sensorial stimuli (see §7.3). A slightly different scenario is represented by HA. In this variety, the use and formal encoding of evidentiality responds to one additional pragmatic parameter that is event accessibility (see §8.7). Besides signaling source reliability, HA evidential forms also encode the higher or lower immediateness with which the speaker can access the event. Again, this feature has nothing to do with the speaker's personal judgement of the event, nor with how she perceives the source of information.

If we are to outline the commonalities and differences occurring between SA and HA with regards to how these two varieties express evidentiality in light of the outcomes of this research, we can affirm the following. In both varieties evidentiality makes up a conceptual category that is based on source reliability, a semantico-pragmatic parameter regarding information acquisition whose variations are systematically mirrored in the language through separate formal devices. Furthermore, SA and HA evidentials essentially share one analogous historical development, as they all originated from nominal constituents or nominal morphology (see Chapter 5). The importance of the semantic characteristics of these nominal constituents has also been stressed for the specific case of SA inferentiality (see §7.3). Here, the inner semantics of the nominal constituents define the ontological contour of the stimulus that constitutes the source of information for inferentiality. The ontological contour helps put the event, the perception of the stimulus and the moment of evaluation in a set of temporal relations. In this way, inferential forms become an overt indication of reference tense for the predicate under the scope of evidentiality. As such, this study on evidentiality also has relevance for the long-debated issue of Ainu tense (see Chapter 1). These logical temporal dependencies were discussed through application of Reichenbach's Reference Tense Theory (RTT) (as discussed in §6.7.3) that I adopted as my main framework when discussing Ainu tense.

The major differences between SA and HA are, among others, the pragmatic features that in HA form the basis of evidentiality (i.e. event accessibility), and the semantic specifications that apply within subdomains of the category. One example of the former is the fact that HA categorizes evidentiality coming from a direct source depending on the different psychophysical stimuli involved (see §8.3), while in SA the use of direct evidentiality rests on the reasoning process of assimilation of information

into a speaker's personal knowledge (see §7.2). Such differences required distinct theoretical approaches to be accounted for appropriately. In particular, Kamio's Theory of Territory of Information (TTI) (as discussed in §6.6) provides the desirable framework to capture and describe the dynamics of information sharing and acquisition based on personal knowledge. However, this same Theory is not applicable to HA evidentiality (at least not without further modification) where the subdomain of direct evidentiality is primarily based on sensorial perception (see §8.6.2). Another striking difference between the varieties is the process of information assimilation and formal shift of the evidential used to mark direct knowledge coming from tradition. Although this process is attested in both varieties, in HA information assimilation involves a shift in the evidential form that is employed in conveying traditional knowledge, while in SA it does not (see §7.4 and §8.3). One general observation on the uses and functions of SA and HA evidentials is that, interestingly, these two varieties differ in the nature of the source that prompts evidentiality based on direct evidence. In fact, while in HA direct evidence is prompted by psychophysical stimuli such as hearing, sight and touch, in SA personal knowledge is the only source at the basis of direct evidence. This fundamental difference is again most likely ascribable to cultural differences between SA and HA speakers, which are difficult to survey given the extinct or moribund statuses of each variety respectively.

9.2.2 Typological discrepancies

Throughout the analysis in Chapters 7 and 8, I employed specific terminology to distinguish separate subdomains of evidentiality. The discriminant that prompts this internal distinction is the different process and stimulus involved in the acquisition of information. Specifically, for SA I distinguished personal knowledge, inferentiality, and reportative evidentiality, while for HA I separated direct and indirect evidentiality. I largely borrow this terminology from typological studies such as Willett (1988) and Aikhenvald (2004) that adopt an approach to evidentiality which sees it as an inherently grammatical category. In my approach, however, I use these labels as indentifiers for subdomains of the broader conceptual category of evidentiality (see §2.2.4 and §9.4 below). The use of this terminology is effective for the purpose of defining and discussing the differences in how information acquisition happens for each variety. Such labels become simple indications of general pragmatic distinctions we are able to identify and utilize for the study of Ainu evidentiality.

SA and HA evidentials used in context suggest that there are language-specific semantico-pragmatic parameters regulating the use of evidentiality that are scalar in nature. The scalar parameters do not allow us to argue for a clear-cut subdivision of evidentiality into theoretically defined subdomains. More importantly, the variations in the formal encoding of evidentiality the language displays support the idea that the semantico-pragmatic features relevant to Ainu evidentiality are far more specific than what would be depicted through a direct-inferential-reportative (in the case of SA) or direct-indirect (in the case of HA) distinction within the category.

As a final comment on the category of evidentiality in Ainu, one can say that, from an overall perspective, Ainu evidentiality showcases a number of characteristics that are not attested in most typological works on this topic (see §2.2). Throughout the analysis in this thesis, my primary aim was outlining a language-specific profile of Ainu evidentiality and discussing all of its morphosyntactic and semantico-pragmatic peculiarities without trying to compare these varieties to a typological prototype. I preferred to report the specific features of Ainu evidentiality while underlining the degree of diversity it shows in comparison to the prototypical outline of the category discussed by typological works. Through this approach, I fundamentally address a number of variables (e.g. the differentiation of stimuli at the basis of inferentiality or the interaction with epistemic modality) in order to capture and describe the different dimensions that define evidentiality for the specific case of Ainu. These dimensions and their internal properties are naturally expected to more or less comply with what are said to be the prototypical characteristics of evidentiality. In section §9.4 below, I briefly discuss how this approach is in line with a neo-Whorfian view of linguistic categories and how it resembles Bickel's (2010) Multivariate Analysis and the implications it has for cross-linguistic comparison.

9.3 Implications for Ainu studies

The present research has a number of implications relevant to Ainu studies. Firstly, I treat some language devices of Ainu as evidentials which had never been regarded as pertaining to information source before – namely the case of SA personal knowledge morphemes *-hV* and *-Ø*, discussed in §7.2. In this respect, I deviate from traditional approaches to Ainu evidentiality (beginning with Nakagawa 1995) that included a limited number of forms in the discussion of evidentiality, which were mostly what I address as direct evidentials in HA in this work.

One other implication for Ainu studies is the definition of tense reference (see §6.7.3, §7.2, and §7.3). Besides discussing the semantico-pragmatic and morphosyntactic properties of evidentiality proper, I considered the long-debated matter of Ainu tense. I proposed that despite the lack of an overt formal marking of this category in Ainu (see §1.2), tense reference is brought out by the use of evidentials. The semantico-pragmatic characteristics of evidentials delineate the temporal contour of the reported event. Consequently, evidentials indicate the reference tense of the scope predicate that expresses that event. The analysis I propose is limited by the evidentiality-based scope of this work, but it nevertheless represents a starting point for future research on this topic. To the best of my knowledge, this is the only analysis that presents tense as a systematically and consistently retrievable feature of the Ainu verb despite its formal unmarkedness (see §6.7.5).

Finally, with regards to morphosytax, the discussion of the structural properties of Ainu evidentials are relevant for the definition of processes such as noun incorporation and relativization (see §5.5), and the particular kind of clause (in)dependency represented by insubordination (see §4.5 and §7.2). The morphosyntactic discussion in Chapter 5 has highlighted the possible presence of classificatory noun incorporation, a process that (at least within the domain of evidentiality) seems to be relevant to the emergence of internally-headed relative clauses. Both these syntactic constructions had never been attested or discussed previously for either of the varieties surveyed here. Insubordination is another syntactic process which has only recently been discussed in Ainu studies (see Bugaeva, 2016). My work stems from previous accounts on this topic and adds to them, showing that insubordination is indeed a feature of SA and that it seems to be more pervasive that previously thought. The question remains as to whether insubordination, classificatory noun incoroporation, and internally-headed relative clauses are characteristics of SA and HA and if they also spread out of the evidential domain, being a common (though probably secondary) feature of the Ainu language. This topic is left for future research.

9.4 Typological and theoretical approach

For both SA and HA, I describe evidentiality as a linguistic category that is essentially conceptual (see §2.2.1). That is, evidentiality represents a conceptually cohesive semantico-pragmatic domain that is encoded in the Ainu language through various formal devices. In the process of linguistic description, we address these formal devices

as constituting a unitary set of linguistic forms particular to the Ainu language, that are brought together by their denotation of the same semantico-pragmatic domain. Given this systematicity between form and denotation, I consider evidentiality in Ainu to be a linguistic category.

This understanding of "linguistic category" must not be confused with "grammatical category", if being grammatical is understood as entailing the obligatory use of evidential forms, without which an utterance is defective and proficiency in that language is considered poor (i.e. grammaticality). My definition in fact excludes the inclusion of these linguistic forms referring all to the same semantico-pragmatic domain (i.e. evidentiality) into a fixed and exclusive morphosyntactic system or paradigm. In this sense, my study departs from analyses such as Aikhenvald's (2004). There are a number of behaviors of evidential forms that support this approach where evidentiality is not a grammatical category. First, the distribution of evidentials in the reference corpora for this study shows that the expression of evidentiality in Ainu is far from obligatory. On average within the consulted corpora, in fact, there are more sentences and utterances which are unmarked for information source than there are sentences and utterances accompanied by an evidential form. Furthermore, even passages expressing similar or identical situations or circumstances may not always be marked with evidentiality. These facts suggest that the use of evidentiality primarily reflects a speaker's choice that ultimately does not affect the expression's grammaticality. Second, the non-unitary stages of morphosyntactic development shown by the different evidentials (see Chapter 5) go against the postulation of a fixed and exclusive set of forms that constitute a paradigm. In contrast, the structural characteristics of Ainu evidentials suggest that the set and number of formal devices used as markers of evidentiality has likely been changing throughout the history of the language, as separate evidentials independently evolved from nominal categories. If it was not for the language vitality issues addressed in Chapter 1, this evolution might have continued, resulting in an expansion and possibly a further modification of the types and number of evidential forms.

The assumption of a fixed paradigm for evidentiality is neither theoretically sound nor supported by the empirical Ainu data. Third, some evidentials have shown to systematically interact with the category of epistemic modality, a conceptual category that I regard as a category in its own right, separate from evidentiality but that interrelates with evidentiality to varying extents (see §2.2.2). In some cases (i.e. SA

personal knowledge, see §7.2), epistemic modality even interacts simultaneously with evidentiality to influence the formal encoding of information source. The fact that formal encoding of information source can be determined also by other categories that are not evidentiality goes against the definition of evidentiality as a grammatical category, in that this definition implies that the only or primary function of forms should be encoding information source.

On a more functional note, I argue that evidentiality in Ainu constitutes a separate conceptual category from epistemic modality. Nevertheless, these two categories may overlap. In this respect, I follow from studies such as Faller (2002), which advocate for the separate categorial status of evidentiality and epistemic modality while recognizing their interaction. Like Faller, I further argue that the two categories can not only be expressed simultaneously via dedicated morphemes or syntactic configurations, but that they may also be encoded jointly in one formal realization. The best example of this we have in Ainu are SA personal knowledge forms that subsume both evidentiality and epistemic modality, much like the Cuzco-Quechua form *-cha* Faller discusses (Faller, 2002: 262-3).

In defining the boudaries and characteristics of the conceptual category of evidentiality in Ainu, I adopted some semantico-pragmatic criteria that are not discussed in main typological studies (e.g. Aikhenvald, 2004). These criteria serve both to define the evidential category as a whole and to divide it into subdomains (e.g. personal knowledge, inferentiality, etc.). Though this work has its root in typological observations, I developed a discussion that puts forward the assumption that the evidential category in Ainu is to be defined in its own terms, without postulating any constraints that are derived from a typological-categorical model. In this instance, I resort to neo-whorfianism (see §2.2.1) that ascribes the cross-linguistic differences in the formal encoding and specification of linguistic categories to a difference in how speakers pack separate primitive semantic concepts into unitary groups of semantic concepts, which are then also cohesively expressed through language via dedicated formal devices. Therefore, linguistic categories are to be understood as essentially language-specific since the way semantic concepts are packed together is the result of the unique organization of primitive concepts by the people who speak that language. Such an approach to the definition of the Ainu evidential category resembles categorial particularism (Haspelmath, 2010: 664). In fact, I argue that we can only felicitously capture the nuances and peculiarities of Ainu evidentiality through a description that

rests on general comparative concepts and that does not expect a certain number of fixed features to be met. That is, I go against the assumption of a universal category of evidentiality defined on the basis of cross-linguistic comparison (as in Newmeyer, 2007).

In contrast, I argue that general comparative concepts (in this specific case, primitive semantic concepts) are to be addressed in cross-linguistic comparison in order to define language categories in their own terms. This allows for more efficient cross-linguistic comparison and a more accurate definition of language particulars, and gives the linguists the ability to pursue language description on the basis of empirical facts rather than on *a priori* categorizations. Possible categorial discrepancies with typology are thus not treated as "exceptions" but can be easily ascribed to a difference in the packing of semantic primitives into larger unites semantic concepts operated by the speakers of a language and then translated formally into this latter. In this sense, this study also adopts Bickel's (2010) Multivariate Analysis approach, where the author advocates for the need of recognizing language-specific categorial features in their own right with the assumption that language categories are cross-linguistically similar but never identical. In light of this approach, we can discuss Ainu evidentiality as evidentiality proper despite the number of typologically "unexpected" behaviors this category displays, and we can focus on functions it exhibits that are clearly related to source of information.

9.5 Some unsolved issues

Some unsolved issues remain at the end of this study. For example, doubts remain concerning the origin of some of the evidential forms I surveyed, specifically for the SA reportative *manu* (see §5.6). Although researchers speculate on the possible derivation and origin of this form, they have reached no satisfactory conclusion.

Other issues that would need to be discussed more deeply than the present work allows concern categories that we systematically find to interact with evidentiality – namely, aspect, epistemic modality and modality more generally. Although we see that it is possible for epistemic modality to overlap with evidentiality, it is not clear to what extent this happens (i.e. whether for all kinds of evidentiality the overlapping of epistemic modality is a common or recurrent phenomenon) nor whether some kinds of epistemicity arise systematically with specific instances of evidentiality. Regarding this latter issue, I specifically highlighted a mirative reading for SA inferentials (see §7.3)

and HA direct evidentials (see §8.3), whose recursivity, however, I could not test given the scarcity of tokens depicting similar contexts. Furthermore, throughout Chapter 6, I made reference to the categories of modality and aspect, and in particular to the realis/irrealis distinction and telicity. I argued that these features of the Ainu verb are relevant for the understanding of the uses and meanings of SA evidentiality and, ultimately, for the definition of relative tense of the scope predicate. However, the definition I gave for these categories is still tentative and is limited to the small number of verbs occurring with an evidential form. The discussion of realis, irrealis, and telicity, and of the characteristics that define them, is only meant to serve the present purpose of discussing Ainu evidentiality and should not be taken as applicable to the Ainu category of verb as a whole. Further studies on Ainu need to address aspect and mood in dedicated research in order to obtain a satisfying and cohesive description of these categories. Hopefully the present study will provide a starting point for such research in the future.

More generally, as is clear from the analytical problems mentioned in this section, at times the scarcity of evidential tokens did not allow me to propose safe conclusions on some characteristics of Ainu evidentiality (especially regarding its use and functions). Similarly, this problem made it difficult to clearly outline its interaction with the abovementioned categories as well as other categories, such as person. Given the aim and scope of this research, tokens relevant to these specific matters might have been left out of the analysis. Future research that focuses on one single dialect of an Ainu variety could bring more insight into evidentiality. However, while this is possible mainly (and almost exclusively) for Southern Hokkaidō and Eastern Hokkaidō dialects, other dialects and varieties do not represent a good field for such studies due to the limited language documentation carried out in the past and the extinct status of dialects such as the ones of the SA variety.

Appendix

I. Additional figures

Figure A – Pilsudski's map of Sakhalin island with locations of Ainu and Nivkh settlements (Majewicz, 1998: 219-220).

1. Korsakovsk	19. Tikhmenevsk
2. Perochi	20. Nayero
3. Mauka	21. Kotankesh
4. Arakoi	22. Hunup
5. Porotomari	23. Motomari
6. Rahmaka	24. Manuye
7. Kusunai	25. Sieraroko
8. Ussoro	26. Otosan
9. Aleksandrovsk	27. Ai
10. Nikolayevsk	28. Naibuchi
11. Yrkyrnvo	29. Sakayama
12. Plivo	30. Rure
13. Slavo	31. Obusaki
14. Uskovo	32. Ochohpoka
15. Rykovskoye	33. Tunaichi
16. Onor	34. Takoye
17. Socigare	35. Siyantsy
18. Taraika	

Map 1.
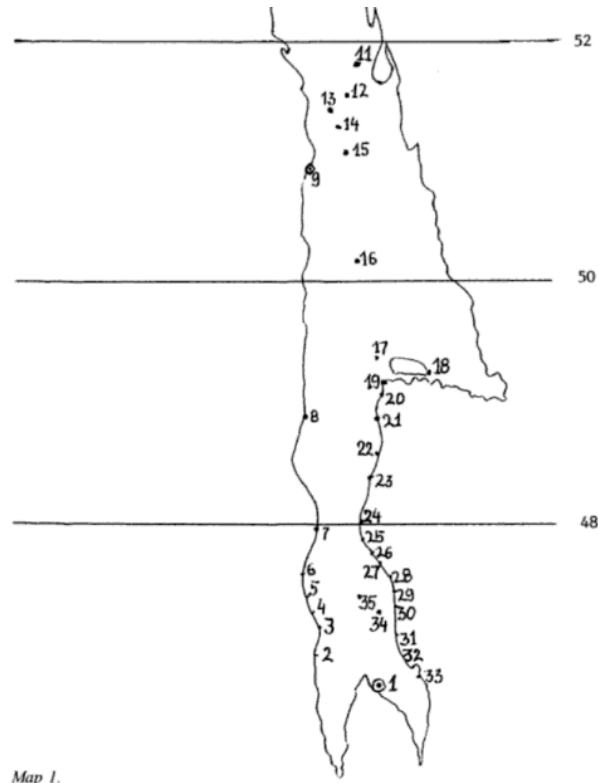
Figure B – Graphic representation of *EP* and *EV* (interrogative tokens) (vertical axis showing percentage of instances where personal knowledge evidentiality is marked via the form *-hV*, horizontal axis showing *EP* and *EV* values resulting from calculation)
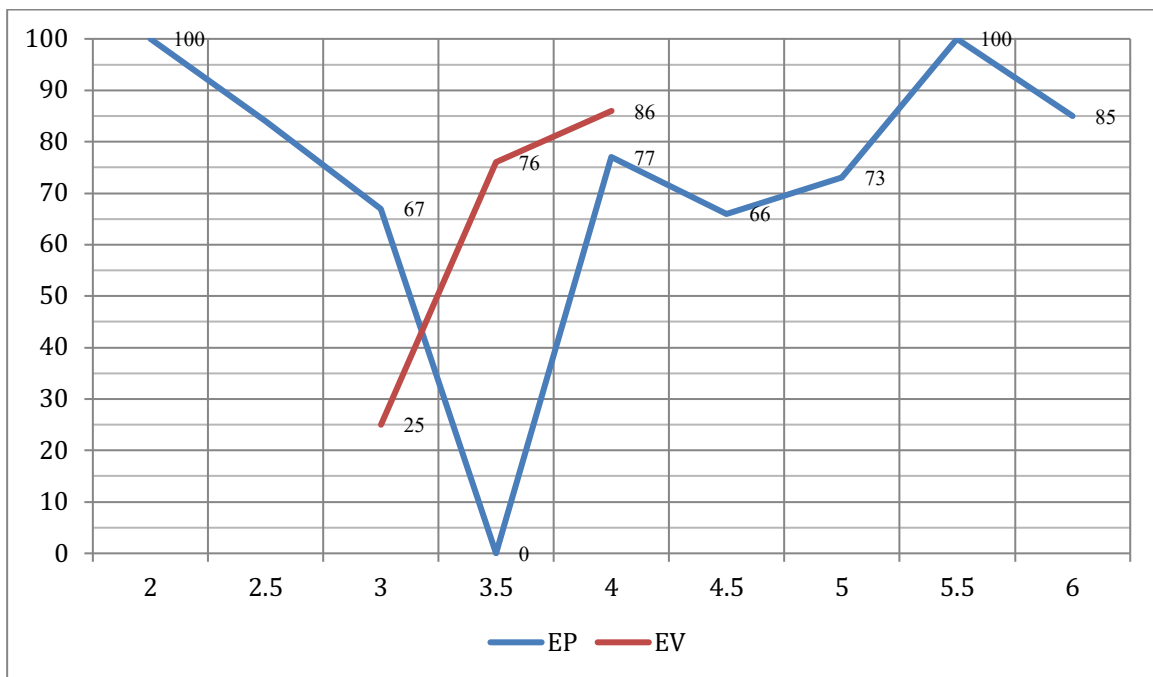
Figure C – Graphic representation of *EP* and *EV* (declarative tokens) (vertical axis showing percentage of instances where personal knowledge evidentiality is marked via the form *-hV*, horizontal axis showing *EP* and *EV* values resulting from calculation)
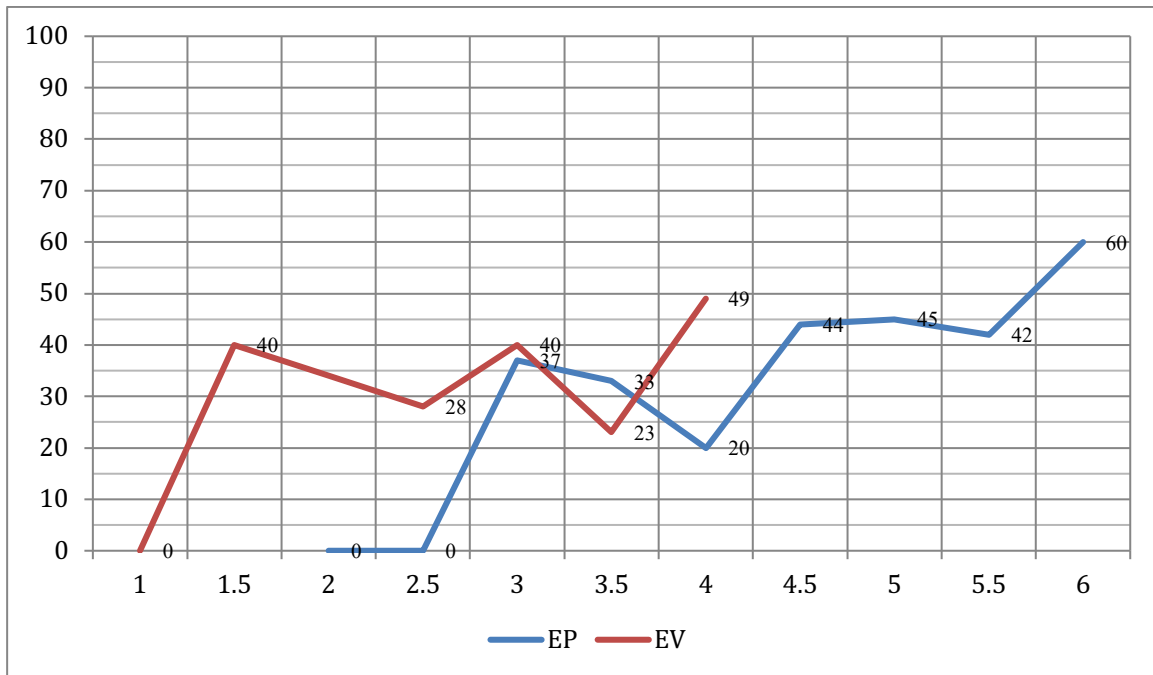
Figure D – Graphic representation of *PKT* (interrogative tokens) (vertical axis showing percentage of instances where personal knowledge evidentiality is marked via the form *-hV*, horizontal axis showing total *PKT* value resulting from calculation)
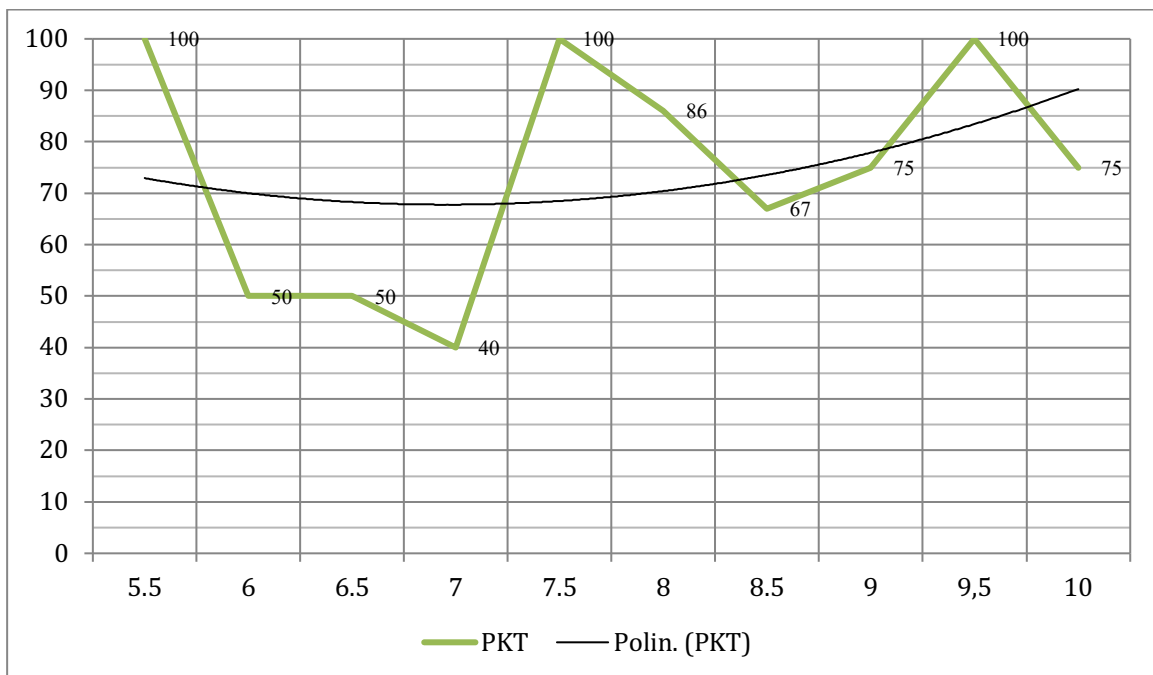
Figure E – Graphic representation of *PKT* (declarative tokens) (vertical axis showing percentage of instances where personal knowledge evidentiality is marked via the form *-hV*, horizontal axis showing total *PKT* values resulting from calculation)
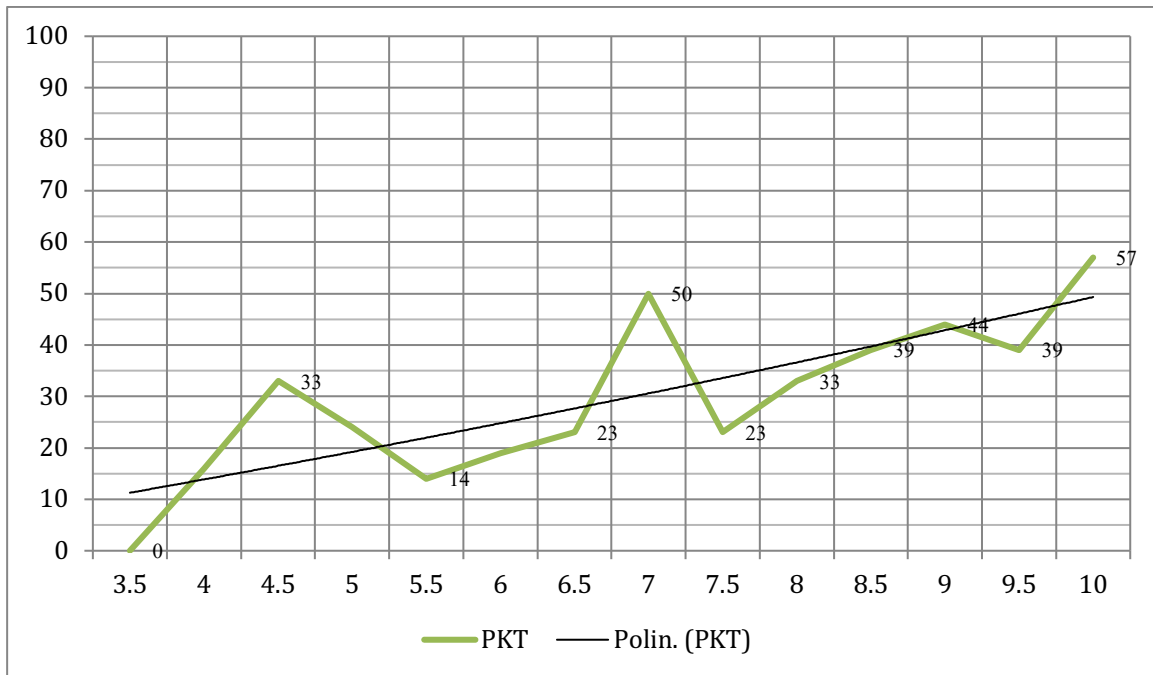
Figure F – Graphic representation of overall *PKT* (interrogative and declarative tokens, vertical axis showing percentage of instances where personal knowledge evidentiality is marked via the form *-hV*, horizontal axis showing total *PKT* values resulting from calculation)
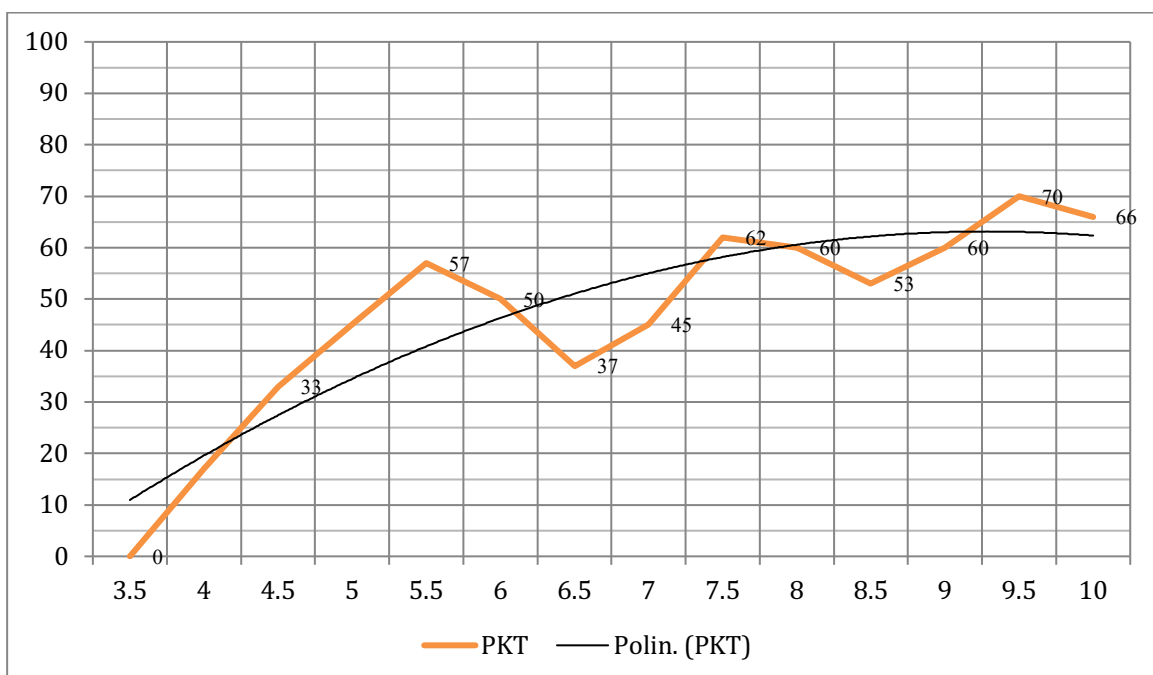
Figure G – Areal distribution of *manu*

II. Additional tables

Table A – Kubodera's (1977: 8) classification of Ainu literary genres[1]

Rhythmic literary genres	Epic poetry	*Uwenkarap-itak*	Greeting formula	Genres Ainus do not sing nor know	
		Kamuy-nomi-itak	Praying formula		
		Ukewehomsu-itak	Thanking formula		
		Caranke-itak	Discussion formula		
		Upopo	Festivity song	Genres Ainus do sing and know	
		Ihumke	Childcare song		
		Rimse-sinotca	Dancing song		
		Sake-haw	Sake-offering song		
		Tree-growing song	?		
		Cip-o-haw	Sailing song		
		Tusu-sinotca	Female shaman song		
		Yukar (sung)	*Kamuy yukar* — Songs of gods	Songs about deities	Genres Ainus know as narratives
			Oyna — Sacred songs		
			Yukar — Songs of heroes	Songs about humans	
			Mat-yukar — Song of women		
	Liric poetry	*Sinotcha*	Melodic lyric	Genres Ainus do sing and know	
		Iyohaycis	Grieving lyric		
		Yaykatekar	Love lyric		
		Yaysamanena	(Melodic folklore)		
Non-rhythmic literary genres (prose)	First-person narrator	*Kamuy-uwepeker*	Hidaka, Saru, Iburi	Folklore about deities	
		Kamuy-tuytak	Center, North, East Hokkaidō		
		Kamuy-ucaskuma	Karafuto		
		Aynu-uwepeker	Saru, Iburi	Folklore about humans	
		Aynu-tuytak	Center, North, East Hokkaidō		
		Enciw-ucaskuma	Karafuto		
	Third-person narrator	*Awta-weysisam-uwepeker*	Tales about a poor Japanese (Hidaka, Saru)		
		Awta-onciko-uwepeker	Tales about an old man (Iburi, Horobetsu)		
		Isoykun-wenheysu-tuytah	Tales about a poor old man (Karafuto)		
		Enciw-tuytah	Tales about humans (Karafuto)		
		Pon-upaskuma	Small tale		
		Aemina pon-itak	Small comical tale (maybe just Horobetsu)		
		Carahaw	Rumor-tales (Karafuto)		

---

[1] My translation and revision from the Japanese original.

III. Ainu texts

In this final section of the appendix, I present a selection of Ainu texts extrapolated from the reference corpora I consulted for this study. The following selection includes texts from only those corpora for which we do not have an English translation and/or thorough linguistic glosses to date. For this reason, texts from thoroughly translated and analyzed corpora like BUG are not included here.

With regards to the texts coming from the PLA, PLB, WDA, and WDB corpora, I re-transliterate them adopting the conventions I outlined in §1.7. In contrast to this, in those instances where we have an audio back-up for the corpora (e.g. MRA), I amend transcription mistakes and gaps of the original edition through a re-listening of the recordings available for the texts. Therefore, the version reported here may differ from the one present in the original edited corpora. If no further specification is given, for all metadata of the texts I refer the reader back to §1.6.

All glosses and translations for the texts are mine. Footnotes include notations on transliteration and observations on unclear passages or "non-canonical" grammar. These notations and observations on grammar are only based on the language present in the texts taken into account here and should not be taken as representative of general behaviors of the Ainu varieties I deal with in this study.

1. *OHACISUYE*[2]

PLA: 98-101, dictated January 1903 by Ipohni of Hunup

1. *Śine kotan am manu. Śine kotan am*

Sine	*kotan*	*an*		*manu.*	*Sine*	*kotan*	*an*
one	village	3SS/exist.PC		DIR.KNW	one	village	3SS/exist.PC

manújḱe, névan àjnuheḱín moto orovano

manu		*ike,*	*newan*	*aynu-he*[3]*-[h]cin*		*moto*	*or-o-wa-no*
DIR.KNW		then	that	person-POSS-PL		origin	3/place-POSS-from-ADV

---

[2] Tales in PLA are reported only with a reference number and no title. The title I provide here is not the original one given to the tale by either the narrator or Pilsudski himself, but it only has the purpose of illustrating the content.

[3] This appears to be a case of "partitive" possessive, where the possessive morpheme does not indicate strictly possession but rather partitivity (i.e. 'those people in particular among others'). This function of the possessive morpheme, that is very common in SA, remains still largely unexplained. Here and in the rest of the glosses for the texts in this appendix, the "partitive" use of the possessive morpheme can be recognised from the absence of a person referent (i.e. 3/, 1S-, etc.) that normally references the possessor.

oháćisujè koro utara ne manu. Ájn iśam

ohacisuye	*koro*	*utara*	*ne*	*manu.*	*Ayn[u] isam*
empty.house.devil	3PS/3SO/have	people	COP	DIR.KNW	person 3PS/not.be

oxta, únź̵ uáre ránḱe an manú. 2. Śine kotan

ohta,	*unc[i][4] ua-re*	*ranke*	*an*	*manu.*	*Sine*	*kotan*
place.in	fire burn-CAUS	ITR	3SS/exist.PC	DIR.KNW	one	village

orova, pájkara ćiśe koro utara ćéx é

or-o-wa…	*paykara*	*cise*	*koro*	*utara*	*ceh*	*e*
3/place-POSS-from	spring	house	3PS/3SO/have	people	fish	3PP/be.in

kotan ónne utára pajéte, okáḱeta śine kotan

kotan	*onne*	*utara*	*paye*	*te[h],*	*oka-ke-ta*	*sine*	*kotan*
village	3/place+to	people	3PS/go.PL	and	3/behind-POSS-in	one	village

orova śine ćiś jám manu. Névan

or-o-wa	*sine*	*cih*	*yan*	*manu.*	*Newan*
3/place-POSS-from	one	boat	3SS/go.ashore.PC	DIR.KNW	that

kotanu otta névan ćiś ě́. 3. Tán oha

kotan-u	*otta*	*newan*	*cih*	*e[h].*	*Tan*	*oha*
village-POSS	place+in	that	boat	3SS/come.PC	this	3SS/be.empty

ćiśe pújhe orova pắ numá-kusu am

cise	*puy-[e]he*	*or-o-wa*	*paa*	*numa*	*kusu an*
house	3/hole-POSS	3/place-POSS-from	smoke	3SS/rise	PRG

manu. Um ájnu itax manu: "Téta

manu.	*Um*	*aynu*	*itah*	*manu:*	*"Teta*
DIR.KNW	stern	person	3SS/speak	DIR.KNW	now

japán-ćiki ipìśanaxćiró. Tani kotan

yap-an	*ciki*	*i-pis-an-a-hci*	*ro.*	*Tani*	*kotan*
go.ashore.PL-1PS	if	AP-ask-1PS-0-3PS	FIN	now	village

---

[4] The letter *ź̵* is used in PLA to transliterate the palatalized version of the sound otherwise represented by *ć*, that in turns is described as the affricate *ć* in Polish. This sound, and subsequently the notation *ź̵*, is said to occur only after a nasal consonant. (Pilsudski, 1912: 7).

koro utara ćéx é kotan ónne pajéxći

koro	*utara*	*ceh*	*e*		*kotan*	*onne*	*paye-hci*
3PS/3SO/have	people	fish	3PP/be.in		village	place+to	go.PL-3PS

rúhe an; oháćirùmpe koróxći án-kusu, ćiśe

ruhe an;	*ohacirum-pe*		*koro-hci*	*an*	*kusu,*		*cise*
INF.RSN	empty.house-thing		3SO/have-3PS	PRF	because		house

orovano pa numa ea rúhe an". 4. Um ájnu

or-o-wa-no		*pa*	*numa*		*ea*	*ruhe an".*[5]	*Um*	*aynu*
3/place-POSS-from-ADV		smoke	3SS/rise		PRF	INF.RSN	stern	person

náx jé manu. Támbe rénkajne cíś

nah	*ye*		*manu.*	*Tan*	*pe*	*renkayne*	*cih*
COMP	3SS/3SO/say		DIR.KNW	this	thing	thanks.to	boat

jánḱe manu. Um ájnu janíḱe,

yan-ke		*manu.*	*Um*	*aynu*	*yan*		*ike,*
3SS/3SO/go.ashore.PC-TR		DIR.KNW	stern	person	3SS/3SO/go.ashore.PC		then

ćipokoxtuś ámpate etáraś manu. 5. Um

cip-o[6]*-kox-tus*		*ampa*	*te[h]*	*etaras*	*manu.*	*Um*
boat.get.in-DEI-have-cord		3SS/3SO/hold	and	3SS/stand	DIR.KNW	stern

śata ćipo ájnu jám manu; cárapox

sa-ta	*cip-o*		*aynu*	*yan*		*manu;*	*carapoh*
side-in	boat-3SS/get.in		person	3SS/3SO/go.ashore.PC		DIR.KNW	manchurian

---

[5] The inferential here seems to have its semantic scope over the predicate of the main clause *numa ea* but also on the predicate of the causal subordinate *koro-hci an*, as the event inferred through reasoning is more likely to be the sitting in rather than the rising of the smoke, which we know the speaker can experience through sight. This one instance of *ruwehe 'an* might indicate that the scopal properties of inferentiality are not limited to the one predicate in the clause where also the inferential occurs. Since this is the only such case appearing in my reference corpora, the matter is difficult to investigate further.

[6] The nature of the morpheme *o-* is dubious. It is most likely the deictic affix meaning 'below, the lower part' but the use of this affix is rarely attested in SA (in contrast, its presence in HA as the cognate *ho-* is far more common) and it is difficult to determine whether its use in this Ainu variety is productive. The hypothesis by which *o-* would be actually the verb *o* 'get into' that incorporates the noun *cih* 'boat', as in other cases in this same text, does not hol here because of the verb *koro* 'have' (reduced to *koh* in the compounding process) that immediately follows.

korope míte makan manu. Ćiśe oxta

koro-pe	*mi*	*te[h]*	*makan*	*manu.*	*Cise*	*ohta*
have-thing	3SS/3SO/wear	and	3SS/go.up.PC	DIR.KNW	house	place+in

makánte ahun manu. Apa ćáxḱe

makan	*te[h]*	*ahun*	*manu.*	*Apa*	*cahke*
3SS/go.up.PC	and	3SS/enter.PC	DIR.KNW	door	3SS/3SO/open

inkarájḱe, úunẑi oxta pőn únẑi ua

inkara	*ike*	*unci*[7]	*ohta*	*poon*	*unci*	*Ua*
3SS/look	then	fire	place+in	3SS/be.quite.small	fire	3SS/burn

jákuś an. 6. Nế turano hemat húmhi án.

ya[8]	*kus[u]*	*an.*	*Nee*	*turano*	*hemat[a]*	*hum-[i]hi*	*an.*
?	PRG		this	together	what	3/sound-POSS	3SS/exist.PC

Inkarájḱe, śine vén kaja mi ájnu, nánhu

Inkara	*ike*	*sine*	*wen*	*kaja*	*mi*	*aynu*	*nan-[u]hu*
3SS/look	then	one	3SS/be.bad	garment	3SS/3SO/wear	person	3/face-POSS

kájki oha numa né, tékhi kájki oha numa né. Ájnu

kayki	*oha*[9]	*numa*	*ne,*	*tek-[i]hi*	*kayki*	*oha*	*numa*	*ne.*	*Aynu*
too	be.full	hair	COP	3/hand-POSS	too	be.full	hair	COP	person

taga, hemáta taga, únẑi ḱeśta etáraś ea. 7. Néva kájki

taga,[10]	*hemata*	*taga,*	*unci*	*kes-ta*	*etaras*	*ea.*	*Newakayki*
whether	what	whether	fire	end.side-in	3SS/stand	PRF	although

---

[7] The lengthened vowel in the original transcription is not clear. The fact that the first *u* is marked with the stress might indicate that it is a morpheme separate from the nominal stem *unci* 'fire'. A plausible proposal would be that the first *u* is a contracted variant of the verb *ua* 'burn' so that the compound would resul in a relative construction (i.e. *u(a) unci*) meaning 'the fire that burns'. However, I could not find any other such contractions within relative constructions in the reference corpora and nothing of this kind is reported in reference grammars.

[8] This is most likely an interrogative/dubitative particle, but its syntactic position between a notional verb and an aspectual construction raises some doubts.

[9] The verb *oha* presents an interesting semantic characteristic by which it bears out the two opposite meanings of 'be full' and 'be empty' and as such qualifies as an auto-antonym.

[10] The word *taga* is a loan from Japanese. The expression だか *daka* (<copula+dubitative particle), usually employed in a disjunctive function, is realized in Ainu as *taga* with an exchange of the feature of voicing between the two consonants.

apa ćaxk ájnu itax manu: "Ájnu

apa	*cahk[e]*	*aynu*	*itah*	*manu:*	*"Aynu*
door	3SS/3SO/open	person	3SS/speak	DIR.KNW	person

ánhi ắ?" Tá ojaśi itax manu: "Ế, ájnu

an[11][-i]-hi		*aa?"*	*Ta*	*oyasi*	*itah*	*manu:*	*"Ee,*	*aynu*
3SS/exist.PC[-0]-DIR		FIN	this	devil	3SS/speak	DIR.KNW	yes	person

án", nax jé manu. Ne ámpe kusu, neja ájnu,

an",		*nah*	*ye*	*manu.*	*Neampe kusu,*	*neya*	*aynu,*
3SS/exist.PC		COMP	3SS/3SO/say	DIR.KNW	therefore	this	person

ene kájki oháćisujè né nanko, nax erám

ene	*kayki*	*ohacisuye*	*ne-Ø*	*nanko,*	*nah*	*eraman*
like.this	too	empty.house.devil	COP-DIR	maybe	COMP	3SS/3SO/think

án manu. 8. Ne ájnu kána aśin. Uto tómbate,

manu.	*Ne*	*aynu*	*kana*	*asin.*	*Uto*	*tompa*	*te[h],*
DIR.KNW	COP	person	again	3SS/go.out.PC	door	3SS/3SO/close	and

téreće manu. Sójta aśin turano opóni

tereke	*manu.*	*Soy-ta*	*asin*	*turano*	*oponi*
3SS/run	DIR.KNW	outside-in	3SS/go.out.PC	together	from.behind

ájn aśin humhi an manu. Irúkaj

ayn[u]	*asin*	*humhi an*	*manu.*	*Irukay*
person	3SS/go.out.PC	INF.FLT	DIR.KNW	a.moment

kohekirújḱe, nukara neaniḱe, neja oháćiśuihè

ko-he-kiru	*ike,*	*nukara*	*neanike,*	*neya*	*ohacisuye*
APPL-DEI-3SS/3SO/turn	then	3SS/3SO/look	when	this	empty.house.devil

orova annóśpa manu. 9. Támḱe rénkajne ekimátex

orowa	*an[12]-nospa*	*manu.*	*Tan*	*pe*	*renkayne*	*ekimateh*
by	IP-3SO/chase	DIR.KNW	this	thing	thanks.to	3SS/be.scared

---

[11] The second person singular prefix is missing from this verb form.

[12] In "passive" constructions, the personal suffix *'an-*, normally used to mark first person plural referents, is better understood as an indefinite person marker, just like the cognate fourth person marker *a-/-an* of HA.

358

kusu, tére̗ke manu. Neja ájnu utárhi anekajo

kusu,	tereke	manu.	Neya	aynu	utar-[i]hi	an[13]-e-kayo
because	3SS/run	DIR.KNW	this	person	3/people-POSS	1PS-APPL-3PO/call

manu: "Ohá̗cisujè inóśpajke̗, kira-ján!", nax

manu:	"Ohacisuye	i-nospa	ike,	kira	yan!"	nah
DIR.KNW	empty.house.devil	1PO-3SS/chase	then	2PS/escape	FIN	COMP

jé manu; tékoro tére̗ke manu. 10. *Nea ohá̗cisujè*

ye	manu;	tekoro	tereke	manu.	Nea	ohacisuye
3SS/3SO/say	DIR.KNW	really	3SS/run	DIR.KNW	this	empty.house.devil

orova annóśpa, śetúru ká̗ś̗keta nǎnhònko emuś áni

orowa	an-nospa,	seturu	kaske-ta	naanhonko	emus ani
by	IP-3SO/chase	back	over-in	almost	sword with

táẘke, śetúru kaśi ćirárire ká̗nne nóśpa

tawke,	seturu	kas-i	cirarire	kanne	nospa
3SS/3SO/cut	back	3/up-POSS	3SS/touch	ADV	3SS/3SO/chase

manu. Ćiś oro okaj utara núkara ámpe,

manu.	Cih	or-o[14]	okay	utara	nukara	ampe
DIR.KNW	boat	3/place-POSS	3PS/exist.PL	people	3PS/3SO/look	when

um ájnu ćibo koxtuś śaje-śaje-kane, ćiś ónne

um	aynu	cip-o-koh-tus	saye-saye	kane	cih onne
stern	person	boat.get.in-DEI-have-cord	3SS/3SO/roll.up	ADV	boat place+to

túxśe manu. 11. *Neja ćibo utara ax śúj, tu śúj,*

tuhse	manu.	Neya	cipo	utara	ahsuy,	tu	suy
3SS/jump	DIR.KNW	this	3PS/boat.get.in	people	once	two	time

neja ćiś utara váxka jóxte. Tu tém paxno neja

neya	cih	utara	wahka yohte.	Tu	tem	pahno neya
this	boat	people	water 3SS/3SO/strike	two	NCLF	until this

---

[13] This morpheme seems to refer to a first person narrator (i.e. the character of the tale) though being outside of the direct speech that follows (i.e. 'I called out'). This is probably an oversight of the informant who extended the first person of direct speech to this verb as well.

[14] The locative postposition *ta* 'in' is omitted here.

ćiś repum manu. Neja oháćisujè orova

cih	*repun*		*manu.*	*Neya*	*ohacisuye*	*orowa*
boat	3SS/go.out.at.sea		DIR.KNW	this	empty.house.devil	and.then

pećar ota-kata sám manu. Neja ájnu

pecar		*ota*	*ka-ta*	*san*		*manu.*	*Neya*	*aynu*
water.edge		beach	3/over-in	3SS/descend.PC		DIR.KNW	this	person

túxśe manújḱe, úmun ćiś śike káta muḱe

tuhse		*manu*	*ike,*	*um*	*un*	*cih*	*sike*	*ka-ta*	*muke*[15]
3SS/jump		DIR.KNW	then	stern	3SS/3SO/be.in	boat	load	over-in	?

ćáraśetè śiróśma manu. 12. Neja oháćisuyè jóboni

carase	*te[h]*	*sirosma*	*manu.*	*Neya*	*ohacisuye*	*yoponi*
3SS/trip	and	3SS/fell.flat	DIR.KNW	this	empty.house.devil	3/after

tusséjḱe vaxka oxta śiróśma manu.

tuhse		*ike*	*wahka*	*ohta*		*sirosma*	*manu.*
3SS/jump		then	water	place+in		3SS/fell.flat	DIR.KNW

Járaḱepokhì nékane ahun manu. Né turano

Yara-ke-pok-[i]hi-ne[16]		*kane*	*ahun*		*manu.*	*Ne*	*turano*
3/low.side-POSS-under-POSS-to ADV		3SS/enter.PC		DIR.KNW		this	together

neja ćiś ećipójḱe. Tomári tujkáta

neya	*cih*	*e-cipo*		*ike*	*tomari*	*tuyka-ta*
this	boat	APPL-3SP/3SO/boat.get.in		then	bay	across-in

---

[15] The origin and meaning of this word are dubious. Pilsudski reports *muke* as an adverb meaning 'with arms outstretched', but there is no clear semantic evidence to fully justify this translation. *Muke* seems to be systematically used only in the context provided here, formung thus some kind of idiomatic phrase. This word possibly has some relation with the verb *mukemuke* 'jostle'.

[16] I take this *ne* to be the locative postposition meaning 'to'. Although the canonical realizations of this postposition (as reported in reference grammars of Western Sakhalin, e.g. Murasaki, 1976a: 118) are *onne* (unbound) or *-ene* (bound), the form *-ne* appears several times in the corpora of Eastern Sakhalin. Another possibility is for this *-ne* to be the copula used with an equative function – this theory hoewer does not find justification semantically in this context.

repum manu. 13. *Neja oháćisujè orova*

repun	*manu.*	*Neya*	*ohacisuye*	*orowa*
3SS/go.out.at.sea	DIR.KNW	this	empty.house.devil	by

nóśpa ájnu atuj káta repum paxno "Oháćisujèp!

nospa[17]	*aynu*	*atuy*	*ka-ta*	*repun*	*pahno*	*"Ohacisuyep!*
3SS/3SO/chase	person	sea	over-in	3SS/go.out.at.sea	until	empty.house.devil

Oháćisujèp!" náx jé manu. Tĕkoro usáje kara

Ohacisuyep!"	*nah*	*ye*	*manu.*	*Teekoro*	*usayekara*
empty.house.devil	COMP	3SS/3SO/say	DIR.KNW	really	3PS/joke

manu. Néva kájki "Oháćisujèp, oháćisujèp!" náx

manu.	*Newakayki*	*"Ohacisuyep,*	*ohacisuyep!"*	*nah*
DIR.KNW	although	empty.house.devil	empty.house.devil	COMP

jé manu. Támb́e pate tékoro

ye	*manu.*	*Tan*	*pe*	*pate[h]*	*tekoro*
3SS/3SO/say	DIR.KNW	this	thing	only	really

evérajax manu. 14. *Ven ájnu hene tán oháćisujè*

e-[u]-w-erayah	*manu.*	*Wen*	*aynu*	*hene tan*	*ohacisuye*
APPL-[REC]-0-3PS/3SO-admire	DIR.KNW	be.bad	person	like this	empty.house.devil

etutan kusu-néjḱe, hánnáx kusu

e-tutan	*kusu*	*neyke*	*hannah*	*kusu*
APPL-3SS/3SO/turn	because	TOP	NEG	because

---

[17] In this relative construction involving a passive construction with *orowa* 'by' the personal prefix *an-*, normally found on "passive" verbs, is omitted after the argument *aynu* 'person', bearing the thematic role of patient and the grammatical function of subject, is relativized. The behavior of the personal affix used in "passive" constructions (i.e. the prefix *an-* in SA, seen here, and the cognate affix *a-/-an* in HA) is not entirely clear. Discrepancies in the referencing of this personal affix to the oblique agent of "passive" constructions arise exactly in environments like relative clauses, where the affix disappears once the patient-subject argument is relativized (as in the case at hand) while the postpositional *orowa* is maintained. Conversely, (though this evidence comes from HA) we see that when it is the oblique-agent to be relativized the postposition *orowa* is omitted but the personal affix is maintained (cfr. *ruyapto orowa a-i-karkarse* 'I was tripped by a harsh storm' > *a-i-karkarse ruyapto* 'the harsh storm by which I was tripped' in (TMA: 56)). For one thing, this kind of relativization goes against the rule of feature retention for obliques (Bugaeva, 2004) and highlights how still today the Ainu so-called "passive" voice remains vastly unexplained.

epírika kúmpeka hánne kumpene

e-pirika	*kun*[18]	*pe*	*ka*	*hanne*	*kun*	*pe*	*ne*
APPL-3SS/3SO/be.good	obligation?	thing	even	NEG	obligation?	thing	COP

manu. Náx-kane oháćisujè ućaśkoma án.

manu.	*Nah*	*kane*	*ohacisuye*	*ucaskoma*	*an.*
DIR.KNW	COMP	ADV	empty.house.devil	tale	3SS/exist.PC

Húśk an ućáśkoma nejaxka, tani án ájnu

Husk[o] an		*ucaskoma*	*ne*	*yahka,*	*tani*	*an*	*aynu*
be.old	3SS/exist.PC	tale	COP	though	now	3SS/exist.PC	person

utara kájki ukućáśkomapenè.

utara	*kayki*	*u-k[o]-ucaskoma*	*pe*	*ne.*
people	too	REC-APPL-3PS/3SO/tell	thing	COP

1. THE EMPTY-HOUSE-DEVIL

1. There was a village. There was a village and the people (living there) had had an Empty-House-Devil (in their houses) since the old times. When a person was not there, (the devil) used to kindle a fire (in their house). 2. From one village… In the springtime, the people of a house went to the village where there were fish[19] and, after that, there came a boat from one village. 3. To that village that boat came. From the chimney-hole of this empty house smoke was rising up. The steersman said: "Let us now enquire if we land. The people of the village must have now gone to (their) fishing village; smoke must rise from the house because (someone) has stayed in". 4. So said the steersman. Therefore he landed the boat. The steersman went aground and stood holding the cord to moor the boat. 5. One of the men in the boat went aground, next to the stern – he was dressed in Manchurian clothes, and went up (towards the house). Having gone up to the house he entered. He looked around opening the door and (he saw) a small fire was burning in the fireplace. 6. At the same time there was the sound of something. When he looked, (he saw) a person dressed in poor garments – his face and even his hands were completely covered with hair. Was it a person or what else? It stood by the edge of the fireplace. 7. Nevertheless, the man who (had) opened the door said: "Are you a

---

[18] The origin and exact meaning of this word (and of the HA cognate *kun*) is dubious.

[19] The seasonal fishing place where people used to move during spring and summer for fishing.

person?" and this devil replied: "Yes, I am a person", so it said. Therefore this man: "It is probably an Empty-House-Devil", he thought so too. 8. That man went back out, he closed the door and ran. While he went out it seemed a person came out behind him. When he turned around for a moment and looked (he saw) he was chased by an Empty-House-Devil. 9. Because he was scared of that he ran. He called his companions: "An Empty-House-Devil chases me, run away!" so he said (and) ran swiftly. 10. He was chased by this Empty-House-Devil, (who) chased him touching his upper back almost cutting him with a sword. When the people who were in the boat saw this, the steersman jumped into the boat rolling up the cord. 11. The people in the boat stroke the water many times (and) the boat went seawards two *tem*s.[20] The Empty-House-Devil then came down to the shore. The man jumped (into the boat and) fell flat tripping over the load of the boat that was (by) the stern. 12. The Empty-House-Devil jumped after him and fell flat into the water, he entered it to the low side (of the boat). Meanwhile the boat set out[21] and went seawards across the bay. 13. Until (they) got to the open sea the man who was chased by the Empty-House-Devil said mocking greatly: "Empty-House-Devil! Empty-House-Devil!". This thing only (his companions) admired a lot. 14. (Had it been) a bad man to turn to the Empty-House-Devil, things could not have gone (so) well indeed. There is such a tale (about) an Empty-House-Devil. Though it is a tale of the old times, today's people indeed tell it too.

---

2. *SETA ANSAMIHI*

PLB: 114, dictated in 1903 by Kutokere of Ocohpoka

1. *Sine*   *moromahpo*   *'an-nee.*   *Tan*[22] *sin[e]'antoo*   *'okay-an*   *ayne,*

   one   young.woman   1PS-COP   this   one.exist.PC.day   exist.PL-1PS   while

---

[20] A *tem* is a unit of measurement corresponding to the distance there is between both hands when one keeps their arms stretched out.

[21] As it regards the translation 'set out' for the verb *ecipo*, I use Pilsudski rendering although I find the verb *ecipo* with the meaning of 'get into a boat with' elsewhere. This latter translation indeed is troublesome in this case, since one of the arguments of the verb seems to be *cih* 'boat' that, beside not entailing a human referent (as should be expected by the lexical entry of the verb), appears also as the incorporated noun in *ecipo*.

[22] The demonstrative *tan* 'this' precedes the adverbial expression *sine'antoo* (< *sine* 'one' *'an* 'exist' *too* 'day') 'one day'. As a modifier that needs a support noun, its used in this environment is not clear.

sine	*horokewpo*	*'ahun.*	*'An-sam.*	*Tan*	*sin[e]'antoo,*
one	young.man	3SS/enter.PC	1PS-3SO/marry	this	one.exist.PC.day

"niina	*kusu"*	*nah*	*yee*	*teh*	*'asin.*
3SS/collect.wood	because	COMP	3SS/3SO/say	and	3SS/go.out.PC

2. *'Onuman-ike-he* *kuwen* *'otuyuni*[23] *'an-ipe-re* *kusu*

'Onuman-ike-he	*kuwen*	*'otuyuni*	*'an-ipe-re*	*kusu*
evening-part-POSS	?	female.dog	1PS-3SO/eat-CAUS	because

'asip-an.	*'An-ipe-re-he*	*neyayki*	*kina*	*tum-wa*	*sine*
go.out.PL-1PS	1PS-3SO/eat-CAUS-NMLZ	but	grass	center-from	one

poro	*'ahko*	*seta*	*saa-ta*	*kaari.*	3. *Ne'ampe kusu*	*'an-ekisn*
be.big	be.male	dog	side-in	3SS/pass.by	therefore	1PS-?

hekota	*waayayse*	*'ani*	*kina*	*tum*	*hekota-'ene*
3/towards	3SS/bark.loudly	by	grass	center	3/towards-to

'ahun.	*'Orowa*	*'ahup-an*	*teh*	*'okay-an.*	*'An-oko-ho*
3SS/enter.PC	and.then	enter.PL-1PS	and	exist.PL-1PS	1P-husband-POSS

'ahun.	*'I-si-komuy-te*	*'ariki*	*'ike*	*'orowa*
3SS/enter.PC	1PO-REF-3SS/pick.lice-CAUS	3SS/come.PL	then	and

'an-ko-he-kiru	*kun-i*	*kayki*	*'etunne.*	*Ne'ampe kusu*
1PS-APPL-DEI-3SO/turn	obligation?-NMLZ	too	3SS/3SO/not.want	therefore

'an-ewee-'aykah	*teh*	*'an-ko-kiru.*	4. *Kisah*	*sut-u-ke*[24]*-ta*
1PS-?-not.be.able	and	1PS-APPL-3SO/3SOI/turn	ear	3/base-POSS-POSS-in

sine	*poro*	*maciri*	*'an.*	*Ne'ampe kusu*	*'inkara-'an*	*koh*
one	be.big	wound	3SS/exist.PC	therefore	look-1PS	when

---

[23] Variation of *'otuyumpe*, reported in Otsuka and al. (2008). The possible presence of the two nominalizers *pe* and *(h)i* in this word suggest that it is a compound, but the exact composition is not certain. I would suggest the word might have something to do with the verb *'otuy* 'terminate' and the stative verb *un* 'be in', but the semantic motivation for this does not follow clearly.

[24] The locative noun *suh* 'base, bottom part' bears both the regular possessive form obtained via the morpheme *-VhV* (appearing here in its shortened form *-V*) and also the possessive morpheme *-ke* proper of locative nouns. Morphologically this construction is analogous to other "multiple" possessives like *or-o-ke-he* where the canonical possessive is followed by *-ke(he)*.

sine	*poro*	*'ahko*	*seta*	*waayayse*		*wa*	*'apa*	*hekota*
one	be.big	be.male	dog	3SS/bark.loudly		and	door	3/towards

tereke.	*Haw-ehe*	*ne'ampe*	*'ene*	*'an*		*manuy.*
3SS/jump	3/voice-POSS	TOP	like.this	3SS/exist.PC		REP.QUO

"'Intaapiri,	*'intaapiri,*	*waayay,*	*waayay"*	*nah*	*yee*		*teh*
INTJ	INTJ	INTJ	INTJ	COMP	3SS/3SO/say		and

'asin.	*Tani*	*naa*	*'ene*	*'an*	*seta*	*'an-sam-i-hi*
3SS/go.out.PC	now	still	like.this	3SS/exist.PC	dog	1PS-marry-0-DIR

nee	*ruwehe 'an.*
COP	INF.RSN

2. I MARRIED A DOG

1. I was a young woman. Once, while I was passing the day, one young man entered. I married him. One day he said: "I'm going to collect wood" and went out. 2. That evening I went out to feed a female dog with no tail[25] (that I had). When I was feeding her, from inside the bushes a big male dog (jumped out and) passed along. 3. Therefore, while barking loudly towards my ears,[26] he entered the bushes. Then I got inside and waited. My husband entered. He came (to) have me pick off his lice but then he did not even want me to look at him. Therefore, I make him turn around.[27] 4. He had a large wound at the base of his ear, so, the moment I looked, (I saw) a big male dog (that) barked loudly and jumped towards the door. His voice was like this: "*Intaapiri, intaapiri, waayay, waayay*" so he said and went out. Still now (the story) is such: I must have indeed married a dog.

---

[25] The translation 'with no tail' corresponds to the word *kuwen* in the Ainu original. This is also the translation apparently given by Murasaki in her edition of PLB, but I could not confirm the meaning of this word. Another possibility is that the meaning 'with no tail' is included in the noun *'otuyuni* and that *kuwen* means 'I had' (where *ku-* would be a personal affix and *wen* a verb), also included in Murasaki's translation, but I could not confirm *wen* as a verb meaning 'have' or the like either.

[26] Again I borrow the translation 'ear' for the word *ekisn* from Murasaki. The final consonant cluster in this word suggest a case of mispronunciation that, however, I could not check due to the lack of an audio back-up for this corpus.

[27] Translation borrowed from Murasaki. The meaning of *ewee* is obscure.

F: *Hus… husko ‘ohta   ‘an   ‘ucaskumaa.   Husko…*
    be.old place+in   3SS/exist.PC   tale   be.old

M: *ゆっくりね。段々早くなっていくね。*

F: *Tunas   ‘an-yee   an-e-pirika-Ø   nee   na.*
   quickly   1PS-3SO/say   1PS-APPL-3SO/be.good-DIR   COP   FIN

Car-u-tu(n)nas…[28]
mouth-POSS-quickly

1. *Husko   ‘ohta   ‘an   ‘ucaskumaa.   Tebutoro   nah*
   3SS/be.old   place+in   3SS/exist.PC   tale   Tebutoro   COMP

‘an-yee   kotan ‘ohta   ‘an (‘an)[29]   *pe   nee   manuu.*
IP-3SO/say   village place+in   3SS/exist.PC   NMLZ   COP   DIR.KNW

Tebutoro (Tebutoro)   ‘Ihohkinay   nah   ‘an-yee   kotan reekoh,   ne‘an,
Tebutoro   ‘Ihohkinay   COMP   IP-3SO/say   village really   that

henke   ‘utah, nispa   henke   ‘utah pateh   ‘ohta[30]   *‘e-‘an*
elder   people great.person elder   people just   place+in   APPL-3PS/3SO/be

---

[28] Conversation up to this point is between the speaker Fujiyama Haru (F) and the collector of the story Murasaki Kyōko (M) , before the actual narration starts.

[29] Prosody suggests this is a repetition of the preceding verb *‘an*, although the possibility of this being a perfective marker is probably not to be excluded completely.

[30] In the recording the speaker seems to correct herself halfway while saying *‘ohta* and prefer using the verb *‘e‘an* ‘be in’ instead. Here in fact *‘ohta* should be superfluous since there already is the APPL *‘e-* referring to a locative (here *kotan* ‘village’) on the verb *‘an* ‘exist’, so that, as a direct argument, *kotan* ‘village’ should not cause morphosyntactic retention when relativized. Also, *‘e‘an* is not considered a strictly paucal form like the simple *‘an* ‘exist’ – although its use with a plural subject is not attested, a correspective *‘e‘okay* for the plural is also never encoutered in my sources.

kotan	*nee*	*manuu.*	*'E-'an-a-hci*	*kotan*	*nee*	*manuu.*
village	COP	DIR.KNW	APPL-3SO/be-0-3PS	village	COP	DIR.KNW

2. *'E-'an-a-hci*   *kotan neyke sine henke 'ahci*   *tura,*
    APPL-3SS/be-0-3PS   village TOP   one   elder   old.woman   together

mac-ihi   *tura*   *'okay-a-hci,*   *yay-cise-koro-hci*   *'okay-a-hci*[31]
3/wife-POSS   together   exist.PL-0-3PS   REF-house-have-3PS   exist.PL-0-3PS

manu   *ike*   *sine*   *mahpoo-ho*   *pateh*   *koro-hci*   *manuu.*
DIR.KNW   then   one   3/daughter-POSS   just   3SO/have-3PS   DIR.KNW

3. *Koro-hci*   *ike (koro-hci ike)*   *tani*   *'okay-a-hci*   *yayne, ramma 'aynu*
    3SO/have-3PS then   now   exist.PL-0-3PS   while   still   person

'okay   *kotan*[32] *nee*   *wakayki,*   *'okay-a-hci*   *yayne ne'an*
  3PS/exist.PL   village COP   even.though   exist.PL-0-3PS   while   that

mahpoo-ho-hcin   *res-ke-hci,*   *sonno kusu 'an*[33]   *pirika-no*
3/daughter-POSS-PL   3SO/grow.up-CAUS-3PS   really   be.good-ADV

res-ke   *ki-hci*   *ike*   *reekoh neera'an*   *'imii*   *ne*
SLV/3SO/grow.up-CAUS   VO/do-3PS   then   really   what.kind.of   clothes   COP

yahka   *ko-pirika-re-hci,*   *nispa*   *'utah*   *nee*   *kusu,*
though   APPL-3SO/3SOI/be.good-CAUS-3PS   great.person   people   COP   because

ne'an   *mahpoo-ho-hcin*   *sine*   *mahpo-ho-hcin*   *reekoh*   *pirika-no*
that   3/daughter-POSS-PL   one   3/daughter-POSS-PL   really   be.good-ADV

---

[31] This resembles a serial verb construction. It is unlikely for this to be a perfective construction (i.e. V + *'an*) since the alternation of *'an* with the plural form *'okay*, according to the subject of the notional verb, is never encountered in this environment. Given the semantics of this passage, the construction could be a progressive where the conjunction *kusu* is missing.

[32] This appears as a non-canonical relativization of a locative argument (i.e. *kotan* 'village') since there is no retention of the locative noun and postposition *'ohta* in the relative clause.

[33] In this informant's idiolect the expression *sonno kusu 'an* is most common with the meaning of 'really so'. This looks like an intensive variant of *sonno* 'really' to which the progressive construction *kusu 'an* has been attached. While it is most unlikely that this latter functions here as an aspectual marker, its other possible semantic functions are not clear.

res-ke-hci   *manu*   *ike,*   *sonno kusu 'an*   *karakara-ki-hci*

3SO/grow.up-CAUS-3PS DIR.KNW   then   really   3SO/love-do-3PS

yay[ne], res-ke-hci   *'okay-a-hci*   *yayne, ne'an*   *mahpoo-ho-hcin*

while   3SO/grow.up-CAUS-3PS   exist.PL-0-3PS while   that   3/daughter-POSS-PL

tani   *'aynu pahno 'an.*   4. *Tani (tani) hoku*   *ka*   *koro*

now   person until   3SS/exist.PC   now   husband   even   3SS/3SO/have

pahno   *'an*   *netapa-koro*   *teh 'an manuu.*   *'An*[34]   *manu*

until   3SS/exist.PC   3SS/constitution-have RSLT   DIR.KNW   3SS/exist.PC   DIR.KNW

ike   *reekoh 'episkan*   *kotan*   *'or-o[-wa]*   *nispa*   *'utah*

then   really   here.and.there village   place-POSS-from   great.person   people

ne'an   *mahtekuh*   *reekoh kaana-hci.*   5. *Ne'an*   *henke*   *'utah*

that   girl   really   3SO/desire-3PS   that   elder   people

mahpoo-ho-hcin[35]   *kaana-hci*[36]   *haw-e-ki-hci*   *yahkayki,*

3/daughter-POSS-PL   3SO/desire-3PS   voice-POSS-do-3PS   even.though

'ampene   *ne'an henke 'utah*   *neyke*   *renkarankoro*[37]*-hci*   *yahka,*   *ne'an*

a.lot   that   elder   people   TOP   agree-3PS   though   that

mahtekuh   *'ampene*   *'etunne*   *man[u].*   6. *Ne'an*   *henke*

girl   a.lot   3SS/3SO/not.want   DIR.KNW   that   elder

'utah   *mahpoo-ho-hcin*   *'ampene,*   *ne'an,*   *kosmah*   *ne*   *'oman*

people   3/daughter-POSS-PL   a.lot   that   bride   as   SLV/go.PC

---

[34] Repetition of the verb *'an* included in the resultative construction *teh 'an.* This seems to show that the verbal constituent within the erstwhile biclausal aspectual construction still retains some syntactic freedom.

[35] Plural agreement referring to the possessor (i.e. *henke 'utah* 'the elders (i.e. the parents)'). As the possessee (i.e. the daughter) is here unmistakably singular, this suggests that morphological number agreement in possessive constructions may be sensitive to plurality of the possessor and not just of the possessee, as otherwise stated in Murasaki (1976a: 85).

[36] Given the syntax of this passage, the clause whose verb is *kaana* 'desire' must function as a clausal argument for the verb *haweki* 'make voice, say', suggesting that the incorporation of the possessive form *hawe* 'the voice of' into the two-place verb *ki* 'do' does not result in syntactic saturation.

[37] This word can possibly be broken down into *renka-ran-koro* 'desire-heart-have'.

'ampene 'etunnee.   *Neewa 'an*[38]   *haw-e-ki-hci*   *yahka, 'ampene,*

a.lot   3SS/VO/not.want   such   voice-POSS-do-3PS   but   a.lot

ne'an, kosmah   *ne*   *'oman*   *'etunne.*   *Ne'an pe*

that   bride   as   SLV/go.PC   3SS/VO/not.want   that   thing

ki   *'ani*   *'okay-a-hci yayne, tani ram-[u]hu*   *poro*

3PS/3SO/do   while   exist.PL-0-3PS while   now   3/heart-POSS   3SS/be.big

pahno tani ('ok…)   *an[-i]-hi*   *nee*   *nanko.* 7. *Neyke*   *taa*

until   now   3SS/exist.PC-0-DIR   COP   maybe   and.then   that

tura ('es… naa) 'esine   *kotan 'ohta*   *kayki reekoh*

together   3SS/be.the.same   village place+in   too   really

'an-kor-rusuy[39]*-a-hci*[40]   *yahka, 'ampene*   *ne'an mahtekuh*   *kosmah ne*[41]

IP-3SO/have-want-0-IP   though a.lot   that   girl   bride   as

'oman   *'etunne*   *'ampene*   *'an*   *manu*   *ike*   *reekoh*

3SS/go.PC   not.want   a.lot   PRF   DIR.KNW   then   really

ne'an   *'episkan*   *kotan nispa*   *'utah*   *reekoh,*   *ne'an,*

that   here.and.there village great.person   people   really   that

car-u-wen(n)-a-hci   *manu*   *ike*   *ne'an*   *henke neewa*

mouth-POSS-be.bad-0-3PS   DIR.KNW   then   that   elder   with

---

[38] Prosody suggests that *'an* is part of the nominal modifier *neewa 'an* 'such', differently from what Murasaki reports in her transliteration where it is understood as the personal prefix *'an-* attached to *haweki*. This would mean that we have a modifier referring to what should be an incorporated noun (i.e. *hawe* 'the voice of') – syntactic constructions like this one can be relevant to the study of incorporation and its stages of development.

[39] The position of personal affixes on the volitive *kor rusuy* 'want to have' shows how *rusuy* can be treated morphosyntactically as part of a complex predicate together with the notional verb (here *koro* 'have'). Morphophonologically we see the elision of the final vowel of the notional verb (i.e. *koro > kor*) and the assimilation of *r* into *n* under the influence of the following tap consonant (*kor-rusuy* is in fact realized as [konɾu̥suj̈]). All of this seems to support the complex predicate hypothesis. Morphosyntactically this can represent a stage of the development process of *rusuy* from possibly an erstwhile light verb into an auxiliary.

[40] The simultaneous use of the first person plural affix *'an-* and the third person plural suffix *-hci*, to form some kind of circumfix *'an-…-hci*, has the function to mark indefinite person, much like HA fourth person *a-/-an*, that is in fact cognate of SA *'an-/-an*. Similarly to the use of *a-/-an* in HA, *'an-/-an* is SA can be employed to mark indefinite person even without the suffix *-hci*, for instance in expressions like *nah 'an-yee* 'called…' (lit.: 'we call/it is called…') seen above.

[41] Copula used as an equative postposition.

'ahci	*tura*	*ko-car-u-wen-a-hci*	*manu*	*ike*
old.woman	with	APPL-mouth-POSS-3SS/be.bad-0-3PS	DIR.KNW	then

wen-no	*ye-hci*	*manu*	*ike* 8. "*Nah*	*kanne*
be.bad-ADV	3SO/say-3PS	DIR.KNW	then like.this	ADV

'eci-kii	*'anahka,*	*nah*	*kanne* *'eci-mahpoo-ho* (*'eci-koro*
2PS-3SO/do	if	like.this	ADV 2P-daughter-POSS

'eci-mahpoo-hoo) pirika	*kusu*	*'eci-'oskoro*	*'anahka,*	*kamuy*
3SS/be.good	because	2PS-3SO/be.jealous	if	god

'onne	*'eci-'ekohnuu*	*'an-nukara-Ø*	*nankoo"*	*nah* *ne'an*
place+to	2PS-3SO/give.away	1PS-3SO/look-DIR	maybe	COMP that

henke	*neewa* *'ahci*	*tura*	*'e-ko-car-u-wen*	
elder	with old.woman	with	APPL-APPL-mouth-POSS-SLV/3SO/3SOI/be.bad	

kara-hci[42]	*manuu.* 9. *Kara-hci*	*teh 'an*	*manu*	*ike*
VO/make-3PS	DIR.KNW 3SO/make-3PS	RSLT	DIR.KNW	then

'an	*(y)ayne*	*tani,*	*sine*	*too,*	*tani* *henke,*	*sine*
3SS/exist.PC	while	now	one	day	now elder	one

sak-ii[43]*-ta,*	*tani*	*henke*	*'ene*	*kii*	*manuu.*
summer-moment-in	now	elder	like.this	3SS/3SO/do	DIR.KNW

Ne[y]a,	*tani*	*susu*	*tuye*	*manu*	*ike* *renkayne*	*susu*
this	now	willow	3SS/3PO/cut	DIR.KNW	then really	willow

tu[y]e	*teh*	*'ampa*	*san. (Teh 'orowa tani…)*	*'ampa*
3SS/3PO/cut	and	3SS/3PO/hold	3SS/descend.PC	3SS/3PO/hold

---

[42] Though Murasaki transliterates this as one word, prosody suggests this might be two separate verbs (i.e. *'ekocaruwen karahci*), in which case the construction could be seen as a complex predicate (possible serial verb construction) or more likely a light verb construction. The light verb construction hypothesis seems confirmed by the repetition of *karahci* right after.

[43] Time expressions referring to seasons are compounded of the season's name (e.g. *sak* 'summer', *cuk* 'autumn'), the locative postposition *-ta*, and a morpheme *-ii* of dubious derivation. This latter could be a variant of the nominalizer *-hV* that has come to be realized as *-ii* throughout the morphoponological processes of insertion and elision (i.e. *sak-i-hi > sak-i-i > sak-ii*). However, the original sytactic function of a nominalizer in this environment remains dubious.

san	*teh*	*'orowa*	*tani*	*ci[se]*	*'ohta*	*san*	*teh*
3SS/descend.PC	and	and.then	now	house	place+in	3SS/descend.PC	and

tani,	*'inaw*	*kee*	*raapoke-ke-ta,*	*ne'an*	*mac-ihi*	*ne'ampe,*
now	inaw	3SS/3PO/carve	3/between-POSS-in	that	3/wife-POSS	TOP

mac-ihi	*neewa*	*mahpoo-ho*	*tura*	*poopoh (kar…)*	*kara*
3/wife-POSS	with	3/daughter-POSS	with	offer	3PS/3PO/make

kii-ree.[44]		10. *Poopoh*	*kara*	*'utah kii*[45]	*manu*
3SS/3SO/3POI-do-CAUS		offer	3PS/3PO/make	people 3PS/3SO/do	DIR.KNW

ike	*reekoh*	*wooya'an*	*poopoh*	*'utah*	*kara*	*kii,*	*tani*
then	really	be.various	offer	people	SLV/3PO/make	3PS/VO/do	now

hemaka	*teh*	*nea[n]*	*henke*	*tani*	*'ota*	*ka-ene*	*mahpoo-ho*
3PS/3SO/finish	and	that	elder	now	beach	over-to	3S/daughter-POSS

niske	*manuu.*	*'Ota*	*kaa-ta*	*nea[n]*	*henke*	*san*
3SS/3SO/accompany	DIR.KNW	beach	over-in	that	elder	3S/descend.PC

teh (tah)	*nean*	*mahpoo-ho*	*tura*	*san*	*teh*
and	that	3/daughter-POSS	together	3SS/descend.PC	and

si-komuy-te	*manuu.*	11. *Sapa-ha*	*rasi*	*'oo*	*kusu,*
REF-pick.lice-CAUS	DIR.KNW	3/head-POSS	louse	3PS/3SO/get.in	because

'en[e]an	*sapa-ha*	*mahpoo-ho*	*rasi*	*'uyna-re*
like.this	3/head-POSS	3/daughter-POSS	louse	3SS/3PO/3SOI/take-CAUS

---

[44] The use of the causative *-ree* in this instance is not entirely clear. The segment *kara kii* could be easily recognizable as a light verb construction, but referencing of arguments becomes troublesome in such a case. Although not attested elsewhere in my reference corpora, we could suppose that the causative semantically refers to *kara* though being morphologically hosted by *kii* – in such instance, the old man would be the subject, the offers would be the direct object, and the wife and daughter would be the indirect object. Another possibility is for the causative to be morphosyntactically and semantically referred to the verb *kii*, which then would have the old man as its subject, the wife and daughter as the indirect object and the whole nominalized clause with *kara* as the direct object (lit.: 'the old man made his wife and daughter do the making of offers'). In this case, the indirect object of *kii* is coreferential with the subject of *kara.* In my glossing, I follow this last hypothesis that seems to better explain the morphological position of the causative *-ree.*

[45] This could be a light verb construction (most likely a re-formulation of the preceding verbal complex) with interposition of subject for pragmatic purposes.

kusu	*nah*	*[y]ee*	*teh*	*nean*	*mahpoo-ho*
because	COMP	3SS/3SO/say	and	that	3/daughter-POSS

['e-y]ee[46]*-kara*[47]		*kusu,*	*ne*	*'ii*[48]	*mahpoo-ho*	*ne*
APPL-3SS/3SO/3SOI/say-make		because	?	?	3/daughter-POSS	as

mahtekuh,	*nean*	*hee,*	*'ona-ha*	*rasi-hi*	*hee*	*'uyna*
girl		that	FOC	3/father-POSS	3/louse-POSS	FOC	3SS/3PO/take

manuu.	12. *'Uyna*		*teh*	*'orowa*	*tani*	*'ene'an*	*mahpoo-ho*
DIR.KNW		3SS/3PO/take	and	and.then	now	like.this	3/daughter-POSS

ko-itah		*kii*		*manuu.*	*"Ci*[49]*-mahpoo-ho,*	*neera'an*
APPL-SLV/3SO/talk		3SS/VO/do		DIR.KNW	1P-daughter-POSS	what.kind.of

kotan ('orowa)	*'or[-o]*	*un*		*nispa*	*'utah ('ehawkihc…)*
village		3/place-POSS	3PS/3SO/be.in	great.person	people

'e-haw-e-ki-hci		*yahka, 'e-kaana-hci*	*yahka,*	*'ampene*
APPL-voice-POSS-3SO/do-3PS	though	2SO-desire-3PS	though	a.lot

'an-e-'oskoro,		*'eci-'oskoro ('an-e-'oskoro)*	*'okay-an*[50]	*ike*	*tan[i]*
1PS-2SO-be.jealous	1SS>2SO-be.jealous		exist.PL-1PS	then	now

'esine		*kotan*	*'ohta*	*kayki*	*reekoh*	*'e-kaana-hci*
3SS/be.the.same	village	place+in	too	really	2SO-desire-3PS

---

yahka,   *'ampene*   *'an-e-'oskoro.*   13. *Neaan*[51]   *pe-he*[52]   *kusu*

though   a.lot   1PS-2SO-be.jealous   this   thing-POSS   because

reekoh *'episkan*   *kotan-u-wa*   *nean*

really   here.and.there   3/village-POSS-from   that

'e-'i-ko-car-u-wen-a-hci,[53]   *'i-ko-car-u-wen-a-hci*

APPL-1PO-APPL-mouth-POSS-3SOI/be.bad-0-3PS   1PO-APPL-mouth-POSS-be.bad-0-3PS

manu   *ike*   *wooya'an*   *'i-ko-car-u-wen-ki-hci*   *nah*

DIR.KNW   then   be.various   1PO-APPL-mouth-POSS-be.bad-do-3PS   COMP

kanne "*'Eci-mahpoo-ho*   *'eci-'oskoro*   *'anahka,*   *kamuy 'onne*

ADV   2P/daughter-POSS   2PS-3SO/be.jealous   if   god   place+to

'eci-(k...) *'ekohnu*   *'ana[h],*   *'eci-'e-nispa-ne*   *'an-nukara-Ø*

2PS-3SO/give.away   if   2PS-APPL-3SO/great.person-COP   1PS-3SO/look-DIR

nanko" 14. *Nah ('ie...)* *'i-e-ko-car-u-wen-kara-hci*

maybe   COMP   1PO-APPL-APPL-mouth-POSS-3SOI/be.bad-make-3PS

kusu   *tani*   *kamuy*   *'onne*   *kosmah*[54]   *ne ('an...)*   *'an-'e-oman-te*

because now   god   place+to   bride   as   1PS-2SO-go.PC-CAUS

kusu, *hanka* *'etunne*   *wa*   *kamuy 'onne*   *kosmah*   *ne*

because NEG   2SS/3SO/hate   and   god   place+to   bride   as

yay-kara"   *nah*   *nean*   *mahpoo-ho*   *'e-ko-itah-kara*

REF-2SS/make   COMP that   3/daughter-POSS   APPL-APPL-3SS/3SO/3SOI/speak-make

manuu. 15. *Teh*   *tani*   *nean*   *rasi*   *'uyna*   *ka*   *tani*   *hemaka.*

DIR.KNW   and   now   that   louse   3SS/3PO/take   even   now   end.up

---

[51] Possible variant of *newa'an.*

[52] The function of the possessive form in this instance is dubious. Other possible "partitive" possessive.

[53] Here the applicative *'e-* appears in a more peripherical position than the personal prefix *'i-*, which is highly uncommon since person agreement prefixes are the left most peripherical morphological elements on verbs. This is most likely a slip of the tongue, as an analogous verb form is repeated right after a few sentences observing the canonical prefix order.

[54] From the original **koro mah* 'have woman'.

Teh	*'orowa*		*tani*	*cise*	*'ohta*		*hosipi-hci*	*teh*	*makap-a-hci*
and	and.then		now	house	place+in		return-3PS	and	go.up.PL-0-3PS

teh	*'orowa*		*tani (tani)*	*cise-koro*		*'ahci*		*naa,*
and	and.then		now	3SS/house-have		old.woman		too

'ahci		*tani*	*sikes*		*ci-'ama-p-[u]hu*[55] (*'oro…*)		*'oro'o-iki*
old.woman		now	treasure.place		PSRS-put-thing-POSS		3SS/3SO/3SOI/insert-do

manu		*ike*	*nean*	*ci-ama-p-[u]hu*		*sah-te*
DIR.KNW		then	that	PSRS-put-thing-POSS		3SS/3SO/get.down-CAUS

manu		*ike*	*wooya'an*		*ci-'ama-h*		*san-ke*
DIR.KNW		then	be.various		PSRS-put-thing		3SS/3SO/descend.PC-CAUS

manu	*ike*	16. *Nean*	*mahpoo-ho*		*ko-tuy*		*teh*
EV.HRS	then	that	3/daughter-POSS		APPL-3SS/3PO/3SO/stick		and

[reekoh] kusu 'an		*tumantesukaani*		*naa (sanke man…)*
really		golden.belt		too

san-ke		*manu*	*ike*	*mahpoo-ho*
3SS/3SO/descend.PC-CAUS		DIR.KNW	then	3/daughter-POSS

tumam[a]-h[a]	*ko-tesuure*		*ko[h]*	*kosonto*
3/waist-POSS	APPL-3SS/3SO/3SOI/try.on		when	kosonto

san-ke		*manu*	*ike*	*mahpoo-ho*
3SS/3SO/descend.PC-CAUS		DIR.KNW	then	3/daughter-POSS

mii-re		*wa (wooya'an kosonto sahte manu ike mahpooho*
3SS/3SO/3SOI/wear-CAUS		and

---

[55] This is an instance of *ci-* marking "passive resultative" (i.e. 'the things that have been/are put away, savings'). The possessive form on this compound also suggests that **ci'amap*, an erstwhile nominalization of *ci'ama* via the nominalizer *p(e)* 'thing', must have undergone some kind of lexicalization as one unitary nominal stem. The realization taken by the *-VhV* morpheme is here *-uhu* so that we see how the vowel-copying process in the possessive morpheme shows an irregularity that contrasts with other erstwhile verbal nominalizations via *p(e)* on which the possessive morpheme's vowel is copied regularly (e.g. *'orumpe* 'personal belongins' > *'orumpehe)*, or shows the irregular ending *-ihi* (e.g. **rewkerewkep* 'the thing that moves and moves around, fox' > *rewkerewkepihi*).

miire wa) *'orowa* *'imuhsay* *san-ke,* *poro*
and.then necklace 3SS/3SO/descend.PC-CAUS be.big

'imuhsay *san-ke* *manu* *ike* *poro* *citoki*
necklace 3SS/3SO/descend.PC-CAUS DIR.KNW then be.big pearl

'e-'okaane *'imuhsay* *san-ke* *manu* *ike*
APPL-3SS/3SO/be.stuck necklace 3SS/3SO/descend.PC-CAUS DIR.KNW then

mahpoo-ho *rekuc-[i]hi* *'or-o-wa* *'ahtee.* 17. *Teh* *'orowa*
3/daughter-POSS 3/neck-POSS 3/place-from 3SS/3SO/hang and and.then

poro *konkaani* *'etooninkaari* *san-ke* *manu* *ike*
be.big gold earring 3SS/3SO/descend.PC-CAUS DIR.KNW then

mahpoo-ho *kisar-[u]hu* *ko-tuy-paa.* *Teh* *'orowa*
3/daughter-POSS 3/ear-POSS APPL-3SS/3PO/3SOI/stick-PL and and.then

tani *tumantesukaani* *san-ke* *manu* *ike*
now golden.belt 3SS/3SO/descend.PC-CAUS DIR.KNW then

mahpoo-ho *tumahm-u*[56] *ko-tesuu,* *'ekuhkunte*[57]
3/daughter-POSS 3/waist-POSS APPL-3SS/3SO/3SOI/place 3SS/3SO/tie

teh *'orowa* *tani* *nea[n]* *henke* *tani* *'inaw* *'ampa* *(san ma…)*
and and.then now that elder now inaw 3SS/3PO/carry

san *manu* *ike* 18. *'ota* *kaa-ta* *san*
3SS/descend.PC DIR.KNW then beach over-in 3SS/descend.PC

teh *nean* *cip-ihi* *'onnay-k[e]he* *'inaw* *'oro'oo,* *'inaw*
and that 3/boat-POSS 3/inside-POSS inaw 3SS/3PO/3SOI/insert inaw

'oro'oo *'omantene* *nea[n]* *kara-hci* *poopoh* *naa*
3SS/3PO/3SOI/insert after that 3PO/make-3PS offer too

---

[56] Possible mispronunciation of *tumam-uhu.*

[57] This can be probably broken down as *'e-kuh-kun-te* (APPL-obi-obi-CAUS) or, as Otsuka and al. suggest, as **'e-kuh-kor-te* (APPL-obi-have-CAUS).

'emu[y]k[e] *'amp[a* *w]a* *sap-a-hci* *manu* *ike* *nean*
all 3PS/3PO/carry and descend.PL-0-3PS DIR.KNW then that

cih *'onnay-k[e]he* *'oro'o-hci* *teh* *'emus* *naa* *nean* *mahpoo-ho*
boat 3/inside-POSS 3PO/3SOI/insert-3PS and sword too that 3/daughter-POSS

'ampa-re *teh* *'orowa* *nean* *mahpoo-ho-hcin*
3PS/3SO/3SOI/carry-CAUS and and.then that 3/daughter-POSS-PL

cih *'ohta* *'ama.* 19. *'Inaw* *tun-ke-ta*
boat place+in 3PS/3SO/place inaw 3/middle-POSS-in

'aa-re-hci *teh* *nea[n] henke tani,* *cih* *'okasura-hci,*
3SO/sit-CAUS-3PS and that elder now boat 3SO/push-3PS

san-ke-hci *manu* *ik[e]* *nean* *henke* *nean* *mahpoo-ho*
3SO/descend.PC-CAUS-3PS DIR.KNW then that elder that 3/daughter-POSS

cih *'ohta* *'aa-re* *teh* *'orowa*
boat place+in 3SO/sit-CAUS-3PS and and.then

ko[58]-cip-oo *wa* *tani* *'atuy* *kaa-en[e]* *rep-a-hci*
CMPL-3SS/boat-get.in and now sea over-to go.at.sea-0-3PS

manuu. 20. *'Atuy* *ka-'en[e]* *rep-a-hci[59]* *neampe,* *rep-a-hci*
DIR.KNW sea over-to go.at.sea-0-3PS TOP go.at.sea-0-3PS

yayne, *hempahno* *rep-un* *teh* *hee,* *'inkara-ha* *neampe,*
while how.much 3PS/go.at.sea-be.in and FOC 3PS/look-NMNL TOP

'atuy *kaa* *wa* *reekoh kusu 'an* *kamuy (kamuy)* *yan*
sea over from really god 3SS/come.up.PC

sir[i]hi 'an *manuu.* *Kamuy yan[60]* *sir-i[h]i* *(anhi…)*
INF.VIS DIR.KNW god 3SS/come.up.PC 3/appearence-POSS

---

[58] The completive suffix *ko-* seems here to derive a verb meaning 'row a boat' from the verb *cipoo* 'get/be in a boat'.

[59] The *-hV* nominalization, that together with *neampe* forms a temporal subordinating expression, is omitted here.

[60] The nominalized clause whose verb is *yan* functions as the possessor of *sirihi*. Despite the presence of *sirihi 'an*, this is not an evidential construction.

'ekannukara-ha			*neampe*	21. *'inoske-ta*		*'an*
3PS/look.from.afar-NMLZ			TOP	middle-in		3SS/exist.PC

kamuy	*hempa[ha]*	*'iwan*	*kamuy*	*taka*[61]	*reekoh*	*'atuy ('atuy)*	*'o-uske*	*nea[n]*
god	how.much	six	god	DUB	really	sea	DEI-place	that

kamuy	*[u]ta*	*hee*	*yah*	*siri-h[i]-hcin*[62]	*ne*	*'an*	*manu*
god	people	FOC	come.up.PL	appearance-POSS-PL	COP	PRF	DIR.KNW

ike	*reekoh*	*'atuy*	*siri-pirika-teh-Ø*	*nee*	*nanko,*
then	really	sea	appearance-be.good-INTS-DIR	COP	maybe

yah	*siri-hi-hcin*	*ne*	*'an*	*manu*	*ike*	*nean*
3PS/come.up.PL	appearance-POSS-PL	COP	PFR	DIR.KNW	then	that

('inoske…) 'inoske-ke-ta	*'an*	*kamuy*	*reekoh*	*'aspe*	*koro*
3/middle-POSS-in	3SS/exist.PC	god	really	backfin	3SS/3SO/have

(kamuy) kamuy	*henke,*	*nean,*	*'inoske-ke-ta*	*'e-sapa-ne*
god	elder	that	3/middle-POSS-in	APPL-3SS/3SO/head-COP

teh ('e)an[63]	*teh*	*'orowa (nean)*	*nean*	*cih*	*san-ke-ta*	*yap-a-hci*
RSLT	and	while	that	boat	3/by-POSS-in	come.PL-0-3PS

teh	*nea[n]*	*henke*	*mahpoo-ho*	*kusa…*	*[w]a*
and	that	elder	3/daughter-POSS	3SS/3SO/mount	and

repun	*(im… repun m.. at..)*	*'ota*	*kaa-wa*	*repun*	*manu*	*ik[e],*
3SS/go.at.sea		beach	over-from	3SS/go.at.sea	DIR.KNW	then

nea[n]	*cih*	*san-ke-ta*	*yap-a-hci*	*teh*	*tani*	*cih*
that	boat	3/by-POSS-in	come.up.PL-0-3PS	and	now	boat

---

[61] Other variant of the Japanese loanword だか *daka*, see fn. 9 above.

[62] This form seems not to be an inferential, not as much because of the plural suffix *-hcin*, which has been seen to seldom occur within inferential forms that develop from possessive nouns, but more in virtue of the copula *ne* that follows. This latter is in turn followed by what appears to be a perfective *'an*, that supports the verbal function of *ne* and subsequently the non-evidential, nominal function of *sirihihcin*.

[63] In this resultative construction the usual one-place verb *'an* is appearently replaced by its two-place verb counterpart *'e'an.*

si-ko-tesu-hci   *teh 'okay-a-hci*   *manuu.*   22. *Nea[n]*

REF-CMPL-3SO/get.close-3PS   RSLT-0-3PS   DIR.KNW   that

kamuy   *utah*   *'okay-a-hci*   *neampe,*   *nea[n] henke tani,*   *neya*

god   people   exist.PL-0-3PS   TOP   that   elder   now   this

'aspe   *koro*   *kamuy (cih)*   *cih*   *'ampene*   *si-ko-tesu*

backfin   3SS/3SO/have   god   boat   a.lot   REF-CMPL-3SS/3SO/get.close

teh 'an   *manu*   *ike*   *ta[ni],*   *nea[n] henke nean*   *mahpoo-ho*   *tani*

RSLT   DIR.KNW   then   now   that   elder   that   3/daughter-POSS   now

'uh   *manu*   *ike*   *(nu…) nean*   *mahtekuh*   *numa*   *manu*

3SS/3SO/take   DIR.KNW   then   that   girl   3SS/stand   DIR.KNW

ike,   23. *nea[n]*   *kamuy henke,*   *(nean) tani*   *'inaw na*   *nea[n]*

then   that   god   elder   now   inaw   too   that

kamuy   *menay-[e]he*   *kask[e]-he*   *'oro'oo,*   *setur-u*

god   3/middle.back-POSS   3/top-POSS   3SS/3PO/3SOI/insert   3/back-POSS

kask[e]-he   *'oro'oo*   *kii-re*[64]   *teh*   *('o…) nean*

3/top-POSS   SLV/3PO/3SOI/insert   3SS/VO/3SOI/do-CAUS   and   that

mahpoo-ho   *tani*   *numa-re*   *manu*   *ike*   *nea[n]*

3/daughter-POSS   now   3SS/3SO/stand-CAUS   DIR.KNW   then   that

mahtekuh   *tani*   *nea[n] kamuy menay*[65]   *'onne*

girl   now   that   god   middle.back   place+to

ran-te,   *nea[n] kamuy menay*   *'aspe-he*

3SS/3SO/descend.PC-CAUS   that   god   middle.back   3/backfin-POSS

'uturu-ke-ta   *'aa-re.*   24. *'Orowa*   *nea[n] kara-hci*

3/between-POSS-in   3SS/3SO/sit-CAUS   and.then   that   3PO/make-3PS

---

[64] This is most likely a mistake made while trying to causativize the verb *'oro'oo*. After a short pause, the speaker then prefers to use the causative on the verb *numa* 'stand'.

[65] The possessive is omitted

'an poopoh naa henke 'emuyke ne'an kamuy 'utah
PRF offer too elder all that god people

menay-[e]he 'oro'oo, yay'an 'i-tura
3/middle.back-POSS 3SS/3PO/3POI/insert companion AP-3PS/be.with

'an kamuy 'utah, ta'oka kamuy ['u]tah na 'emuyke, nean,
PRF god people those god people too all that

'okore, nean menay-[e]he kask[e]-he 'inaw 'oro'oo teh
all that 3/backfin-POSS 3/top-POSS inaw 3SS/3PO/3SOI/insert and

neya 'ampa 'an 'emus naa nea[n] kamuy menay kaa-ta
that 3SS/3SO/carry PRF sword too that god back.fin over-in

'amaa teh 'orowa nea[n] kamuy 'utah (renne…)
3SS/3SO/put and and.then that god people

reenne-no nea[n] cih 'oykaarimpa[66] hesuye-hci teh
3SS/be.silent-ADV that boat going.around 3SO/go.around-3PS and

tani 'atuy ka-'en[e] rep-a-hci manuu. 25. 'Atuy ka-['e]n[e]
now sea over-to go.at.sea-0-3PS DIR.KNW sea over-to

rep-a-hci neampe nea[n] henke taata 'an teh (nukara)
go.at.sea-0-3PS TOP that elder there 3SS/exist.PC and

nukara yayne, nea[n] mahpoo-ho kamuy setur-u kaa-ta
3SS/3SO/look while that 3/daughter-POSS god 3/back-POSS over-in

'aa teh 'aspe 'uturu-ke-ta 'aa teh nea[n]
3SS/sit and back.fin 3/between-POSS-in 3SS/sit and that

kamuy 'utah rep-a-hci manu ike, rep-a-hci yayne,
god people go.at.sea-0-3PS DIR.KNW then go.at.sea-0-3PS while

'ampene nean taa henke tan[i] 'ampen[e] nukaraa.
a.lot that that elder now a.lot 3SS/3SO/look

---

[66] Possible verb used adverbially.

379

26. *Sik[i]hika'omuhteh*   *pahno tani*   *rep(-ah)*[67]   *hemaka-hci*[68] *kusu,*
     not.be.visible.anymore   until   now   go.at.sea-0   end.up-3PS   because

nea[n]   *henke*   *tani*   *'e-ram-sii*[69]*-ne*   *teh*   *'orowa*
that   elder   now   APPL-3SS/3SO/heart-situation-COP   and   and.then

yan   *manuu.*   27. *'Ota*   *kaa-ta*   *yan*
3SS/come.ashore.PC   DIR.KNW   beach   over-in   3SS/come.ashore.PC

teh   *tani*   *cise-ta*   *makan*   *teh*   *'o[ro]wa*   *ta*   *'ahci*
and   now   house-in   3SS/go.up.PC   and   and.then   this   old.woman

henke   *'ota*   *kaa-ta, (yan*   *'an o...,)*   *san*   *teh*
elder   beach   over-in   3SS/come.ashore.PC   3SS/descend.PC   and

tu   *'aynu n[e]*   *cih*   *'ehekem-a-hci-Ø*   *nee*   *nanko. Kii*
two   person as   boat   3SO/drag-0-3PS-DIR   COP   maybe   3PS/3SO/do

teh   *'orowa*   *tani*   *cise*   *'ohta*   *makap-a-hci*   *teh*
and   and.then   now   house   place+in   climb.PL-0-3PS   and

'okay-a-hci   *manu*   *ike*   *'ene*   *'an*   *manuu.*
exist.PL-0-3PS   DIR.KNW   then   like.this   3SS/exist.PC   DIR.KNW

28. *Hempah*   *too*   *ka*   *'an*   *teh*   *'ota*   *kaa-ta*
     how.many   day   even   3PS/exist.PC   and   beach   over-in

sap-a-hci   *wa*   *'ahci*   *kayki, henke*   *isa*   *'ahci*   *isa*
descend.PL-0-3PS   and   old.woman   too   elder   too   old.woman   too

'ota   *kaa-ta (san koh),*   *sap-a-hci*   *koh,*   *reekoh 'ota*   *kaa-ta*
beach   over-in   descend.PL-0-3PS   when   really   beach over-in

wen   *poro*   *kamuy kayki*   *tani*   *'an.*   *Sapa-ha*   *sitayki*   *wa*
be.bad   be.big   beast   too   now   3SS/exist.PC   3/head-POSS   3PS/3SO/hit   and

---

[67] I cannot explain the addition of this final *-ah*. It is probably an epenthetic sound of some sort.

[68] Similarly to the case of the volitive *rusuy* (see fn. 39 above), the verb *hemaka* 'end up' is best understood as part of a complex predicate within the notional verb *rep*. This is suggested by the position of the personal suffix *-hci* that is found on *hemaka* (instead of the more common structure that would have been *repahci hemaka*).

[69] Possible variant of *siri*.

rayki *kamuy* *neno* (reek...) *'etuy-[e]he* *'or-o*[70] *kem*
3PS/3SO/kill beast be.like 3/nose-POSS 3/place-POSS blood

'asin *kanne, peycah-ta* *'an* *kusu 'an*
3SS/come.out.PC ADV foreshore-in 3SS/be.PC PRG

'e-kaari-hci. 29. *'Usa'an* *ceh* *kayki, reekoh wen* *poro*
APPL-3SS/go.around-3PS be.various fish too really be.bad be.big

'ohontoho, *teemun* *'ani* *ean*[71] *'e-epusne-kara*
fish.chain seaweed with ? APPL-3PS/3SO/3POI/pierce-make

'ohontoho *'ota* *ka-ta* *ruw-e-san[-i]-hi-hcin*[72] *'etuy-e[he]*
fish.chain beach over-in trace-POSS-descend.PC-0-NMLZ-PL 3/nose-POSS

an-ko-tawka-hci. 30. *'Usa'an* *kamuy kam* *kayki,*[73] *reekoh*
IP-APPL-3SO/3SOI/hit-IP be.various beast meat too really

(he... hum...) *humpe* *kam kayki, humpe rikaa* *kayki, wen*
whale meat too whale white.meat too be.bad

poro *rikaa* *reekoh kusu an* *nea[n] ruw-e-san[-i]-hi-hcin*[74]
be.big white.meat really that 3/trace-POSS-descend.PC-0-NMLZ-PL

'ohta *yan* *koh,* *'ota* *kaa-ta sap-a-hci*
place+in 3SS/come.ashore.PC when beach over-in descend.PL-0-3PS

koh *'uk-a-hci* *koh* *'ampa* *makap-a-hci*[75]
when 3PO/take-0-3PS when 3PS/3PO/carry climb-0-3PS

koh *'e-hci.* 31. *Reekoh,* *ne'an,*
when 3PO/eat-3PS really that

---

[70] A locative postposition (namely *wa* 'from') seems to be missing here.

[71] This is possibly the stative verb 'be in', but its syntactic function in this environment is not clear as there is already *'eepusnekara* to fulfill the verb function in the clause.

[72] It is not clear what is the syntactic function of this nominal in this instance.

[73] The tape of the original recording cuts off at this point and the following two lines are repeated on the new side of the tape.

[74] The speaker says *'ohta* right after the nominalizer *-hi* and then corrects herself adding the plural *-hcin*.

[75] Possible serial verb construction.

'ipe-ko-pirika-'okay[76]
SLV/eat-APPL-be.good-exist.PL

ki-hci
VO/do-3PS

yayne, tani
while now

riyaa
3PS/pass.winter

teh
and

'oya-paa-kike[77]
be.different-year-POSS

paykara
spring

ko-oman
CMPL-3SS/go.PC

kanne,
ADV

paykara
spring

'oman
3SS/go.PC

teh
and

tani
now

suy
again

nea[n]
that

henke
elder

'ota
beach

kaa-ta
over-in

san[-i]-hi
3SS/descend.PC-0-NMLZ

neampe,
TOP

32. *hacikoo*
be.small

pon
be.small

hekaci
boy

nunnun
3SS/3SO/suck

kirupuu
grease

nii
tree

kaari
through

'an[78]*-'ahun-ke,*
IP-3SO/enter-CAUS

nah
so

nii
tree

kaari
through

'an-'e-ciwkara
IP-APPL-3PS/3SO/3SOI/stick

teh
and

'ahun-ke
3PS/3SO/enter-CAUS

kirupuu, kamuy
grease god

kirupu,
grease

hekaci
boy

nunnun
3SS/3SO/suck

kirupu,
grease

'arikir-tukun-[e]he
3/middle.part-middle.part-POSS

'or-o-wa
3/place-POSS-from

nunnun
3SS/3SO/suck

teh,
and

'okore
all

'eruu
3SS/become.small

kirupu, (taa)
grease

nii
tree

kaari
through

'an-'ahun-ke
IP/3SO/enter-CAUS

pe,
thing

tah
that.thing

naa
too

'ota
beach

kaa-ta
over-in

yan
3SS/come.ashore.PC

manu
DIR.KNW

ike
then

taa
that

henke
elder

'uh.
3SS/3SO/take

---

[76] Compound verb featuring incorporation of an applicative argument (i.e. *'ipe* 'food', as suggested by prosody) and involved in a light verb construction.

[77] This looks like some kind of possessive morpheme, but this hypothesis is not supported by further evidence showing similar cases. The **ke* segment seems a possessive form of a locative noun, while **ki* could be a mispronunciation of the possessive morpheme *-hi*. Although the realization *-hike* would not be so unexpected here, this hypothesis results even more dubious given that the usual form taken by the possessive morpheme for the noun *paa* 'year' is *-ha*.

[78] Although prosody suggests that this *'an-* is not part of the following verb, I take it indeed as an impersonal prefix given the context. The odd prosidy is probably to be ascribed to a moment of hesitation on the narrator's part.

33. *Ne'an*   *mic-[i]hi*   *nunnun*   *'an*   *kirupuu,*   *tah*
that   3/grandson-POSS   3SS/3SO/suck   PRF   grease   this.thing

naa   *'uh*   *'ampa*   *makan.*   *Ci[se]*   *'ohta*   *reekoh*
too   3SS/3SO/take   3SS/3SO/carry   3SS/go.up.PC   house   place+in   really

ne'an   *henke*   *neewa*   *'ahci*   *tu[ra]*   *'ipe-ko-pirika-hci*   *manu*
that   elder   with   old.woman   with   food-APPL-be.good-3PS   DIR.KNW

[i]k[e][79] *'usa'an*   *kaamu* *kayki* *ceh*   *ka*   *reekoh*   *'ee*[80]
then   be.various   meat   too   fish   too   really   3PS/3PO-eat

ko-pirika-hci   *henke*   *ne'an*   *kim-o-iki*   *ka*   *kii*
APPL-3SO/be.good-3PS   elder   that   SLV/mountain-DEI-do   even   3SS/VO/do

koh,   *reekoh* *kii,*   *hekimoh*   *kii*   *kun*
when   really   3SS/3SO/do   SLV/go.to.mountain.in   3SS/VO/do   obligation?

pe   *ka,*   *reekoh* *ko-pirika*   *'eysonno*[81]   *reekoh*
NMLZ   even   really   APPL-3SS/be.good   3SS/3SO/do.easily   really

'ison   *kii*[82]   *neampe,*   34. *('ewr…)* *'ahci*   *tura*
SLV/hunt   3SS/VO/do   TOP   old.woman   with

'e-w-res-ke-hci   *['a]n[i]*   *'okay-a-hci*   *'ani*   *tani*
APPL-REC-3SO/grow.up-CAUS-3PS   while   exist.PL-0-3PS   while   now

riyaa   *teh*   *'oya-paa-ke*   *sak-ii-ta,*   *ta[n]*
3PS/winter.pass   and   be.different-year-POSS   summer-moment-in   that

---

[79] The sole sound *k* can be heard in the recording at this point. The presence of the conjunction *ike* is inferred on the basis of the recursivity of the formula *manu ike*, widespread in the text.

[80] This construction seems to show that the applicative on *kopirika* 'be good/live well from' may also refer to a nominalized verb (here *'ee*) that has its own set of arguments. This contrasts with *ipekopirika*, seen above and also following in this passage, where the one-place *'ipe* appears incorporated in *kopirika*, possibly in virtue of its double function of verb 'to eat (something)' and noun with the meaning of 'food'.

[81] Murasaki reports this word as a two-place verb meaning 'do easily'. However, it appears to be some kind of adverbial form (given the ending in *-no*) coming possibly from a verb form *'e-ison* (APPL-hunt). This form does not appear elsewehere in MRA nor in any other of the reference corpora.

[82] Nominalization is lacking (cfr. *kii-hi neampe*).

henke *suy* *nean* *'inaw* *kee* *manu* *ike* *cih*
elder again that inaw 3SS/3PO/carve DIR.KNW then boat

'oro'oo *'omantene,* *nean* *mahpoo-ho* *nukar*
3SS/3PO/3SOI/insert meanwhile that 3/daughter-POSS 3SS/3SO/look

rusuy *kusu* *hee,* *suy,* *nean,* *'atuy* *kaa-ta* *repun*
want because FOC again that sea over-in 3SS/go.at.sea

manuu. 35. *Nean* *poopoh* *naa* *kara-hci* *teh* *kusaa* *teh*
DIR.KNW that offer again 3PS/3PO/make and 3PS/3PO/load and

'orowa *'atuy* *kaa-ta* *(repun…)* *repun[-i]-hi* *neampe,* *suy*
and.then sea over-in 3SS/go.at.sea-0-NMLZ TOP again

ne'an *kamuy* *['u]tah* *reekoh* *'atuy* *'os-ke-wa*
this god people really sea 3/behind-POSS-from

'uyahte *sir-[i]hi-hcin,* *nean,* *'ekannukara* *yayne,*
3PS/come.up 3/situation-POSS-PL that 3SS/3SO/see.from.afar while

yap-a-hci-hi *neampe,* 36. *ne[y]a* *mahpoo-ho* *ne[y]a*
come.up-0-3PS-NMLZ TOP this 3S/daughter-POSS that

kamuy *'aspe* *'uturu-ke-ta* *'aa* *teh* *reekoh* *kusu* *'an*
god 3/backfin 3/between-POSS-in 3SS/sit and really

'iramasre[83]*-no* *'an* *mahtekuh* *ka,* *(puk…)* *pirika*
content?-ADV 3SS/exist.PC girl even 3SS/be.good

'ik[e]-he *naaruy* *ka* *kamuy* *pirika* *'e-yay-kara-kara*
3/group-POSS more even god 3SS/be.good APPL-REF-SLV/3SO/make-make

kii *ruu* *'or-o-k[e]he* *'an* *manu* *ike,*
3SS/VO/do trace 3/place-POSS-POSS 3SS/exist.PC DIR.KNW then

---

[83] Murasaki reports the whole *'iramasreno 'an* with the meaning of 'be woderful (in aspect)' and the sole *'iramasren(n)o* with the meaning of 'happily, contentedly', but this form seems to be constituted by the verb *'an* and the adverbial form of *'iramasre*, possibly a verb whose meaning remains dubious. The form can be broken down as *i-ramas[u]-re-no* (AP-like-CAUS-ADV) as reported in Otsuka (2008).

reekoh	*tahruu-koro*	*'imii*	*mii*		*wa,*	*'ohko*	*mii*		*teh*
really	3SS/size-have	dress	3SS/3SO/wear		and	ohko	3SS/3SO/wear		and

'iramasreno	*'an*		*'ohkayo*	*hekaci-po*	*tenkoras[-i]-hi.*
content?-ADV	3SS/exist.PC		male	boy-DIM	3SS/3SO/hug-0-DIR

37. *Hohciri-koro (ho…)*   *hekaci* *tenkoras*   *teh*   *ne'an* *kamuy* *'aspe*

     3SS/star-have   boy   3SS/3SO/hug   and   that   god   backfin

'uturu-ke-ta		*'aa*	*teh*	*nea[n]*	*henke,*	*nean*	*cip-ihi*		*san-ke-ta*
3/between-POSS-in		3SS/sit	and	that	elder	that	3/boat-POSS		3/next-POSS-in

neeroh	*kamuy*	*yap-a-hci*		*ike*	*nea[n]*	*henke*	*nukara.*	*Nah'an*
those	god	come.up.PL-0-3PS		then	that	elder	3SS/3PO/look	such

pe	*ka*	*'an*		*manuu…*	38. *Nean*		*kamuy*	*'utah*		*nean*
thing	even	3SS/exist.PC		DIR.KNW	that		god	people		that

poo-ho-hcin	*henke*	*nukan-te*			*rusuy-a-hci*	*kusu,*		*nean*
3/baby-POSS-PL	elder	3PS/3SO/3SOI/look-CAUS			want-0-3PS	because		that

poo-ho-hcin	*henke ('e…)*	*'e-ko-'imoka-koro-hci*		*wa*
3/baby-POSS-PL	elder	APPL-APPL-3SO/3SOI/gift-have-3PS		and

'e-si-kopunteh-te-kara		*teh*	*nukan[-te]*[84]
APPL-REF-3PS/3SO/3SOI/surprise-CAUS-make		and	3PS/3SO/3SOI/look-CAUS

rusuy-a-hci	*kusu,*		*nea[n]*	*henke*	*si-nukan-te-hci*		*kusu*
want-0-3PS	because		that	elder	REF-3SO/3SOI/look-CAUS-3PS		because

yap-a-hci		*manu*	*ike*	39. *henke*	*nea[n]*	*mic-ihi*
come.up.PL-0-3PS		DIR.KNW	then	elder	that	3/grandson-POSS

naa	*mahpoo-ho*		*naa*	*ne'an*	*kamuy (ko…)*	*poo-ho*		*naa*
too	3/daughter-POSS		too	that	god	3/child-POSS		too

---

[84] The causative suffix is reported in Murasaki's transcription, but cannot be heard in the recording. The construction, however, does indeed have sense with a causative here (given that the speaker used it right before) so that this omission is probably an oversight.

nukara   *teh*   *'oro[wa]*   *kanna*   *hosipi-hi*   *[ne]ya,*   *reekoh,*
3SS/3SO/look   and   and.then   again   3SS/return-NMLZ   although   really

nean,   *pirika*   *yay-reske*   *ki-hci*   *'ahci*   *newa*   *henke*
that   be.good   REF-SLV/raise   VO/do-3PS   old.woman   with   elder

tura   *pirika*   *'okay*   *ki-hci*   *yayne,*   *tan*   *toono (mos…)*
with   be.good   SLV/exist.PL   VO/do-3PS   while   this   light

mosiri   *ko-hokus-a-hci*   *wa*   *'oya*   *kotan*   *'onne*   *paye-hci*
land   APPL-3SO/leave-0-3PS   and   be.different   village   place+to   go.PL-3PS

simakoraye-hci   *wa*   *'isam*   *manuu.*   40. *Nah'an*   *'ucaskuma*   *ka*
pass.away-3PS   CNCL   DIR.KNW   such   tale   even

'an.   *Nah'an*   *kusu,*   *sine*   *mahpoo*[85]   *koro*   *'aynu,*
3SS/exist.PC   such   because   one   daughter   3SS/3SO/have   person

mahpoo-ho   *'oskoro,*   *'an-'etunnee*[86],   *(ne)*   *nah'an*   *kusu*
3/daughter-POSS   3SS/3SO/be.jealous   IP-3SO/hate   such   because

pirika-Ø   *nee*   *manu*   *kusu,*   *'oskoro*   *manu*
3SS/be.good-DIR   COP   DIR.KNW   because   3SS/3SO/be.jealous   DIR.KNW

ike,   41. *nah'an*   *pirika-no*   *kamuy*   *'onne*   *pateh*   *nah*   *'oman*
then   such   be.good-ADV   god   place+to   just   so   SLV/go.PC

'easkay-Ø   *nee*   *'anah*   *pirika-h[a]*   *kayki,*   *wen*
3SS/VO-be.able-DIR   COP   if   3SS/be.good-NMLZ   even.though   be.bad

'oyas   *ka*   *'uturu-ke-ta*   *ahun*   *manu*   *ike,*   *wen*
spirit   even   3/between-POSS-in   3SS/enter.PC   DIR.KNW   then   be.bad

'oyas   *kayki*   *hameciriramu-kara*   *ka*   *kii*   *(ka kii)*   *nah*
spirit   too   SLV/use.violence-make   even   3SS/VO/do   COMP

'aynu   *'e-'ucaskuma*   *nah'an*   *pe*   *ka*   *'an*   *manuu.*
person   APPL-3PS/3SO/tell   such   thing   even   3SS/exist.PC   DIR.KNW

---

[85] The possessive, common in numeral expressions, is omitted.

[86] *'An* seems to mark here indefinite person, giving the meaning 'the fact he was jealous was hated'.

3. A DAUGHTER

F: [This is] a tale of the old [days]. The old days…

M: *Slowly, please. You get faster and faster.*

F: But my Ainu is better if I speak fast. Chatting quickly…

1. [This is] a story of the old [days]. It is an event that happened in the village called Rebutoro. The village called Rebutoro 'Ihohkinay was a village in which there were many elders, just noble elders indeed. [That] was the village where they lived. 2. [In] this village of noble elders lived [also] one old man with an old woman, his wife. They shared the same house and had just one daughter. 3. Living with their daughter, though there were [many] people in the village already, they did raise her really well and made her beautiful with whatever kind of clothes. Because they were noble people, they raised that one daughter of theirs really well and, while bringing her up with much love, she eventually became an adult. 4. Hence the right time had come for her to get a husband too, and really noble people from villages all around desired that girl very much. 5. But even though they said [that] they desired the daughter of those elders, and these latter indeed were well disposed, the girl was really unwilling [to get married]. 6. The daughter of those elders did not want to become a bride at all. Although such were the proposals, she really did not want to get married. Having been proposing [to her] so, maybe these men eventually grew proud. 7. And then even in that same village people really wanted to have her, but that girl had refused to get married so much that the people [from] those villages all around said bad things, they bad-mouthed both the old man and the old woman speaking ill [of them]. 8. "If you act like this, if you are jealous of your daughter because she is so beautiful, then maybe we [will] see you give her away to a god", so they kept bad-mouthing both the old man and the old woman. 9. Being that they had kept on [like this], finally one day, in the summer, the old man did the following. He cut willows, a lot of willows and came back with them. Having come back home with them, he carved *inaw*s and in the meanwhile he made his wife prepare offers with their daughter. 10. They made offers, those people, really a lot of offers did they prepare [and] once they finished the old man accompanied his daughter to the beach. The old man went down to the beach with his daughter and had her pick his lice. 11. Since lice got on his head, he asked her to pick them [from there] and, ordering [so] to his daughter, she picked the lice of her father. 12. Then he said so to her: "Dear

387

daughter, even though noble people from every kind of village have been vocal about it, even though they desired you, we have been jealous of you. Eventually even in [our] own village they desired you, but so jealous were we. 13. Therefore, people from villages all over really spoke ill of us regarding this matter, they bad-mouthed us and said many bad things like 'If you are [so] fond of your daughter, if you give her away to a god [then] maybe we [will] see that you are ennobled by that". 14. So they bad-mouthed us about [this situation], therefore now prepare yourself to become a bride to a god without being unwilling, since I [will] give you away". So he did tell his daughter. 15. And eventually she finished also picking the lice, and then they returned to the house going inland. And then the old woman, lady of the house, too [had] put some valuable objects in a dedicated place. She took many of those objects out 16. and put them on her daughter; she took out also an exquisite golden belt and, once she passed it around her daughter's waist, she took out a *kosonto*[87] and made her wear it and then she took out a necklace, a big necklace encrusted with big pearls and hang it from her daughter's neck. 17. Then she took out big golden earrings and attached them to her daughter's ears. Then she took out a golden belt and placed it on her daughter's waist, she tied it and then finally the old man went [to the sea] carrying the *inaw*s. 18. He went down to the beach and, after he loaded the *inaw*s into his boat, they went down [to the beach] carrying also all those offers [the two women] [had] made and he loaded them into the boat. He made his daughter carry also a sword and then he had her get on board. 19. The old man had her sit among the *inaw*s and he [and his wife] pushed the boat, put it at sea and, having he had his daughter sit in the boat, they rowed and eventually went out at sea. 20. Once they got out at sea (in the meanwhile, they probably had gotten out at some [distance from the shore]), looking at it, it seemed a mighty god emerged from the open sea. When they saw from afar the figure of the god emerging, 21. [they saw that was just] the one god in the middle: there were the shapes of maybe six gods or so majesticly emerging [from] the sea, and maybe the weather was indeed nice [over] the sea [so that] they were visible while they emerged. And that god in the middle [was] an old god with big back fins, it was at the lead [of the group] in the middle and then they [all] came up next to the boat and the old man mounted his daughter…[88] and he went out at sea, out at sea from the beach, then they came up next to the boat and eventually they had gotten close to it. 22. Those gods being [there], the old man at that point,

---

[87] Garnment of Japanese origins (the word *kosonto* is in fact a loan from the Japanese *kosode*).

[88] The narration skips back here and the narrator repeats some previous passages of the story.

[since] the god with the [big] back fins had gotten very close to the boat, took his daughter and she stood [on the god's back]. Then 23. he put also the *inaw*s onto the god's back, he had [his daughter] put them on top of its back, made her stand up stepping down onto the god's back [and] made her sit between the god's middle back and its back fin. 24. And then the old man put also those offers that had been prepared on the back of all those gods, he placed the *inaw*s over the back fin of all those gods, even the accompanying ones. Then he placed also that sword [his daughter] had carried over the god's back fin, and then those gods went silently around the boat in circles and eventually went out to the open sea. 25. Going [the gods] out to the open sea, the old man stayed [there] and looked: his daughter sat on the god's back, in between its back fins as those gods went. The old man stared long at her while they headed seawards. 26. Since they eventually went so far out to not be visible anymore, the old man felt relieved and then went back ashore. 27. He got aground on the beach and went inland to the house. Together with the old woman they went down to the beach and, I guess, they dragged the boat [to the ground]. After they did [so], they went back up to the house and lived like that. 28. Some days passed and when both the old man and the old woman went down to the beach: now there was even a huge beast there. Like an animal that was killed by being beaten [on] its head, they realized it was staying on the foreshore with blood coming out of its nose. 29. [On] their way down to the beach [there were] also many kinds of fish [and] fish chains stringed together with seaweed; [and that god] had been hit on its nose. 30. When they went to the shore, on their way down there [there was] also the meat of various animals, whale meat too [and] a really huge amount of white meat; once they got down [there] they took it and ate it, after having returned [home] with it. 31. While feasting really plentifully on [that meat], now they passed the winter season and [got to] the break of the following spring. Then the spring came and after the old man again went down to the beach, 32. [he saw that] some fat a small baby boy sucked on had been stuck in a tree – some animal fat that a baby boy sucked on, put into a tree and stuck like so. He sucked the middle part of it [protruding out] from [the tree] and the fat [had] all consumed. That thing that was put into the tree too came ashore and the old man took it. 33. The fat his grandson[89] had sucked on, that too he took and brought back home. At home both the old man and the old woman really feasted on the food [they collected] and lived well by eating also the various meat and

---

[89] In a preview of the following events, the narrator tells us that it was the son of his daughter and the sea god the boy who had sucked on that fat.

fish; [and] even whenever the old man went hunting, [and] he did it often, even [when] he would do it in the mountains, he easily had a fruitful catch. As he really did hunt easily, 34. he lived thanks to that together with his wife. They passed the winter season and, in the summer of the following year, the old man again carved *inaw*s and, after he loaded them on the boat, he again went out at sea – he wanted to see his daughter. 35. They made offers once more and loaded them [on the boat] and then, once he went out at sea, he saw from afar the figures of those gods again emerging from the open sea. 36. And his daughter sat between the god's back fins; [she was] a splendid girl and it was clear that her beautiful features [had] become even more beautiful thanks to the god being noble. She wore fitting clothes and an *ohko*[90] and she was holding in her arms a splendid baby boy. 37. She hugged [that] star-shimmering baby boy and sat in between the god's back fins; and then the gods emerged next to the old man's boat and he saw [his daughter and grandson]. There is also such a story... 38. Since those gods wanted to show the baby to the old man, since they wanted to show him the baby as a gift and surprise him with that, they emerged to have him see the baby. 39. The old man saw his grandson, the child of that god, and also his daughter and then returned, but, indeed living well, [eventually] both him and the old woman left this world, passed away [and] went to the afterworld. 40. There is such a tale too. Like so, a man who had one daughter was hated for being jealous of her. So much she was beautiful [that] he was jealous of her. 41. But, although it is good that she was able to go [like] so without trouble [as a bride] to a god, certainly people also tell of such times when some bad spirits came in the way and used violence.

---

4. ʻICARUN ʻAHCI
MRC: 95-99

M: *ʻUcaskuma…*

   tale

A: *ʻUcaskuma だ.*

   tale

---

[90] Belt similar to a Japanese *obi*.

M: ああっ、それじゃ、*'ucaskuma en-nuu-re   wa.*
                        tale   1SO-3SS/hear-CAUS   FIN

A: 昔、あのう、そこ・・・

M: *'Aynu   itah   'ani   yee   wa.*
   person   saying with   2SS/3SO/say   FIN

A: *'Icar[a]-un 'ahci   taata   'an   manu.   'Icara…* それで
   Icara-be.in old.woman   there 3SS/exist.PC   DIR.KNW   Icara

'Icara っていうんだ（っていう）、あのホロトマリさ行く方。
 Icara

M: *Husko   'ohta…*   もう一度最初これやって.
   be.old   place+in

A: *Neyke*[91]   *taa…*
   and.then   INTJ

M: もういこ・・・　もう一度最初から言って.

A: *Taata   taa   'icar[a]-un ('ahci)   'ahci   sine-h   'an*
   there   INTJ   icara-be.in   old.woman   one-NCLF   3SS/exist.PC

manu.   'Ahci   sine-h   'an…
DIR.KNW   old.woman   one-NCLF   3SS/exist.PC

W: *Sine ka   rayta oto*[92] もいるんだ.
   one even   ?

A: *Ot…*

W: 子供の *po.*
         child

A: 男の子.

---

[91] Here we see the topic marker *neyke* seemingly used as a conjunction that resumes preceding content.

[92] Possible mispronunciation of the Japanese *otoko* 'man'.

M: うん、いや、いいえ、いいえ.

A: いるんだと.

M: うん. もう一度最初に、と、男の子いるんだとは言わないか・・・もう一度.[93]

1. 男の子 *'ohkayo poo*   *'an*   *manu.*   *Yuhpo-ho*   も *'an*
        male   child   3SS/exist.PC   DIR.KNW   3/older.brother-POSS   3SS/exist.PC

manu.   *Neyke*   *taa*[94] *(an...)*   *tusu*   *'ahci*   *nee*   *kusu*
DIR.KNW   and.then   INTJ   shaman   old.woman   COP   because

kamuy koro   *'ahci*   *nee*   *kusu*   あのう   *'Ustomonaypo-'en[e]*
god   3SS/3SO/have   old.woman   COP   because   Ustomonaypo-to

'i-ko[95]*-tuunas*   *kusu*   *'oman[-i]-hi*   *nee*   *manu.*
 AP-APPL-3SS/be.quick   because   3SS/go.PC-0-DIR   COP   DIR.KNW

2. *'I-ko-tuunas*   *kusu*   *'oman*   *ike*   *taa*   *'orowa*
   AP-APPL-3SS/be.quick   because   3SS/go.PC   then   INTJ   and.then

'i-ko-tuunas   *'omantene*   *'orowa*   *hosipi*   *'ike*   *taa...*   *nee*[96]
 AP-APPL-3SS/be.quick   meanwhile   and.then   3SS/return   then   INTJ   COP

kusu   *nean*   *tusu*   *'aynu, seta-ha*   *'ampa-re* せば   *wen*
because   that   shaman   person   3/dog-POSS   3PP/3SO/3SOI/bring-CAUS   be.bad

nah   *'an-yee*   *pe*   *nee*   *manu.*   *Manu*   *ike*   *taa*   *seta-ha*
COMP   IP-3SO/say   NMLZ   COP   DIR.KNW   DIR.KNW   then   INTJ   3/dog-POSS

---

[93] Conversation up to this point is between the speaker Asai Take (A) and the collector of the story Murasaki Kyōko (M), with intromission of a second Ainu woman (W) present at the recording session. In the remainder of the text I will put interferences from Murasaki and the second Ainu woman in the footnotes.

[94] This is a filler word, literally meaning 'that', that the speaker Asai Take uses a lot in this particular tale but also in all other tales included in MRB, MRC and MRD. The abundance of this filler word in Asai's way of speaking could be ascribed to a weakened language fluency derived from her not speaking Ainu for several years before the recording sessions with Murasaki. In the translation for this tale, I signal this kind of interjection via a '#' symbol.

[95] Here the applied argument is the same argument that gets demoted and implied via the antipassive.

[96] The copula appears syntactically out of place here. This is possibly an afterthought by which the speaker wanted to rephrase what she has said as *hosipi-hi nee kusu* (i.e. a directive construction).

taa	*tusu*	*'atay-e*	*seta*	*taa*	*'ampa-re-hci*[97]	*teh*
INTJ	shaman	3/value-POSS	dog	INTJ	3SO/3SOI/bring-CAUS-3PS	and

'oman-te-hci	*'i[ke]*	*taa*	*'oman*	*kanne* こんだ	*nis-e*[98]
3SO/go.PC-CAUS-3PS	then	INTJ	3SS/go.PC	ADV	sky-to?

'asin[-i]-hi	*nee*	*manu.*	*3. Herikoh*	*'asin [... ma]*[99]*nu.* あのう	
go.out.PC-0-DIR	COP	DIR.KNW	upwards	go.out.PC DIR.KNW	

yuhpo-ho	*taa*	*soy-ta*	*'asin*	*ike*	*nukara-ha*	*nee*
3/boy-POSS	INTJ	outside-in	3SS/go.out.PC	then	3SS/3SO/look-DIR	COP

manu.	*Neya*	*'oman*	*teh*	*herikoh*	*rikin*	*nah*	*taa*
DIR.KNW	that	3SS/go.PC	and	upwards	3SS/ascend.PC	COMP	INTJ

yee	*manu.*	*Cise*	*'ohta*	*'ahun*	*ike*	*'eweepekere*
3PS/3SO/say	DIR.KNW	house	place+in	3SS/enter.PC	then	3SS/3SO/tell

manu.	*'Eweepekere*	*teh*	*'orowa*	*taa*	*tani*	*temana*
DIR.KNW	3SS/3SO/tell	and	and.then	INTJ	now	what

'an-i-hi	だが	*(ne…)*	*wooneka-hci*	*kusu*	*paye-hci-[hi]*
3SS/exist.PC-0-NMLZ			check.on-3PS	because	go.PL-3PS-NMLZ

neampe	*seta-ha*	*ka*	*'ahci-y-ehe*	*ka*	*'oha*
TOP	3/dog-POSS	even	3/old.woman-0-POSS	even	be.empty

kaysey-[e]he	ばっかり	*'ota*	*kaa-ta*	*'an*	したと	*raw-ta*
3/slough-POSS		beach	over-in	3SS/exist.PC		below-in

---

[97] Indefinte person is here rendered via a third person plural, marked via the suffix *-hci*. The circumfixal construction *'an-…-hci* or the first person plural prefix *'an-* seen above thus are not the only ways to express indefinite person in SA. This indefinite third person plural may be also zero marked, as suggested by the form *ampare* '(they) made her bring' in this very passage.

[98] This could be either a mispronunciation of the locative postposition *-'ene* or the Japanese postposition へ *e* indicating motion towards a goal. This code switching between Japanese and Ainu (as it can be well inferred from this text) is a chief characteristic of Asai's way of speaking. Unfortunately, the audio recording does not make any more clarity on this point.

[99] Audio is incomprehensible.

'an したと. 4.（し・・・）亡くなって *'isam* *hemaka*
3SS/exist.PC   3SS/not.be   end.up

teh そうしていたうちこんだあのう...[100] *cise-he* こんだあのう
and   3/house-POSS

cise-he だとよ *puu-hu* *nah* *yee-hci?*[101]
3/house-POSS   3/store.house-POSS   COMP   3SO/say-3PS

今でもあるんだというもの、あのう. *Suma* 大きな *suma.* *'Asin-no*
                                   stone   stone   be.new-ADV

ne'an *taata* *taa* *'ahkas* *ayne* *taata* *'ahup-a-hci* (*ahun*) *taata*
that   there   INTJ   3SS/walk   then   there   enter.PL-0-3PS   there

wahka *'isam* *'ahkayki* *taa* あのう *niatus* *'asin-ke*
water   3SS/not.be   though   INTJ   bucket   3SS/3SO/get.out-CAUS

ranke *soy-ta* と *'apa* *cahke* *ranke* *soy-ta* *'ama* *yahkayki*
ITER   outside-in   door   3SS/3SO/open   ITER   outside-in   3SS/3SO/put   though

ponno *'an* *rank[e]* *'apa* *cahke* *'ike* *taa* (*'iram…*)
a.little   3SS/exist.PC   ITER   door   3SS/3SO/open   then   INTJ

wahka *'oro'oo* *ranke* *'ahun.* *Nah* *'an* *manu.*
water   3SS/3SO/insert   ITER   3SS/enter.PC   COMP   3SS/exist.PC   DIR.KNW

5. *Neyke* *taa* *'anasihkara*[102] 色々な (*'ana…*) *wooya'an* *'anasihkara*
   and.then   INTJ   banquet   be.various   banquet

kii *koh* *taa* *'omanan* *'utah* *taa* *'ee-re,*
3SS/3SO/do   when   INTJ   3PS/travel   people   INTJ   3SS/3SO/3POI/eat

---

[100] Murasaki intervenes here asking the informant to speak Ainu.

   M: *'Aynu itah…* [(Say it in) Ainu]

[101] The other Ainu woman intervenes here.

   W: 今でもあるんだよ. [It exists still now.]

[102] The derivation of this word is unknown.

nah	*taa*	*kii*	*manu,*	*nah*	*kii*	ばばだと.	*'Orowa*
COMP	INTJ	3SS/3SO/do	DIR.KNW	COMP	3SS/3SO/do		and.then

ne'an	*'ikotuunas*[103]	*teh*	*'orowa*	*'ek-i*	*ike*	*ruu*	*ton-ta*
that	3SS/3SO/cure	and	and.then	3SS/come.PC-0	then	road	middle-in

'eh	*kanne*	*'orowa*	*'isam-[i]-hi*[104]	*seta-ha* あのう
3SS/come.PC	ADV	and.then	3SS/not.be-0-NMLZ	3/dog-POSS

tusu	*'atay-e*	*seta*	*naa*	*koro*	*'ike* その	*seta-ha*
shaman	3/value-POSS	dog	also	3SS/3SO/have	then	3/dog-POSS

もちゃんと	*'ahci*	*san-ke-ta*	*(pa…)*	*kaysey-ehe-hcin*
	old.woman	3/next.to-POSS-in		3/slough-POSS-PL

ばっかりだと. 6. *Ramat-[u]hu-hci[n]* 皆んな上さ登っていってしまったんだ.
         3/soul-POSS-PL

Taa	*cise-he-ta(a),*	*ta*	*puu-hu*	*nah*	*yee-hci*
that	3/house-POSS-in	that	3/store.house-POSS	COMP	3SO/say-3PS

'icar(a)-un	*'ahci*	*puy-ehe*[105]	*'onne*	*sinnurahpa*
Icara-be.in	old.woman	3/store.house-POSS	place+to	3PS/make.offering

yan ってこうやっておらたちも引き揚げて来るとき
FIN

'aynu	*'okore* こんだ、その	*'icar(a)-un*	*'ahci*	さこんだお酒あげたり語弊
person	all	Icara-be.in	old.woman	

献じたりしてあげるして. "*'Icar(a)-un*	*'ahci*	*pirika*	*siri*
Icara-be.in	old.woman	be.good	appearence

---

[103] The presence of the deteminer *ne'an* suggests that *ikotuunas* functions here as a noun (i.e. 'a cure, a treatment'). However, if this is the case, a verb is missing in this clause.

[104] The function of nominalization in this environment is not clear. The possibility for this to be a directive morpheme on a verb involved in a relative construction is unlikely in light of the syntactic behavior of directivity – this would be the only case of directivity in a relative clause encountered in my reference corpora.

[105] Variant of *puu* 'store house', possibly a semantic extension of the noun *puy* 'hole', whose possessive form is also *puyehe*.

kara[106]	*'i-kon-te"*	*nah*	*'an-yee.*	*Yoy*[107]
2SS/3SO/make	1PO-2SS/3SOI/have-CAUS	COMP	IP-3SO/say	be.good

siri	*kara*	*teh 'an.*	*Teh*	*'oro[wa]*	*yoy*
appearence	3SS/3SO/make	RSLT	and	and.then	be.good

siri	*kara-hci*[108]	*teh ('arik 'ampe*[109]*)*	*taa*	*teeta (arik[i] 'an...)*
appearence	3SO/make-3PS	and	INTJ	there

'ariki	*an*	*ike*	*taa*	あすこさ来たけあれ...	*si-toyki*[110]	*neanno*[111]
3PS/come.PL	PRF	then	INTJ		INTS-soil	be.like?

reera yuhke	*ike*	*koy* みたい *(nee)*	*reera*	*yuhke*	*toko...*[112]
wind 3SS/be.strong	then	wave	wind	3SS/be.strong	place

7. *taa*	*[o]ro-ke-he*	*('ayn…) 'aynu*	*mahtekuh* ばっかり	*'ohta*
that	3/place-POSS-POSS	person	woman	place+in

an	*kotan 'an*	*pe*	*nee*	*manu,*	*husko*	*'ohta…*
3SS/exist.PC	village 3SS/exist.PC	NMLZ	COP	DIR.KNW	be.old	place+in

neyke	*taa*	*sihturaynu*	*'ohkayo*	*'utah*	*taata*	*yap-a-hci*
and.then	INTJ	3SS/be.lost	young.man	people	there	come.up-0-3PS

---

[106] The conjunction *wa* 'and', proper of this benefactive construction, is missing.

[107] Loan from Japanese 良い *yoi* 'good'.

[108] Possible mistake. The subject of this verb is the old woman (as it is in the sentece above), but the suffix is the one of a plural subject.

[109] Possible mispronunciation of *'arikihi ne 'ampe* 'once they came'.

[110] If the derivation of this word is correct, this would be a case where a intensive morpheme, that usually selects a verbal stem, is added to a nominal stem, possibly with the meaning of 'very [big]'.

[111] Possible variant of *neeno*.

[112] Asai Take turns here to her other friend. She asks her question also to somebody else, suggesting that there is more than one person sitting in during the recording session, but only one of them replies. Murasaki also intervenes in Ainu. Part of what the woman replies is incomprehensible from the audio.

A: あばさんたちも見たか？ [Did you (women) see it too?]

W: 見ない. [I/we don't see it.]

A: あすこはね、あのう *'Okamuysaki* っていうとこだと. [There, you see, well… they say there is a place called *'Okamuysaki*.]

M: *'Okamuysaki nah* いう *nah… nah yee… tokoho?* [A place called… called *'Okamuysaki*?]

A: *Mm.* そこ、昔ね... [Yes. There, once you see…]

M: *'Aynu itah ani…* [In Ainu…]

'ike	*taata*	*'okay-a-hci*	*ike*	*sine*	*mahtekuh*	*tura*	*taa*	*poo*
then	there	exist.PL-0-3PS	then	one	woman	with	INTJ	child

kara-hci	*manu.*	8. *Poo*	*kara-hci*	*teh*	*taa*	*'orowa*
3SO/make-3PS	DIR.KNW	child	3SO/make-3PS	and	INTJ	and.then

hosipi-hci	*'ike*	*taa*	*'orow[a]*	*'an-tura*	*rus[uy y]ahka*
return-3PS	then	INTJ	and.then	IP-be.together	want though

taa	*tura*	*ka*	*'etunne*[113]	*teh*
INTJ	SLV/be.together	even	3SS/VO/not.want	and

hohpa-te-hci	*teh*	*paye-hci*	*teh*	*'orowa*	*'okaa-ke-ta*	*suy*
leave-?-3PS	and	go.PL-3PS	and	and.then	3/behind-POSS-in	again

paye-hci-hi	*neampe*	*taa*	*poo*	*koro*	*taa*	*mahtekuh*
go.PL-3PS-NMLZ	TOP	that	child	3SS/3SO/have	that	woman

'utah	*poo*	*koro*	*ike*	*taa*	*poo-ho*	*taa (taa)*	*'aynu*
people	child	3SS/3SO/have	then	that	3/child-POSS	that	person

utah	*taa*	*ko[r]o-re*	*rusuy*	*[y]ahkay[ki]*	*taa*	*'ampene*
people	INTJ	3SS/3SO/3SOI/have-CAUS	want	though	INTJ	really

ko-'uh	*'etunne-hci-hi*	*nee*	*manu.*
APPL-SLV/3SO/3SOI/take	VO/not.want-3PS-DIR	COP	DIR.KNW

9. *(Uh anahci…)*	*'uh*	*etunne-hci*	してその	*mahtekuh* 今度
	SLV/3SO/take	VO/not.want-3PS		woman

poo-ho	*nii*	*'utohton*[114]	*'e-u-te[h]-'ee-kara*	*yayne*
3/child-POSS	stick	ONOM	APPL-REC-use-APPL-3SS/3SS/make	then

---

[113] The presence of the nominal-restrictive *ka* 'even' before *'etunne* 'not want' seems to be a piece of evidence for the nominal function of the notional verb *tura* 'be together'. This construction with *'etunne* thus still retains the properties of a light verb construction. Such occurrence is not common as, together with *rusuy* 'want', *'etunne* was on the verge of turning into an auxiliary construction (see §5.6.2 for further discussion).

[114] Otsuka (2008) reports this word as a locative noun, though in the form *'utohtonke* (with possessive form *'utohtonkehe*), but its function here seems to be the one of an onomatopoeic word, which is also the position taken by Murasaki in her translation.

rayki	*teh*	*taa*	*nukara-hci*	*teh*	*'orowa*	*pateh*	
3SS/3SO/kill	and	that	3SO/look-3PS	and	and.then	just	

paye-hci	*pe*	*nee*	*manu.*	*Taa*	*'or-o-wa*		*tani*
go.PL-3PS	NMLZ	COP	DIR.KNW	INTJ	place-POSS-from		now

(taa 'orowa)	*[i]ke*	*reekoh*	*reera-'o-*[115]*yuhke*	*toko-ho*
	then	really	wind-?-be.strong	place-POSS

nee	*manu.*	女島って言うとこだと.[116]
COP	DIR.KNW	

4. THE WOMAN OF 'ICARA

M: A tale…

A: *It is*[117] a tale

M: *Oh, so,* tell me a tale.

A: *Once, you see, there…*

M: Say it in Ainu.

A: There lived an old woman of 'Icara. 'Icara… *So it is called* 'Icara*, [in] the direction that goes to that Horotomari, see.*

M: In the old days… *Say this again (from) the beginning.*

A: And then, you see…

M: *Ag… Say it once more from the beginning.*

A: There # lived one old woman of 'Icara. There lived one old woman…

W: *There was also* one man.[118]

A: A m…

W: *A* child.

A: *A baby boy*.

M: *Oh, no, no, no.*

A: *They say there was*.

---

[115] Prefix with an unclear function. It appears to denote the entity possessing the quality expressed by the one-place qualitative verb, here *yuhke* 'strong'.

[116] The narration changes here into a discussion about the name of the island and on the past of the informant's husband.

[117] Japanese parts in the original text are written in italics in this translation.

[118] I borrow the translation of this passage from Murasaki. The word *rayta* is unknown.

A: *I see. Once more in the beginning, don't you say there is also a baby boy… ? (Say it) once more.*

1. There was a baby boy *(a baby boy)*. There was *also* her older brother. And then # since she was a shaman, a medium for the gods, # she went to 'Ustomonaypo to perform a healing. 2. To perform a healing she went and # then, once she was done, since she returned # …[119] it was indeed said that it was inappropriate *if* a shaman [who had performed a healing] was made to bring their dog [with them]. And # she was made go bringing # her dog #, her helping dog, and while going # she did ascend to the sky why. 3. She ascended upwards. # Her older brother # went out of the house and indeed saw it. It is said that [the shaman woman] went [away] ascending upwards. [Her brother] went into the house and told about this and then # once they eventually went to check what happened, *it seems* there was *nothing but* the empty slough of both the old woman and of her dog on the beach, down (there). 4. *She died* and *in the meanwhile, now, see…*[120] her house #, *it was* her house, do they call it a store house? *It does exist still today #.* A stone, a *big* stone [there was]. Entering there for the first time, people did not find water but #, *well…*, they kept on bringing water inside through the door little by little by using a bucket. 5. And then[121] # when she prepared a rich banquet, she provided food to # travellers #, so # they did. *She was and all woman* who did so. Then she performed the healing and then, coming [back] on the way, her dead dog, *see*, she also had with her an accompanying dog, [there] *was just* their sloughs next to the old woman, *for sure also* the one of *that* dog. 6. *All of* their souls *went up to the sky. Whenever travellers came back home* [they used to say]: "Let [us] make offerings to [what] people call the store house of the old woman of Icara, in that house of hers". All people *then, gave sake and offers* [to] the old woman of Icara. People said: "Oh old woman of Icara, give us good weather" [and] she made the weather good. And then # [travellers who] had gotten there #, *the following day*, a wind like a landslide [blew] strong, a wind *like* a wave… 7. [In] that place there was indeed a village were *only* women lived; in the old [days]… And then # lost young men went up there and lived there and [each] had babies # with one woman. 8. And then they returned # and, although [the men] wanted to take [the women] with them, # [the women] did not want to, so [the men] left and then afterwards, again, when they went [back there] #, the women who had [had] babies

---

[119] Here follows a digression on the taboo that was for a shaman to be accompanied by a dog after a healing.

[120] Flashback to events in the storyline that were omitted.

[121] Another flashback to events in the storyline that were omitted.

wanted the men to have them, but # [these men] indeed did not want at all to take the babies from them. 9. So *then* the women killed their children by beating them with sticks, and [the men] saw that. Then they just went back indeed. From that [time] that place has become a place of strong winds. *[It is known] as Women Island.*

---

5. *UKOYSOYTAK*
TMA: 12-16

W: *Ku-matak-ihi*   *he!*
     1S/younger.sister-POSS   FOC

S: *Ku-sapo*   *he!*
     1S/older.sister   FOC

W: *Numan,*	*tan*	*cup*	*re*	*to*	*an*	*to-ho[122]-ta,*	*"Ikiya un*
yesterday	this	moon	three	day	3SS/exist.PC	day-POSS-in	DUB

tunas-no	*e-ek*	*wa"*	*sekor,*	*ku-raman (pontono…)*	*ponkurmat*
be.quick-ADV	2SS-come.PC	FIN	ADV	1SS-think	little.girl

eun	*ku-ye*	*ka*	*ki*	*wa,*	*c-e-w-ko-ysoytak*	*kor oka-as*
to	1SS-3SO/say	even	SLV/VO/do	and	1PS-APPL-REC-talk	PROG-1PS

wa,	*a-e-tere*	*yakka*	*wen.*	*Ruwe ne*	*awa,*	*mak*
and	4S-2SO-wait	though	3SS/be.bad	DIR.INT	and.so	how

an	*pe*	*ne*	*kusu*	*ene,*	*numan*	*e-ek*
3SS/exist.PC	thing	COP	because	like.this	yesterday	2SS-come.PC

katu	*ka*	*isam*	*yakka,*	*tanto*	*poka*	*e-ek*	*wa*	*ponkurmat*
situation	even	3SS/not.be	though	today	at.least	2SS-come.PC	and	little.girl

e-nukar	*yakun,*	*tan*	*pe*	*poka*	*pirka*	*sekor*	*ku-yaynu*
2SS-3SO/see	if	this	thing	at.least	3SS/be.good	ADV	1SG-think

---

[122] Another case of "partitive" possessive (see fn. 3). The frequency of "partitive" possessives in HA is far lower than it is in SA.

wa.	*Mak*	*an*		*pe*	*kusu*	*e-moyre*	*a*	*ruwe an?*
FIN	how	3SS/exist.PC		thing	because	2SS-be.late	PRF	DIR.INT

S: *Numan k-ek kusu ne a korka, toy or*
yesterday 1SG-come.PC because COP PRF but earth place

un		*pe*	*ka,*	*tane*	*tunas-no*	*a-uyna*		*kuni*
3PS/3SO/be.in		thing	even	now	be.quick-ADV	IP-3PO/take.PL		obligation?

hi	*neno*	*an.*		*Orowa*	*suy,*	*mosma*	*kur*	*or-ta,*
NMLZ	like	3SS/exist.PC		and.then	again	be.another	person	3/place-in

wen-pe		*an*		*wa,*	*or-o-ta*		*ka*	*ku-yorot*
be.bad-thing		3SS/exist.PC		and	3/place-POSS-in		even	1SS-visit

wa	*easir*	*k-ek*		*kusu ne*	*wa*	*kusu,*		*ku-moyre-moyre.*
and	really	1SS-come.PC		INTN.FUT	and	because		1SS-be.late-be.late

Numan		*somo*	*k-ek*		*wa*	"*a-en-ko-y-pak*		*ruwe*
yesterday		NEG	1SS-come.PC		and	IP-1SO-APPL-AP-punish		\<DIR.INT\>

somo	*he*	*an?"*		*sekor*	*ku-yaynu*		*korka,*	*tanto*	*k-ek*
NEG	FOC	\<DIR.INT\>		ADV	1SS-think		but	today	1SS-come.PC

ruwe un.
DIR.INT

W: *Yakun,*	*tanto*	*kani*	*anak*	*tasum-kur*		*kusu,*		*nen poka*
if	today	I	TOP	disease-person		because		somehow

a-en-si-y-erampokiwen-te	*wa*	*kusu,*		*tokap*		*nicihan*[123]
IP-1SO-REF-AP-pity-CAUS	and	because		midday		two.hours.half

or-o-wano		*isa-cise*[124]	*or-un*		*suy*	*k-arpa*		*oasi*
3/place-POSS-from		doctor-house	place-to		again	1SS-go.PC		be.about.to

kus[u],	*iruka*		*hene*	*ohonno*		*hene*	*teta,*	*a-e-oripak*
because	a.while		FOC	long		FOC	here	IP-APPL-3SO/respect

---

[123] From Japanese the 2時半 *nijihan* 'half past two'.

[124] Compound meaning 'hospital' from the Japanese 医者 *isha* 'doctor' and the Ainu *cise* 'house'.

ponkurmat	*sam-a-ta*	*e-an*	*wa*	*nep*	*ka*
little.girl	3/next-POSS-in	2SS-exist.PC	and	something	even

a-e-ko-nu	*yakun*	*e-ye*	*kuni*	*hi,*	
IP-2SO-APPL-listen	if	2SS-3SO/say	obligation?	NMLZ	

c-e-w-ko-ytak	*ka*	*a-e-w-ko-ytak*	*ka*	*ki*
1PS-APPL-REF-APPL-speak	even	4S-APPL-REF-APPL-speak	even	SLV/VO/do

na,	*neno*	*yaynu*	*hani!*
FIN	like	2SS/think	FIN

S: | *E,* | *pirka* | *ruwe un.* | *Kuni* | *ku-ramu* | *kor,* | *k-ek* | *pe* |
|---|---|---|---|---|---|---|---|
| INTJ | 3SS/be.good | DIR.INT | COMP | 1SS-3SO/think | when | 1SS-come.PC | NMLZ |

ne	*kusu,*	*nep*	*ka*	*a-en-ko-pisi*	*yakun,*	*k-eraman*
COP	because	something	even	IP-1SO-APPL-ask	if	1SS-3SO/know

pe	*anakne,*	*nep*	*oruspe*	*ne*	*yakka,*	*a-en-ko-pisi*
thing	TOP	something	story	COP	though	IP-1SO-APPL-ask

p	*anakne,*	*opitta*	*ku-ye*	*wa,*	*pontonomat*	*ku-nu-re*
thing	TOP	all	1SS-3SO/say	and	little.woman	1SS-3SO/hear-CAUS

kuni	*ku-ramu*	*kor*	*k-ek*	*ruwe ne*	*wa.*
COMP	1SS-3SO/think	when	1SS-come.PC	DIR.INT	FIN

W: | *He he...* | *Hetak* | *eani* | *nep* | *ka* | *ye...* | *Hokanpa* | *oruspe* |
|---|---|---|---|---|---|---|---|
| | INTJ | you | something | even | 2SS/3SO/say | be.difficult | story |

てなく易しいの.

S:	*Yakun,*	*te-wano,*	*nep*	*a-en-ko-pisi*	*kusu ne*	*hi*
if	now-from	something	IP-1SO-APPL-ask	INTN.FUT	NMLZ

ne	*yakka,*	*a-en-ko-pisi*	*p*	*anakne (teeta oruspe* ても)
COP	though	IP-1SO-APPL-ask	thing	TOP

tee-ta	*oruspe*	*ne*	*yakka,*	*tane*	*oruspe*	*ne*	*yakka,*	*sinrit*	*oruspe*	*ne*
there-in	story	COP	though	now	story	COP	though	ancestor	story	COP

yakun *neno,* *tane* *an* *a-kor* *puri* *ne* *yakun* *neno,*
if like now 3SS/exist.PC 4S-3SO/have style COP if like

tono *puri* *ne* *yakun* *neno,* *a-en-ko-pisi* *p* *anakne,*
Japanese style COP if like IP-1SO-APPL-ask thing TOP

opitta *ku-ye* *wa* *ku-nu-yar,* *k-eraman* *pakno*
all 1SS-3SO/say and 1SS-3SO/3SOI/hear-CAUS 1SS-3SO/know until

anak *k-eypakasnu* *oasi,* *kuni* *ku-ramu* *wa.*
TOP 1SS-3SO/teach.to be.about.to COMP 1SS-3SO/think FIN

W: *Yakun* *pirka* *wa.* *Neno* *iki* *wa* *en-kore* *hani!*
　 if 3SS/be.good FIN like 2SS/do and 1SOI-2SS/3SO/give FIN

S: *E.* *Oraun* *tanto,* *te-wano,* *e-arpa* *wa* *sone,* *tasum-kur*
　 INTJ and.then today there-from 2SS-go.PC and really disease-person

(e-tek-e *na,* *e-tek-e…)* *tektasa* *poka* *e-e-kar*
 2S-hand-POSS FIN 2S-hand-POSS hand.imposition at.least 2SS-APPL-3SO/3SOI/make

wa *tasum-kur* *kor* *tasum* *pirka* *wa,* *newaanpe,*
and disease-person 3SS/3SO/have disease 3SS/be.good and such.thing

a-e-e-nunuke, *"tapne* *a-i-siknu-re* *wa*
IP-2SO-APPL-value.well like.this IP-4O-save-CAUS and

a-e-e-ko-yayirayke *na"* *sekor,* *sone* *pirka-no* *a-e-e-ko-yayirayke*
4S-2SO-APPL-APPL-thank FIN ADV really be.good-ADV IP-2SO-APPL-APPL-thank

kuni-ne, *ko-yayramkesmewe* *wa,* *tasum-kur* *apunno*
obligation?-COP APPL-2SS/3SO/be.hardworking and disease-person healtily

e-tusa-re *kuni* *sekor, (kamuy…)* *kamuy* *ne* *yakka*
2SS-3SO/cure-CAUS obligation? ADV god COP though

si-sermak-us-te *wa* *irammakaka* *tektaksa* *poka*
REF-3SS/divine.help-put-CAUS and be.well.done hand.imposition at.least

e-kar   *kuni*   *ramu!*

2SS-3SO/make   COMP   2SS/3SO/think

W: *Ene*   *kani*   *ka*   *ku-yaynu.*   *Hunakke*   *kusu*   *hacigaci*[125]

    like.this   I   even   1SS-think   for.what.reason because   eight.month

cup   *or-ta*   *nen poka*   *tono*   *nispa*   *ka*   *niwkes*   *pe,*

moon   place-in   somehow   noble   noble.man   even   be.difficult   thing

nen poka   *kamuy* *isermakus*[126]   *an*   *kusu,*

somehow   god   3SS/have.divine.protection   PRF   because

teknimawpo[127]   *k-e-kar-kar*   *wa,*   *hetopo horka,*

hand.imposition   1SS-APPL-3SO/make-make   and   anew   backwards

siknu   *awa*   *asirkinne,*   *montum-u*   *kasi,*   *mosma*

3SS/survive   and.so newly   3/health.condition-POSS   over-POSS   be.other

kur   *kem*   *a-o*   *wa*   *ora*   *ene,*   *yaani, ukuran*   *ka*

person   blood   IP-3SO/3SOI/insert   and   then   like.this   almost evening   even

yaani-po   *isam*   *anki*   *sirki.*   *Yakka,*   *tan*   *pe*

almost-DIM   3SS/not.be   almost IND.VIS   though   this   thing

rekor[128] *a-kor*   *kinra*   *itak,*   *sinotca*   *tura,*

really   4S-3SO/have   god.conveying   word   3PS/3PO/sing   while

hussa   *tura,*   *ku-ko-hopuni*   *wa,*   *o-tu-suy-konna*

3PS/say.hussa   while   1SS-APPL-3SO/jump.PC   and   DEI-two-time-ADV

o-re-suy-konna,   *ku-ko-hopuni,*   *sonno an*   *a,*

DEI-three-time-ADV   1SS-APPL-3SO/jump.PC   really 3SS/exist.PC   ADM

---

[125] From the Japanese 8 月 *hacigatsu* 'August' (lit.: the eighth month).

[126] This verb can be analyzed as *i-sermak-us* (AP-back.of.shoulders-get.stick). Despite what would appear a case of incorporation of the noun *sermak* and the presence of the (usually) valency-changing antipassive *i-*, there is no syntactic saturation of the verb *us* and the whole compound remains a one-place verb.

[127] This noun can be analyzed as *tek-nimaw-po* (hand-tree.bark-DIM). The meaning of 'hand imposition (to heal someone)' the whole noun takes is mainly derived from the noun *nimaw* 'the bark of a special tree used specifically in healing rituals'. The function of what appears to be the diminuitive *-po* is not clear.

[128] Cognate of the SA form *reekoh*. This adverb is most rare in my reference corpora for HA.

kimatek		*tura*	*ki*	*ruwe ne*	*a*	*yakka,*	*nen poka*
3PS/be.surprised		while	3PS/3SO/do	DIR.RSN	PRF	though	somehow

ne	*wa,*	*ramat*	*a-ko-nitata*		*yakun,*	*sirunno,*	*pase*
COP	and	soul	IP-APPL-3SO/3SOI/support		if	for.sure	be.heavy

utar	*nispa*	*utar*	*ne*	*kusu,*	*en-okpare*[129]	*anak*	*somo*
people	noble.man	people	COP	because	1SO-3PS/treat.coldly	TOP	NEG

ki	*yakka,*	*ne*	*hi*	*anak*	*a-maktaanu,*	*a-en-nunuke*
3PS/3SO/do	though	this	fact	TOP	4S-3SO/be.indifferent	IP-1SO-regard

hi	*anak*	*henpara*	*ne*	*yakka*	*pirka,*	*"sisam*	*nispa*
fact	TOP	when	COP	though	3SS/be.good	Japanese	noble.man

siknu	*yakun*	*tan*	*pe*	*rekor,*	*kamuy ne*	*yakka*	*kotom*	*a*[130]
3SS/survive	though	this	thing	really	god COP	though	as.if	?

kuni	*p*	*ne*	*na"*	*sekor*	*ku-yaynu*	*kane,*
obligation?	thing	COP	FIN	ADV	1SS-think	ADV

ku-yay-ramkesmewe	*siri ne*	*hi*	*tap*	*an*	*na.*	*Tanto*
1SS-REF-be.dedicated	DIR.VIS	NMLZ	EPH	3SS/exist.PC	FIN	today

or-ta,	*easir,*	*a-e-oripak*	*pe,*	*ponkurmat*	*ne*	*ruwe ne*	*na.*
place-in	really	IP-APPL-3SO/respect	thing	little.girl	COP	DIR.RSN	FIN

Neun poka,	*iruka*	*hene*	*ohonno*	*hene,*	*turano*	*an*
somehow	a.while	DUB	at.length	DUB	3/together	2SS/exist.PC

wa,	*u-w-enewsar*		*ka*	*ki,*	*u-ko-ysoytak*
and	REC-0-SLV/converse		even	2SS/VO/do	REC-APPL-SLV/chat

ka	*ki*	*kor oka*	*yan*	*hani!*
even	2SS/VO/do	PRG	FIN	FIN

---

[129] The presence of the topic marker *anak* signals the nominal use of the preceding predicate. Such combination is quite rare in my reference corpora.

[130] The function of *a* in this passage is not clear. As it is, it seems to be the marker of perfect aspect but this is not supported by syntax as there is no support verb preceding. This *a* can otherwise very well be a mispronunciation of *an* 'exist' that, together with the semblative *kotom* forms a verb phrase meaning 'seeming…'; this last hypothesis fits in also with the use of the following *kuni*.

S: *E.* *Kusu ne* *korka,* *ohonno* *hene* *iruka* *hene,*
INTJ INTN.FUT but at.length DUB a.while DUB

a-en-ko-pisi *p* *ku-ye* *rusuy* *korka, tanto,* *mosma*
IP-1SO-APPL-3SO/3SOI/ask thing 1SS-3SO/say want but today be.other

kur, *hunna tap,* *ek* *kusu ne* *wa,* *"Tanto* *anak*
person who EPH 3SS/come.PC INTN.FUT and today TOP

ohonno *neno* *u-ko-ytak* *ka* *a-eaykap* *nankor* *na"*
at.length like.this REC-APPL-SLV/speak even 4S-VO/be.able maybe FIN

sekor kane *hawean* *kor* *ora,* *te-wano,* *kani* *ka* *toy*
ADV 3SS/say.PC when then now-from I even ground

or *un* *pe* *ka* *k-e-yay-monniska,* *cise*
place 3PS/3SO/be.in thing even 1SS-APPL-REF-3SO/keep.busy house

ka *ku-kar* *rusuy* *toy* *ka* *k-e-yay-monniska* *wa*
even 1SS-3SO/make want ground even 1SS-APPL-REF-3SO/keep.busy and

ohonno *neno* *k-an* *ka* *eaykap* *yakun,*
at.length like.this 1SS-exist.PC even SLV/VO/be.able if

ene *a-kor* *katkemat* *hawean* *hi* *ku-nu* *wa* *tanto*
like.this 4S-3SO/have girl 3SS/say.PC NMLZ 1SS-3SO/hear and today

nani *ku-hosipi* *kusu ne* *korka, ene* *e-hawean* *hi*
at.once 1SS-return.PC INTN.FUT but like.this 2SS-say.PC fact

ne *wa* *kusu,* *somo* *ku-henoye* *no* *ku-hosipi* *yakka*
COP and because NEG 1SS-turn ADV 1SS-return.PC though

a-e-oripak, *ponkatkemat* *a-e-oripak* *wa* *kusu,*
IP-APPL-3SO/respect little.girl IP-APPL-3SO/respect and because

ku-henoye *siri ne* *wa.*
1SS-turn DIR.VIS FIN

W: *He, he,   he…   Sonno   an   a.   Hawe ne   yakun, katu*
    INTJ INTJ INTJ   really   3SS/exist.PC ADM DIR.HRN   if   situation

renkayne,   yozi[131]   *pakno hene,   kozi*[132]   *pakno hene   ne   yakka*
according.to   four.hours   until   DUB   five.hours   until   DUB   COP   though

u-tura   eci-oka   kunine ne   yak   pirka   na.   Inan
REC-together   2PS-exist.PL   so.that COP   if   3SS/begood   FIN   which

katu   ne   yakka, inan   katu   ne   yakka,
situation COP   though which situation   COP   though

c-e-w-ko-ytak   ka   ki   kusu ne   na.   Iteki
1PS-APPL-REC-APPL-speak   even   SLV/VO/do   INTN.FUT   FIN   NEG

si-eyomne-yar[133]   *no   e-monasap   hi   yakun hunna*
REF-2SS/gain.badly.from-CAUS ADV   2SS-be.busy   NMLZ   if   who

erampewtek   k-erampewtek   ka   somo ki   korka,
3SS/3SO/not.know   1SS-3SO/not.know   even   NEG   SLV/VO/do   but

katu   renkayne,   pase tono utar,   e-si-y-amkir-e   ka
situation according.to   be.big noble people 2SS-REF-0-get.to.know-CAUS even

ki   yakne,   u-irwakne-an   wa,   pase kotan un-no,
SLV/VO/do   if   REC-be.sibling-4S   and   be.big village to-ADV

"Tapne   kane   u-irwakne   utar ka,   a-u-ko-ytak-te
like.this   ADV   REC-be.sibling   people even   IP-REC-APPL-3PO/speak-CAUS

a   ruwe   tap   an   na"   sekor uwepeker   koraci,
PRF   <DIR.RSN>   EPH   <DIR.RSN>   FIN   ADV   tale   look.like

---

[131] From the Japanese ４時 *yoji* 'four o'clock'.

[132] From the Japanese ５時 *goji* 'five o'clock'.

[133] Imperative used in an adverbial dependent clause.

an | *wa ne yak* | *tan* | *uske-he,* | *a-e-si-yuk-ye-yar,*[134]
3SS/exist.PC | and COP if | this | place-POSS | IP-APPL-REF-3SO/praise-say-CAUS

neyta | *pakno* | *onne-an* | *yakka,* | *i-ruw-oka-ke-ta* | *a-ye* | *rok*
when | until | be.old-4S | though | 4O-trace-after-POSS-in | 4S-3SO/say | PRF

itak, | *tu* | *kanpiso* | *ka* | *re* | *kanpiso* | *ka,* | *a-e-nuypa*
word | two | page | even | three | page | even | IP-APPL-3PO/write.PL

wa oka | *yakun,* | *tan* | *uski-ke,*[135] | *easir* | *a-re-he* | *ohonno* | *hene*
RSLT | if | this | place-POSS | really | 4-name-POSS | at.length | DUB

iruka | *hene,* | *kamuy* | *sirine* | *oka* | *tono-nispa* | *or-ta*
a.while | DUB | god | be.like | 3PS/exist.PL | noble-noble.man | place-in

kanpi | *ka* | *o* | *wa oka* | *yakun* | *ne* | *hi* | *koraci,* | *easir,*
paper | even | 3PL/3PO/insert | RSLT | if | COP | NMLZ | look.like | really

sinrit | *oruspe,* | *kamuy* | *oruspe,* | *neyta* | *pakno* | *sineatki* | *no*
ancestor | tale | god | tale | when | until | get.settled | ADV

a-e-w-eraman | *kuni* | *sekor,* | *ku-yaynu* | *kor* | *k-an*
IP-APPL-REC-3SO/know | obligation? | ADV | 1SS-think | PRG | <1SS->PRG

ruwe ne | *na* | *hani!*
DIR.RSN | FIN | FIN

S: *E.* | *Pirka.* | *Ku-nu* | *hawe ne.* | *K-eraman* | *korka, oraun,*
INTJ | 3SS/be.good | 1SS-3SO/hear | DIR.HRN | 1SS-3SO/know | but then

tane, | *a-kor* | *pontonomat* | *ka,* | *a-kor* | *ponkatkemat* | *ka,*
now | 4S-3SO/have | little.woman | even | 4S-3SO/have | little.girl | even

yay-tunas-ka | *ka* | *ki.* | *Kotan-un* | *hosipi* | *rusuy.* | *Tane*
REF-3SS/be.quick-TR | even | SLV/VO/do | village-to | 3SS/return.PC | want | now

---

[134] Although we can derive its meaning by breaking down this verb, *yuk* is not reported in any of my reference dictionaries as an independent word with the meaning of 'praise'. It most likely remains only in lexicalized compounds.

[135] Variant of *uskehe*.

anakne, ene   *e*-yaku-*kor-pa*[136]   *p,*   *sinnaynaye*[137] *ne,*

TOP   like.this   APPL-3SS/3PO/role-have-PL   NMLZ   3SS/put.line   COP

kanpi-nuye   *ne*   *kusu,*   *eypakasnu-pa*   *kusu,*   *ene*

3SS/letter-write   COP   because   3SS/3PO/teach.people-PL   because   like.this

haweoka-an   *hi,*   *tunas-no*   *utari*   *e-ko-ymoko-kor*

say.PL-4S   NMLZ   be.quick-ADV   people   APPL-APPL-3SS/3SO/3POI/present-have

wa,   *nu-yar*   *ka*   *ki*   *rusuy*   *wa,*

and   3SS/3SO/3POI/hear-CAUS   even   SLV/VO/do   want   and

yay-tunas-ka   *nankor.*   *Pe*   *ne*   *kusu,*   *tanto*   *he*   *ne*

REF-3SS/be.quick-TR   maybe   NMLZ   COP   because   today   FOC   COP

ya   *nisatta*   *he*   *ne*   *ya,*   *pakno neno*

INT   tomorrow   FOC   COP   INT   unitl   like.this

a-i-ko-uwepeken-nu   *ayke,*   *mak*   *an*   *hi*   *un*[138]

IP-4O-APPL-news-hear   even.though   how   3SS/exist.PC   NMLZ   FIN

kani   *anak*   *ku-kopan*   *ruwe*   *ka*   *somo*   *ne*   *korka,*

I   TOP   1SS-3SO/hate   <DIR.RSN>   even   NEG   <DIR.RSN>   but

oraun,   *hosippa*   *kor*   *ora,*   *makanak*   *sino*   *imaka-ke-ta*

then   3PS/return.PL   while   then   how   really   3/behind-POSS-in

(aewkoysoytak…)   *e-w-ko-ysoytak*   *wa*   *e-mina*

                     APPL-REC-APPL-3PS/3SO/talk   and   APPL-3PS/3SO/laugh

he,   *somo*   *he,*   *ki*   *kusu*   *ene,*   *oyakoyak-un*

FOC   NEG   FOC   do   because   like.this   here.and.there-to

---

[136] Case where a Japanese loanword (i.e. 役 *yaku* 'role') is incorporated in an Ainu verb (here *kor* 'have').

[137] We can break this verb down as *sin-naynaye*, where *naynaye* is the iterative form of *naye* 'to put/carve lines on' and *sin-* is likely a variant of *sir* 'appearence' (where /r/+/n/ > /nn/) that here takes the specific meaning of 'symbols' or 'letters'.

[138] The syntactic function of the final particle *un* is not clear in this context. It is possible that the whole *mak an hi un* has lexicalized into a fix adverbial expression translatable as '(not) at all'. Tamura renders this in Japanese as ちっとも.

anun *itak* *ka* *a-kor* *mosir* *un* *itak* *ka,*
other.person speech even 4S-3SO/have land 3SS/3SO/be.in speech even

Karapto *un* *itak* *ka,* *opitta,* *nu* *rusuy-pa* *kusu*
Karafuto 3SS/3SO/be.in speech even all 3PS/3PO/hear want-PL because

ene, *nispa* *or-ke* *katkemat* *orke,* *arki* *ruwe ne.*
like.this noble.man 3/place-POSS woman 3/place-POSS 3PS/come.PL DIR.RSN

Yakun, *(aoka anakun aka...)* *aoka* *anakne,* *tan,* *a-kor* *Hitaka,*
if we TOP this 4S-3SO/have Hidaka

a-kor *itak* *a-ye* *wa,* *utar-ihi*
4S-3SO/have speech 4S-3SO/say and 3/people-POSS

e-ko-imoko-kor-pa *oasi* *ruwe ne* *hi*
APPL-APPL-3SS/3SO/3POI/present-have-PL be.about.to DIR.RSN NMLZ

ne *nankor* *wa.*
COP maybe FIN

W: *E.* *Hioy'oy.* *E-ye* *p* *pirka* *wa* *kani* *ka*
INTJ thank.you 2SS-3PO/say thing 3SS/be.good and I even

k-e-yay-kopuntek *na.* *Hokure,* *iruka* *poka,* *easir*
1SS-APPL-REF-3SO/rejoice FIN INTJ a.while at.least really

a-e-oripak *ponkurmat* *turano,* *u-w-enewsar* *yan* *hani.*
IP-APPL-3SO/respect little.girl together REC-0-2SS/converse FIN FIN

S: *U-w-enewsar-'as* *kusu ne* *korka,* *nep* *ka* *ye* *wa*
REC-0-converse-1PS INTN.FUT but something even 3SS/3SO/say and

en-enewsar *oasi* *ruwe ne* *ya?*
1SO-3SS/converse be.about.to DIR.RSN INT

W: *He he he he, he he.*
INTJ

S: *Mak* *hawean* *wa* *en-enewsar* *pe* *ne* *ya?*
how 3SS/say.PC and 1SO-3SS/converse NMLZ COP INT

410

W: *Tanepo*   *e-nukar*   *wa…*
at.first   2SS-3SO/see   FIN

S: *Tanepo*   *en-nukar*   *ka*   *tanepo ku-nukar*   *ka*   *ki*
at.first   1SO-3SS/see   even   at.first 1SS-3SO/see   even   SLV/VO/do

wa,   *mak*   *haweoka-as*   *wa*   *mina-as*   *kor oka-as*   *iruska-as*
and   how   say.PL-1PS   and   laugh-1PS   PRG-1PS   get.angry-1PS

kor oka-as, …
PRG-1PS

W: *Ha ha irus…*   *Ha ha…*   *hemanta*   *kusu*   *iruska…*   *ha ha ha…*
INTJ   INTJ   what   because   get.angry

S: *(Ki kusu…)*   *Ki*   *kusu*   *ene*   *a-i-ko-uwepeken-nu*   *humi an*
do   because   like.this   IP-4O-APPL-news-hear   DIR.FLT

hi   *ka,*   *k-erampewtek.*   *Hnta*   *poon*   *hemanta,*   *eun*
NMLZ   even   1SS-3SO/not.know   what   be.smallest   what   towards

ene   *he-tutturi-an*   *wa*   *haweoka-an*   *kor*   *ora*   *mak*
like.this   DEI-stretch.out-4S   and   say.PL-4S   while   then   how

a-haw-ehe   *imaka-ke-ta*   *e-mina-pa*   *he,*   *somo*   *he,*
4-voice-POSS   3/behind-POSS-in   APPL-3PS/3PO/laugh-PL   FOC   NEG   FOC

ki   *kusu,*   *a-i-ko-uwepeken-nu*   *humi*   *ene*
SLV/VO/do   because   IP-4O-APPL-news-hear   <DIR.FLT>   like.this

an   *hi*   *an?*
<DIR.FLT>   NMLZ   3SS/exist.PC

W: *Ha ha…*   *Poon*   *hemanta,*   *oar…*   *A-kor*   *pon*   *kikay*[139]
INTJ   be.smallest   what   at.all   4S-3SO/have   be.small   device

mak   *ne*   *p*   *ene*   *pon-pon*   *ruwe ne*   *kor an*[140]   *pe…*
how   COP   NMLZ   like.this   be.small-be.small   DIR.RSN   PRG   thing

---

[139] From the Japanese 器械 *kikai* 'device'.

[140] This is a rare case (at least for a dialect of HA) where an aspectual follows an evidential.

5. CONVERSATION

W: Little sister!

S: Big sister!

W: Yesterday, the 3rd of this month, I thought that perhaps you were coming soon; I also said it to [our] dear girl[141] and we were talking together but, although we waited for you, you did not come. So for some reason yesterday there was no sign of you coming, but at least today you came and I think it is nice if you even just meet [our] dear girl. Why were you late?

S: I intended to come yesterday, but then it looked like it was time for the crops to be harvested quickly. Then again there was an accident at another person's [house] and I went there to visit and, once It got [finally] the time for me to come, I was so late. Yesterday I did not come and I thought: "Oh, won't I be told off for this?" but today I came.

W: If so… Today I was asked to please somehow pay a visit to a sick person and I plan to go back to the hospital from two in the afternoon, so be ready to sit here next to our dear girl, [just] for a while or at length, and be willing to reply if you are asked something, even have a conversation together with me or all together!

S: Was, that is ok. Since I did come, I did so thinking I shall reply to everything that I may be asked, as long and I know it, whatever fact, and have [our] little girl listen to it.

W: He he… So come on, say something… *Not* a difficult topic, *a simple one.*

S: If so, whatever thing I am going to be asked from now on, may it be a thing of the past, a contemporary topic, or a story of [our] ancestors, according to either our own contemporary style or the Japanese style, I [will] say it and have her listen to it; I think I shall teach her as much as I know.

W: That is good. Please do like this!

S: Ok. So today, later on, you go and really (give me your hand, your hand…)[142] do at least a massage a to a sick person and, because that person's illness gets better you are taken in great consideration. Be dedicated so that you shall be thanked most profoundly [with words like]: "I was saved like this, thank you!", and even pray to

---

[141] With *ponkurmat* 'little girl' the informants refer to Tamura Suzuko, the collector of these texts.

[142] Here the informant asks her friend to give her her hand.

the gods so that you may [be able to] heal the sick person properly, and think that you want to give at least a great massage!

W: I feel the same way too. Despite [my] effort, in August, I performed a healing through hand imposition, somehow thanks to the help of a god, for something that [even] Japanese people could not [heal] in any way, and [that person] regained their strength back again. But then again the blood of another person was injected in their body and then like this little by little, even in the evening, it seemed like they were dying. However I concentrated while singing our god-summoning words and saying the *hussa*,[143] again and again I did, [and] though I did perform this being very agitated, if they were somehow saved from death [it was] because they were important and noble people; they did not treat me badly but they did not even make a big deal of it. As long as I am acknowledge [my import] it does not matter. Thinking: "If a Japanese person survived, it looks like they certainly were worthy of it for the gods", I indeed put all my effort in that. Today the one who [should] be paid homage to is [our] little girl. Either for a little while or at length, stay with her and chat and converse together.

S: Yes, I intend [to do so]. Either for a while or at length, I want to reply to what I am asked but, today, [even] another person, who [was it]…, decided to come and they said: "Maybe we won't even have the time to talk together like this for a long time" and then, from now on, I too [will] be busy with the harvesting, I want to also build a house, I am busy in the crops and if I can't even stay like this for a long time, I intended to listen to what our little girl [was going to] say and then to return home, but since it's something you say like this, I had no excuses to go home without showing up, I had no excuse towards the little girl and so I showed up.

W: He, he, he… It is really like this. If so, depending on what you have to do, I hope that the two of you plan to stay together even up to four or five o'clock. Whatever your commitments may be, we will converse together. Without resentment, nobody knows [how] busy you are, I don't even know, but, according to your commitments, if you make yourself known to the Japanese[144] all the way to Tokyo, since the two of us are related, [by the little girl saying]: "This way I indeed conversed together with two related [women]", if [all this] becomes some kind of tale, this place [will] be praised. And even though we get old some day, after we die the things we have said,

---

[143] Onomatopoeic word describing the blowing and hissing sound made while reciting healing words used in rituals.

[144] Defined by the informant literally as *tono nispa utar* 'great noble people'.

our names, the facts of our ancestors and our gods [will] be known to everyone forever without going to waste may it be for a long time or a short time, if they are written on two, three pages on paper in the place of the men who are like gods.[145] This is what I'm thinking!

S: Yes, that's good. I see. I understand but now our little girl is in a hurry. She wants to go back to her country. Now she probably is in a hurry because she wants soon to bring [the recordings of] the way we speak as a gift to the people of her country and she wants also to make them listen to it, to teach everyone, since what she has committed to, like this, is writing and studying. So, no matter if we are interviewed this way even today or tomorrow: it doesn't bother me one bit. But then once she returns, after that, they [will] probably laugh of [our] conversations, or maybe not. Both men and women [will do] like this because they want to hear all of the languages from foreign countries and other people, including the language of our country and also the language of Karafuto. If so, she indeed will probably take [information about] our Hidaka and our language as a gift to her people.

W: Yes, thank you. What] you say is good and I'm happy for that. So come on, even for a short time, talk together with the really dear little girl.

S: We will talk, but will she say something and have me converse?

W: He, he, he, he, he, he.

S: What [will] she indeed say to have me converse?

W: It's the first time you meet her…

S: It is both the first time she meets me and I meet her, how [should] we talk and laugh [or] get angry?

W: Ha, ha get an… ha, ha… Why [would you] get angry? Ha, ha, ha…

S: So well, I'm not even sure of how we speak together. We speak sticking our face like this to this something… this very small something[146] and then is it that we are interviewed so that afterwards they [can] laugh or not at our voices?

W: Ha, ha… Little something, not at all… How is our device such a small thing…

---

[145] Again here the informant is referring to Japanese people.

[146] The informant is talking about the microphone used during the recording session.

(Penanpe…)	*Penanpe*	*an*	*Pananpe*	*an*	*[h]ine*
	Penanpe	3SS/exist.PC	Pananpe	3SS/exist.PC	and.then

siran	*[h]ike*	*Pananpe*	*earkinne*	*ison*
appearence.be	and.then	Pananpe	extremely	3SS/be.skilled.hunter

cep	*nukoan*[147]	*kor an*	*pe*	*ne*	*ruwe ne*	*hike*
fish	3SS/catch.plentifully	PRG	COP	NMLZ	DIR.KNW	and.then

Penanpe	*anak*	*neun*	*iki*	*yakka*	*omuken*	*patek*
Penanpe	TOP	how	3SS/do	though	3SS/catch.scarcely	only

ki	*a*	*p,*	*sine-an-ta*	*ek*	*[h]ine,*	*"A-kor*
SLV/VO/do	PRF	NMLZ	one-exist-in	3SS/come.PC	and.then	4S-3SO/have

Pananpe	*mak*	*e-iki*	*[h]ine*	*ene*	*nani*	*e-ison*
Pananpe	how	2SS-do	and.then	like.this	at.once	2SS-catch.plentifully

pe	*ora*	*asinuma*	*anak*	*nepka*	*a-sak*	*[h]i*
NMLZ	and.then	I	TOP	anything	4S-3SO/not.have	NMLZ

an,	*nepka*	*a-uk*	*ka*	*eaykap*	*[h]i*
3SS/exist.PC	anything	4S-3SO/take.PC	even	SLV/VO/not.be.able	NMLZ

an?"	*sekor*	*hawean*	*akusu*	*"Ek.*	*Ipe*	*kor*
3SS/exist.PC	ADV	3SS/say.PC	because	2SS/come.PC	3SS/eat	while

a-paskuma[148]	*na!"*	*sekor*	*(hawean akusu,)*	*Pananpe*	*hawean*
4S-3SO/tell	FIN	ADV		Pananpe	3SS/say.PC

---

[147] The verb *nukoan*, as well as its opposite *omuken*, are one-place verbs but here *nukoan* is seemingly used with a direct argument (i.e. *cep* 'fish'). A form with an applicative would be expected in this instance, like *eomuken* appearing at the end of the tale: the two-place counterpart of the one-place *omuken*.

[148] Both verbs *ipe* 'eat' and *paskuma* 'tell' are zero-marked for third person (respectively for subject and direct object) although the referent here is a second person. This probably happens under the influence of a preceding imperative form (i.e. *ek* 'come!'), where second person is normally zero-marked.

akusu	*"Somo a-nu*		*yakka*	*hoski*		*tas*	*a-nu*		*a*	*p"*
because	NEG 4S-3SO/hear		though	front		EPH	4S-3SO/hear		PRF	NMLZ

sekor	*hawean*	*kor*	*apa*	*(somoan…)*	*sam-un*	*okuyma*	*tek*
ADV	3SS/say.PC	while	door		3/next-to	3SS/urinate	ISTN

kor	*soyne*	*ruwe ne*	*orano*	*Pananpe*	*anak*	*e-mina*
while	3SS/go.out.PC	DIR.KNW	and.then	Pananpe	TOP	APPL-3SS/laugh

rusuy,	*"Ene*	*a-ye*	*p*	*ka*	*e-hayta*[149]	*[h]ike*
want	like.this	4S-3SO/say	NMLZ	even	2SS-3SO/miss	and.then

hnta	*e-oskoni*	*p*	*an?"*	*sekor*	*hawean*	*kor*
what	2SS-3SO/catch	NMZL	3SS/exist.PC	ADV	3SS/say.PC	while

e-mina	*rusuy*	*kor an*	*ruwe ne*	*akusu*	*sonno*	*ka*	こんど
APPL-3SS/3SO/laugh	want	PRG	DIR.KNW	because	really	even	

omuken	*wa*	*ene*	*iki*	*hi*	*ka*	*isam*
3SS/catch.scarcely	and	like.this	3SS/do	NMLZ	even	3SS/not.be

orano	*Pananpe*	*anakne*	*"Ta*	*ene*	*ne*	*wa*	*kusu*
and.then	Pananpe	TOP	EPH	like.this	COP	and	because

a-ye	*p*	*e-nu*	*wa*	*a-ye*	*p*	*neno*	*e-iki*
4S-3SO/say	NMLZ	2SS-3SO/hear	and	4S-3SO/say	NMLZ	like.this	2SS-do

yakne	*pirka*	*[h]ike,*	*a-ye*	*p*	*e-nu*	*ka*	*somo*
if	3SS/be.good	and.then	4S-3SO/say	NMLZ	2SS-3SO/hear	even	NEG

ki	*hi*	*an.*	*Kamuy ne*	*yakka*	*aynu*	*ne*	*yakka*	*iteki*
SLV/VO/do	NMLZ	3SS/exist.PC	god COP	though	person	COP	though	NEG

a-si-ko-wen-te	*no*	*aynu*	*ye*	*p*	*kamuy*	*ye*
4S-REF-APPL-3PO/be.bad-CAUS	ADV	person	3SS/3SO/say	NMLZ	god	3SS/3SO/say

---

[149] With the intended meaning in this context the verb form here should be *e-ehayta*, with the two-place variant of the one-place *hayta*. The intended syntactic function of the verb is signalled by the presence of a direct object argument (i.e. *aye p* 'what I say').

p	*a-nu*		*kor oka-an*	*kor*	*pirka*		*p*	*ne*	*hike*
NMLZ	4S-3SO/hear		PRG-4S	while	3SS/be.good		NMLZ	COP	and.then

ene	*a-ye*	*p*	*ka*	*somo*	*e-nu*	*ora*		*ene*
like.this	4S-3SO/say	NMLZ	even	NEG	2SS-3SO/hear	and.then		like.this

e-iki	*hi*	*ka*	*isam*	*[h]i*	*an"*		*sekor kane*	*hawean*
2SS-do	NMLZ	even	3SS/not.be	NMLZ	3SS/exist.PC		ADV	3SS/say.PC

kor an,	*orano*		*Pananpe*	*anak*	*e-mina*		*rusuy*	*Penanpe*
PRG	and.then		Pananpe	TOP	APPL-3SS/3SO/laugh		want	Penanpe

anak	*ene*		*iki*	*hi*	*ka*	*isam.*	*Uk*		*wa*
TOP	like.this		3SS/do	NMLZ	even	3SS/not.be	3SS/3SO/take.PC		and

e		*p*	*ka*	*isam*	*[w]a*	*sino*	*ray*	*tuttu*[150]
3SS/3SO/eat		thing	even	3SS/not.be	and	really	3SS/die	?

ye		*kor*	*an*	*orano*	*ene*	*yaynu*	*hi:*	*"Iteki*
3SS/3SO/say		while	3SS/exist.PC	and.then	like.this	3SS/think	NMLZ	NEG

a-kor		*Pananpe*	*ye*		*p*	*a-hayta*		*no*
4S-3SO/have		Pananpe	3SS/3SO/say		NMLZ	4S-3SO/miss		ADV

ye		*p*	*a-nu*		*a*	*yakne*	*aynu*	*neno*	*iki-an…*
3SS/3SO/say		NMLZ	4S-3SO/hear		PRF	if	person	like	do-4S

ene	*iki*	*hi*	*neno*	*iki-an*	*pe*	*ne.*	*Ye*		*p*
like	3SS/do	NMLZ	like	do-4S	NMLZ	COP	3SS/3SO/say		thing

a-hayta		*ora*		*ene*		*omuken-an*		*cep-po*	*poka*
4S-3SO/miss		and.the		like.this		catch.scarcely-4S		fish-DIM	at.least

ka	*a-e-omuken*		*[h]i*	*an"*		*sekor*	*yaynu*		*wa*
even	4S-APPL-3PO/catch.scarcely		NMLZ	3SS/exist.PC		ADV	3SS/think		and

ene	*iki*	*hi*	*ka*	*isam*	*[w]a*	*kusu*		*Pananpe*
like.this	3SS/do	NMLZ	even	3SS/not.be	and	because		Pananpe

---

[150] This is possibly a mispronunciation or an idiolect variant of *turiri* 'stretch (one's hand) to reach something'. The syntactic function of this word in the present environment is not clear.

ye	*p*		*Penanpe*	*somo*	*nu*	*wa*	*ora*	*ene*
3SS/3SO/say	NMLZ		Penanpe	NEG	3SS/3SO/hear	and	and.then	like.this

iki	*hi*	*ka*	*isam*	*[w]a*	*kamuy*	*opitta*	*orowa*
3SS/do	NMLZ	even	3SS/not.be	and	god	all	by

a-wen-apapu		*wa*	*ene*		*iki*	*hi*	*ka*	*isam*
4S-3SO/be.bad-apologize		and	like.this		3SS/do	NMLZ	even	3SS/not.be

kor an	*ruwe ne*		*sekor*	*hunakor*	*a-nu*		*p*	*an.*
PRG	DIR.KNW		ADV	some.place	4S-3SO/hear		NMLZ	3SS/exist.PC

6. PENANPE AND PANANPE

There lived Penanpe and Pananpe. Pananpe was an exceptionally skilled hunter, he indeed always caught plenty of fish, but Penanpe only had poor catches no matter what he tried. So one day he came [to Pananpe] and asked: "Dear Pananpe, how do you always have such a plentiful catch while I indeed have nothing, while I can't catch anything". Then Pananpe replied: "Come, I'll tell you while you eat!", but [Penanpe] got out of the house and there he urinated a little saying: "I listened to the beginning, [it's fine] if I don't listen [to the rest]". Pananpe laughed at that, finding it odd, and said: "You ignore what I say like this and you really [expect to] catch something?" and so in fact *after that* his hunting was poor and he indeed could not catch anything. "Well, you see, you would have done better if you had listened to what I [had to] say and had done as I told [you], but indeed you didn't listen to me. It is indeed good for me to listen to what either gods or people have to say without being unkind, but you indeed didn't listen to me and now you are hopeless like this" so Pananpe was saying, finding it funny and there was nothing to do for Penanpe. He had no provisions to eat and he lived saying he [was] on the verge of death; then hopelessly he thought so: "If I had listened to what my dear Pananpe had to say without ignoring it, I [would] indeed have made it like [any other] person, like he makes it. I ignored him and now my hunting is poor, I indeed don't even catch small fish". And so Penanpe had no means of subsistence for not having listened to Pananpe and was irremediably punished by all the gods. So I have heard somewhere.

Bibliography

Reference Corpora

<u>Sakhalin Ainu</u>

MRA – Murasaki Kyōko. 1976b. *カラフトアイヌ語：テキスト編 (Karafuto Ainu – texts)*, Tokyo, Kokushokan Kōkai.

MRB – Murasaki Kyōko. 2001a. *樺太アイヌの昔話 (Karafuto Ainu folktales)*, Tokyo, Sōfūkan.

MRC – Murasaki Kyōko. 1989. *樺太アイヌ語口承資料 (Traditional materials of Karafuto Ainu)*, Sapporo, Hokkaidō Daigaku Gengo Bunkabu.

MRD – Murasaki Kyōko. 1995. *樺太アイヌ語口承資料2 (Traditional materials of Karafuto Ainu 2)*, Sapporo, Hokkaidō Daigaku Gengo Bunkabu.

PLA – Pilsudski, Bronislaw. 1912. *Materials for the study of the Ainu language and folklore*, Crakow, Imperial Academy of Sciences.

PLB – Murasaki Kyōko (ed.). 2001b. ピウスツキ収録の昔話１１編と民話１編：再転写によるアイヌ語テキストと日本語訳 (Sakhalin Ainu texts of eleven fairy tales and a tale of tradition collected by Bronislaw Pilsudski – reliterated version of the Ainu text with Japanese translation), in *Endangered Languages of the Pacific Rim vol. 6 A2-009 pp. 91-135*, Suita, Osaka Gakuin University.

TMS – Tamura, Suzuko. 2003. アイヌ語樺太方言の音声資料 (Audio materials of the Karafuto dialect of Ainu), in *Endangered Languages of the Pacific Rim A2-039 pp. 1-169*, Suita, Osaka Gakuin University.

WDA – Wada, Bunjirō. 2013. *和田文次郎樺太アイヌ説話集1 (Wada Bunjirō's Collection of tales of Karafuto Ainu 1)*, Sapporo, Aynu Teetawanoankur Kanpinuye Cise.

WDB – Wada, Bunjirō. 2014. *和田文次郎樺太アイヌ説話集2 (Wada Bunjirō's Collection of tales of Karafuto Ainu 2)*, Sapporo, Aynu Teetawanoankur Kanpinuye Cise.

<u>Hokkaidō Ainu</u>

BUG – Bugaeva, Anna. 2004. *Grammar and folklore texts of the Chitose dialect of Ainu (idiolect of Ito Oda)*, Endangered Languages of the Pacific Rim A02-045, Suita, Osaka Gakuin University.

KAY – Kayano, Shigeru. *Ainu language and oral literature*, http://www.town.biratori.hokkaido.jp/biratori/nibutani/culture/language/story/, Nibutani Ainu culture museum, last accessed August 2017.

NKA – Nakagawa Hiroshi. アイヌ口承文芸テキスト集１、白沢ナベ口述 ： 狼から逃げた娘 (Textual collection of Ainu oral tradition 1, dictated by Shirazawa Nabe : The young woman who escaped from the wolf), in 千葉大学ユーラシア言語文化論集 3 pp. 52-66.

NKB – Nakagawa Hiroshi. 2001. アイヌ口承文芸テキスト集２、白沢ナベ口述 ： 主人を助けられなかった犬 (Textual collection of Ainu oral tradition 2, dictated by Shirazawa Nabe : The dog that could not help his master), in 千葉大学ユーラシア言語文化論集 4 pp. 77-94.

NKC – Nakagawa Hiroshi. 2002. アイヌ口承文芸テキスト集３、白沢ナベ口述 ： トパットゥミから逃げたウライウシナイの少年 (Textual collection of Ainu oral tradition 3, dictated by Shirazawa Nabe : The young boy of Urayusnay who escaped from Topattumi), in 千葉大学ユーラシア言語文化論集 5 pp. 111-143.

NKD – Nakagawa Hiroshi. 2003. アイヌ口承文芸テキスト集４、白沢ナベ口述 ： ナナカマドのイナウで伝染病の神を倒した (Textual collection of Ainu oral tradition 4, dictated by Shirazawa Nabe : He defeated the god of the epidemic with the *inaw* of Nanakamato), in 千葉大学ユーラシア言語文化論集 6 pp. 107-120.

NKE – Nakagawa Hiroshi. 2004. アイヌ口承文芸テキスト集５、白沢ナベ口述 ： ウォリ: アオバトが生まれたわけ (Textual collection of Ainu oral tradition 5, dictated by Shirazawa Nabe : Uwori: The reason why Aobato was born), in 千葉大学ユーラシア言語文化論集 7 pp. 161-174.

NKF – Nakagawa Hiroshi. 2005. アイヌ口承文芸テキスト集６、白沢ナベ口述 ： 兄に殺されかけ、犬に救われた (Textual collection of Ainu oral tradition 6, dictated by Shirazawa Nabe : About to be killed by the older brother, saved by the dog), in 千葉大学ユーラシア言語文化論集 8 pp. 151-184.

NKG – Nakagawa Hiroshi. 2006. アイヌ口承文芸テキスト集７、白沢ナベ口述 ： 狼が人間の母親に虐待された (Textual collection of Ainu oral tradition 7, dictated by Shirazawa Nabe : The wolf mistreated by its human mother), in 千葉大学ユーラシア言語文化論集 9 pp. 219-256.

NKH – Nakagawa Hiroshi. 2007. アイヌ口承文芸テキスト集８、白沢ナベ口述：ユカライルパイェ：シヌタプカ人、石狩人と戦う (Textual collection of Ainu oral tradition 8, dictated by Shirazawa Nabe : Yukar Irupaye: The man of Sinutapka battled with the man of Iskar), in *千葉大学ユーラシア言語文化論集１０ pp. 291-313.*

NKI – Nakagawa Hiroshi. 2008. アイヌ口承文芸テキスト集９、白沢ナベ口述：カニに手足が生えるわけ (Textual collection of Ainu oral tradition 9, dictated by Shirazawa Nabe : The reason why crabs can regain their lost limbs), in *千葉大学ユーラシア言語文化論集１１ pp. 113-132.*

NKJ – Nakagawa Hiroshi. 2010. アイヌ口承文芸テキスト集１０、白沢ナベ口述：ペナンペ金の子犬を授かる (Textual collection of Ainu oral tradition 10, dictated by Shirazawa Nabe : Penanpe got a gold puppy), in *千葉大学ユーラシア言語文化論集１２ pp. 163-185.*

NKK – Nakagawa Hiroshi. 2011. アイヌ口承文芸テキスト集１１、白沢ナベ口述：キネズミに妹をさらわれた男 (Textual collection of Ainu oral tradition 11, dictated by Shirazawa Nabe : The man whose sister was abducted by a red squirrel), in *千葉大学ユーラシア言語文化論集１３ pp. 95-115.*

NKL – Nakagawa Hiroshi. 2012. アイヌ口承文芸テキスト集１２、白沢ナベ口述：ユカライルパイェ敵の村の美女を妻に迎えたシヌタプカウンクル (Textual collection of Ainu oral tradition 12, dictated by Shirazawa Nabe : The Sinutapka man who got a girl from his enemy as a wife), in *千葉大学ユーラシア言語文化論集１４ pp. 179-213.*

NKM – Nakagawa Hiroshi. 2013. アイヌ口承文芸テキスト集１３、白沢ナベ口述：ウエペケレチセコロカムイの怒り (Textual collection of Ainu oral tradition 13, dictated by Shirazawa Nabe : The anger of the God of the House), in *千葉大学ユーラシア言語文化論集１５ pp. 175-204.*

TMA – Tamura, Suzuko. 1984. *アイヌ語音声資料１：ワテケさんとサダモさんの昔話　沙流方言 (Audio materials of Ainu 1 – Folktales of Wateke-san and Sadamo-san, Saru dialect)*, Tokyo, Waseda Daigaku Gogaku Kyōiku Kenkyūjo.

TMB – Tamura, Suzuko. 1985. *アイヌ語音声資料2：ワテケさんの昔話　沙流方言 (Audio materials of Ainu 2 – Folktales of Wateke-san, Saru dialect)*, Tokyo, Waseda Daigaku Gogaku Kyōiku Kenkyūjo.

TMC – Tamura, Suzuko. 1986. *アイヌ語音声資料3：サダモさんの昔話　沙流方言 (Audio materials of Ainu 3 – Folktales of Sadamo-san, Saru dialect)*, Tokyo, Waseda Daigaku Gogaku Kyōiku Kenkyūjo.

Others

Abraham, Werner. 1990. Die Grammatikalisierung von Auxiliar- und Modalverben, in *Geschichte der deutschen Sprache und Literatur 112 pp. 200-208*.

Aikhenvald, Alexandra Y. 2004. *Evidentiality*, Oxford, Oxford University Press.

Aikenvald, Alexandra Y. 2007. Information source and evidentiality: what can we conclude?, in *Italian Journal of Linguistics. Rivista di Linguistica vol 19-1 pp. 209-227*.

Aikhenvald, Alexandra Y. and Dixon Robert M. W. (eds.). 2008. *Serial verb constructions – A cross-linguistic typology*, Oxford, Oxford University Press.

Akatsuka, Noriko. 1985. Conditionals and epistemic scale, in *Language 61 pp. 625-639*.

Aksu-Koç Ayhan A. and Slobin Dan I. 1986. A psychological account on the development and use of evidentials in Turkish, in *Evidentiality: the linguistic coding of epistemology pp. 159-167*, Norwood N.J., Ablex Publishing Corporation.

Akulov, Alexander. 2016. Krasheninnikov's and Dybowski's materials as sources on grammar of Kamchatka – Northern Kuril Ainu dialect, in *CAES vol. 2 no. 1 pp. 34-40*.

Arakaki, Tomoko. 2013. *Evidentials in Ryukyuan: The Shuri variety of Luchuan*, Leiden, Brill.

Asai, Tooru. 1974. 方言分類「アイヌ語諸方言のクラスター分析」 (Classification of dialects: Cluster analysis of Ainu dialects), in *北方文化研究第8号pp. 45-136*, Sapporo, Hokkaidō University.

Baker, Mark C. 1988. *Incorporation – A theory of grammatical function changing*, Chicago and London, The University of Chicago Press.

Baker, Mark C. 1996. *The polysynthesis parameter*, New York, Oxford, Oxford University Press.

Bartee, Ellen L. 1996. *Deixis and spatiotemporal relations in Lhasa Tibetan*, Thesis presented at the University of Texas at Arlington.

Basilico, David. 1996. Head position and internally headed relative clauses, in *Language Vol. 72 No. 3 pp. 498-532*, Linguistic Society of America.

Batchelor, John. 1901. *The Ainu and their folk-lore*, London, The Religious Tract Society.

Batchelor John. 2016 [1887]. Ainu grammar, in Chamberlain, Basil H. and Batchelor John. *Memoirs of the literature, Imperial University of Japan No. 1 – The language, mythology, and geographycal nomenclature of Japan viewed in the light of Aino studies pp. 77-133*, Tokyo, Imperial University.

Bauer, Laurie and Valera, Salvador. 2005. *Approaches to conversion/zero-derivation*, Waxmann Münster.

Beavers, John. 2012. Lexical aspect and multiple incremental themes, in *Telicity, change, and state – A cross-categorial view of event structure pp. 23-59*, Oxford, Oxford University Press.

Bickel, Balthasar. 2010. Capturing particulars and universals in clause linkage: a multivariate analysis, in *Clause linking and clause hierarchy: syntax and pragmatics pp. 51-102*, Amsterdam, Brill.

Boas, Franz. 1911. *Handbook of American Indian languages – part 1*, Washington, Govt. Print. Off.

Borik, Olga and Reinhart, Tanya. 2004. Telicity and perfectivity: two independent systems, in *Proceedings of LOLA 8 (Symposium of Logic and Language) pp 13-34*.

Borik, Olga and Gehrke, Berit. 2015. *The syntax and semantics of pseudo-incorporation*, Leiden/Boston, Brill.

Boye, Kasper and Harder, Peter. 2009. Evidentiality: linguistic categories and grammaticalization, in *Functions of Language 16:1 pp. 9-43*, John Benjamins Publishing Company.

Bugaeva, Anna. 2004. *Grammar and folklore texts of the Chitose dialect of Ainu (idiolect of Ito Oda)*, Endangered Languages of the Pacific Rim A02-045, Suita, Osaka Gakuin University.

Bugaeva, Anna. 2012a. Southern Hokkaidō Ainu, in *The languages of Japan and Korea pp. 461-499*, London/New York, Routledge.

Bugaeva, Anna. 2012b. Evidentials that come from nouns: a case of Ainu, in *The nature of evidentials, conference (Leiden) pp. 1-19*.

Bugaeva, Anna. 2013. Mermaid construction in Ainu, in *Adnominal clauses and "mermaid construction": Grammaticalization of nouns pp. 667-676*, NINJAL

Collaborative Research Project Reports 13-01, Tokyo, National Institute of Japanese Language and Linguistics.

Bugaeva, Anna. 2015. Relative clauses and noun complements in Ainu, in *アイヌ語研究の諸問題 pp. 73-107*, Sapporo, Hokkaidō Shuppan Kikaku Sentā.

Bugaeva, Anna. 2016. On the innovative nature of Sakhalin Ainu: focusing on nominalization, in *Studia Orientalia 117 pp. 95-117*.

Butt, Miriam. 2003. The light verb jungle, in *Harvard Working Papers in Linguistics – volume 9 pp. 1-49*.

Chafe, Wallace. 1976. Givenness, contrastiveness, definiteness, subjects, topics and point of view, in *Subject and topic pp. 27-55* Charles Li (ed.), New York Academic Press.

Chafe, Wallace and Nichols, Johanna (eds.). 1986. *Evidentiality: the linguistic coding of epistemology*, Norwood N.J., Ablex Publishing Corporation.

Chiri, Mashiho. 1936. *アイヌ語法概説 (Intruduction to Ainu grammar)*, Tokyo, Iwanami Shoten.

Cinque, Guglielmo. 2013. *Typological studies – Word order and relative clauses*, Routledge.

Cole, Peter. 1987. The structure of internally headed relative clauses, in *Natural language and linguistic theory No. 5 pp. 277-302*.

Comrie, Bernard. 1985. *Tense*, Cambridge, Cambridge University Press.

Comrie, Bernard. 1998. Rethinking the typology of relative clauses, in *Language Design 1 pp. 59-86*.

Comrie, Bernard and Thompson, Sandra A. 1985. Lexical nominalization, in *Language typology and syntactic description, vol III: Grammatical categories and the lexicon pp. 349-398*, Cambridge: CUP.

Cornillie, Bert. 2007. The continuum between lexical and grammatical evidentiality: a functional analysis of Spanish *parecer*, in *Rivista di Linguistica 19.1 pp. 109-128*.

Classen, Costance. 1993. *Worlds of sense: Exploring the sense in history and across cultures*, NY, Routledge.

Classen, Costance. 1997a. Foundations of an anthropology of the senses, in *International Social Science Journal 153 pp. 402-423*.

Classen, Costance. 1997b. Engendering perception: Gender ideologies and sensory hierarchies in Western history, in *Body & Society 3(2) pp. 1-19*.

Culy, Christopher D. 1990. *The syntax and semantics of internally headed relative clauses*, PhD dissertation submitted to the department of linguistics at Stanford University.

Curnow, Timothy J. 2001. Evidentiality and me: the interaction of evidentials and first person, in *Proceedings of the 2001 conference of the Australian Linguistic Society pp. 1-10*.

Dal Corso, Elia. 2016. Morphological alignment in Saru Ainu: a direct-inverse analysis, in *SOAS Working Papers in Linguistics vol. 18 pp. 3-28*.

de Haan, Ferdinand. 1999. Evidentiality and epistemic modality: Setting boundaries, in *Southwest Journal of Linguistics 18 pp. 83-101*, El Paso Tex., Linguistic Association of the Southwest.

DeLancey, Scott. 1997. Mirativity: the grammatical marking of unexpected information, in *Linguistic Typology 1 pp. 33-52*, Walter de Gruyter.

Demonte, Violeta and McNally, Louise (eds.). 2012. *Telicity, change, and state – A cross-categorial view of event structure*, Oxford, Oxford University Press.

De Swart, Henriëtte and Verkuyl Henk J. 1999. *Tense and aspect in sentence and discourse*, Utrecht University.

Diesing, Molly. 1992. *Indefinites*, Cambridge, MIT Press.

Dixon, Robert M. W. 1994. *Ergativity*, Cambridge Studies in Linguistics 69, Cambridge University Press.

Dobrotvorskij, Mikhail M. 1996 [1875]. Айнско-русский словарь (Ainu-Russian dictionary), in *Early European writings on the Ainu language – vol. 3*, Richmond (UK), Curzon.

Evans, Nicholas. 2007. Insubordination and its uses, in Nikolaeva, Irina (ed.) *Finiteness – Theoretical and empirical foundations pp. 366-431*, Oxford University Press.

Evans, Nicholas. 2009. *Insubordination and the grammaticalisation of interactive presuppositions*, paper presented at the 'Methodologies in determining morphosyntactic change' conference, Museum of Ethnography, Osaka.

Faller, Martina T. 2002. *Semantics and pragmatics of evidentials in Cuzco Quechua*, dissertation submitted to the Department of Linguistics of Stanford University.

Faller, Martina T. 2002. Remarks on evidential hierarchies, in *The construction of meaning* Beaver et al. (eds.), Stanford, CSLI Publications.

Farkas, Donka F. and De Swart Henriëtte. 2003. *The semantics of incorporation – From argument structure to discourse transparency*, Stanford, CSLI Publications.

Fillmore, Charles J. 1997. *Lectures on deixis*, Stanford, CSLI Publications.

Friedman, Victor A. 1986. Evidentiality in the Balkans: Bulgarian, Macedonian, and Albanian, in *Evidentiality: the linguistic coding of epistemology pp. 168-187*, Norwood N.J., Ablex Publishing Corporation.

Friedman, Victor A. 1997. One grammar, three lexicons: ideological overtones and under-pinnings in the Balkan Sprachbund, in *CLS 33: Papers from the Panel pp. 23-44*, Chicago.

Fukuda [Tamura], Suzuko. 2001 [1960]. アイヌ語沙流方言の助動詞：アイヌ語の助詞についての報告その１ (Auxiliary verbs in the Saru dialect of Ainu – Relation on the particles of Ainu 1), in *民族学研究 ２４／４ pp. 343-354*, Tokyo, Japanese Society of Cultural Anthropology.

Furukawa, Kyōko. 1967. アイヌ語カラフトライチシカ方言シンタクス (The syntax of the Karafuto Rayciska dialect of Ainu), in *言語研究５０ pp. 100-120*, Tokyo, Nihon Gengogaku Kai.

Givón, Talmy. 1982. Evidentiality and epistemic space, in *Studies in language 6 (1) pp. 23-49*.

Givón, Talmy. 1983. *Topic continuity in discourse: A quantitative cross-language study*, Amsterdam, John Benjamins.

Greenberg, Joseph H. 2000. *Indo-European and its closest relatives*, Stanford, Stanford University Press.

Gundel, Jeanette K.; Hedberg, Nancy; Zacharski, Ron. 1993. Cognitive status and the form of referring expressions in discourse, in *Language 69 pp. 274-307*.

Hancil, Sylvie; Haselow, Alexander and Post Margje. 2015. *Final particles*, De Gruyter.

Harrison, Scott. 2007. The indigenous Ainu of Japan and the "Northern Territories" dispute, thesis presented to the University of Waterloo.

Haspelmath, Martin. 2010. Comparative concepts and descriptive categories in crosslinguistic studies, in *Language 86 pp. 663-687*.

Heine, Bernd. 1993. *Auxiliaries: Cognitive forces and grammaticalization*, New York, Oxford University Press.

Heine, Bernd; Kaltenböch, Gunther and Kuteva Tania. 2015. Some observations on the evolution of final particles, in *Final particles pp. 111-140*, De Gruyter.

Hill, Nathan. 2015. Hare *lõ*: the touchstone of mirativity, in *SKASE Journal of Theoretical Linguistics vol. 13, no. 2 pp. 24-31*.

Himmelmann, Nikolaus P. 1998. Documentary and descriptive linguistics, in *Linguistics 36 pp. 161-195*.

Howes, David. 2011. *The craft of the senses*, paper presented at Craft Forward Conference, California College of the Arts, San Francisco.

Izutsu, Katsunobu. 2004. *The Ainu language – A linguistic introduction*, Asahikawa, Hokkaidō University of Education.

Jackendoff, Ray. 1992. *Languages of the mind: Essays on mental representation*, Cambridge MA, MIT Press.

Jacobson, Roman. 1971. Shifters, verbal categories and the Russian verb, in *Selected Writings vol. II pp. 130-147*, The Hague Mouton.

Johnstone, Barbara. 2008. *Discourse analysis 2nd ed.*, Blackwell Publishing.

Kamio, Akio. 1997. *Territory of information*, Amsterda/Philadelphia, John Benjamins Publishing Company.

Karttunen, Lauri. 1974. Presupposition and linguistic context, in *Theoretical linguistics 1 pp. 181-194*.

Keenan Edward L. and Comrie Bernard. 1977. Noun phrase accessibility and universal grammar, in *Linguistic Inquiry 8 pp. 63-99*.

Kenesei, István. 2006. Focus is identification, in *The architecture of focus* Valeria Molnar and Susanne Winkler (eds.), Berlin. Mouton de Gruyter.

Kennedy, Christopher. 2012. The composition of incremental change, in *Telicity, change, and state – A cross-categorial view of event structure pp. 103-121*, Oxford, Oxford University Press.

Kindaichi, Kyōsuke. 1931. *アイヌ叙事詩ユーカラの研究 II (Studies on Ainu epics II)*, Tokyo, Tōyō Bunko.

Kiss, Katalin É. 1998. Identificational focus versus information focus, in *Language 74 pp. 245-273*.

Kobayashi, Miki. 2008. アイヌ語の名詞抱合 (Noun incorporation in Ainu), in *千葉大学人文社会科学研究１７ pp. 199-214*, Chiba, Chiba University.

Krifka, Manfred. 2006. Basic notions of information structure, in *Interdisciplinary Studies on Information Structure 06 (2006)*, Berlin, Humboldt Universität.

Kubodera, Itsuhiko. 1997. *アイヌの文学 (Ainu literature)*, Tokyo, Iwami Shoten.

Kuno, Susumu. 1987. *Functional syntax: Anaphora, discourse and empathy*, Chicago, University of Chicago Press.

Levinson, Stephen C. 1983. *Pragmatics*, Cambridge, Cambridge University Press.

Levinson, Stephen C. 2003. *Space in language and cognition – Explorations in cognitive diversity*, Cambridge, Cambridge University Press.

Lim, Dongsik and Zubizarreta, María L. 2012. The syntax and semantics of inchoatives as direct motion: the case of Korean, in *Telicity, change, and state – A cross-categorial view of event structure pp. 212-251*, Oxford, Oxford University Press.

Lipták, Anikó (ed.). 2009. *Correlatives cross-linguistically*, Amsterdam/Philadelphia, John Benjamins Publishing Company

Majewicz, Alfred F. (ed.). 1998. *The collected works of Bronislaw Pilsudski – Volume 1: The aborigines of Sakhalin*. Berlin, New York, Mouton de Gruyter.

Malouf, Robert P. 2000. *Mixed categories in the hierarchical lexicon*. CSLI Publications.

Matsumoto, Yoshiko. 1997. *Noun-modifying constructions in Japanese: A frame semantic approach (Studies in Language Companion Series 35)*. Amsterdam, John Benjamins.

McCready, Eric and Ogata, Norry. 2007. Evidentiality, modality, and probability, in *Linguistics and Philosophy 30 pp. 147-206*, Kluwer Academic Publishers.

Mithun, Marianne. 1985. The evolution of noun incorporation, in *Language vol. 60 no. 4 pp. 847-894*.

Mithun, Marianne. 1986. Evidential diachrony in Northern Iroquoian, in *Evidentiality: the linguistic coding of epistemology pp. 89-112*, Norwood N.J., Ablex Publishing Corporation.

Mithun, Marianne. 1995. On the relativity of irreality, in *Modality in grammar and discourse pp. 367-388*, John Benjamins Publishing Company.

Modena, Francesca and Muro, Alessio. 2009. Noun incorporation, relative clauses and their interactions in polysynthetic languages, in *Padua Working Papers in Linguistics no. 3 pp. 29-69*.

Murasaki, Kyōko. 1976a. *カラフトアイヌ語：文法編 (Karafuto Ainu – grammar)*, Tokyo, Kokushokan Kōkai.

Murasaki, Kyōko. 2013. *樺太アイヌ語例文集 1* (*Collection of example sentences in Sakhalin Ainu 1*) *– Short sentences in Sakhalin Ainu language as spoken by Fujiyama Haru*, Sapporo, Center for Ainu and Indigenous Studies, Hokkaidō University.

Murasaki, Kyōko. 2016. *樺太アイヌ語例文集 2* (*Collection of example sentences in Sakhalin Ainu 2*) *– Short sentences in Sakhalin Ainu language as spoken by*

Fujiyama Haru, Sapporo, Center for Ainu and Indigenous Studies, Hokkaidō University.

Muro, Alessio. 2009. *Noun incorporation – A new theoretical perspective*, doctoral thesis presented at Università degli Studi di Padova.

Mushin, Ilana. 2001. *Evidentiality and epistemological stance – Narrative retelling*, Amsterdam/Philadelphia, John Benjamins Publishing Company.

Nakagawa, Hiroshi. 1995. アイヌ語千歳方言辞典 *(A dictionary of the Chitose dialect of Ainu),* Tokyo, Sōfūkan.

Nakagawa, Hiroshi. 2001. 自動性・他動性とアイヌ語の動詞 (Intransitivity – transitivity and the Ainu verb), in *ユーラシア諸言語の動詞論 1 pp. 1-18*, Chiba, Chiba Daigaku Shakai Bunka Kagaku Kenkyūka.

Narita, Shōichi. 2001 [1986]. アイヌ語の動詞について (About the Ainu verb), in *アイヌ語考 5 pp. 1-3*, Tokyo, Yumani Shobō.

Nedjalkov, Vladimir. 1988. Typology of resultative constructions, John Benjamins Publishing Company.

Nevskij, Nikolai A. 1972. *Айнский фольклор – Исследования, тексты и переводы (Ainu folklor – Research, texts and translations)*, Moscow, Nauka Publishers.

Newmeyer, Frederick J. 2007. Linguistic typology requires crosslinguistic formal categories, in *Linguistic typology 11 pp. 133-157*.

Okuda, Osami. 2001 [1995]. 日本語とアイヌ語における連体修飾と文の名詞化 (Modifying constructions and sentence nominalization in Japanese and Ainu), in *アイヌ語考 5 pp. 186-173*, Tokyo, Yumani Shobō.

Ōtsuka, Rie et al. (eds.). 2008. *サハリンアイヌ語辞典* (A dictionary of Sakhalin Ainu), Hokkaidō Kyōiku Daigaku Asahikawa Kō.

Palmer, Frank R. 2001. *Mood and modality 2nd ed.*, Cambridge, Cambridge University Press.

Peterson, Tyler. 2015. The semantics of grammatical evidentiality and the unprepared mind, in *Review of cognitive linguistics 13(2)*.

Quirk, Randolph et al. 1972. *A grammar of contemporary English*. New York

Refsing, Kirsten. 1986. *The Ainu language – The morphology and syntax of the Shizunai dialect*, Aarhus, Aarhus University Press.

Refsing, Kirsten, 1998, Origins of the Ainu language – the Ainu Indo-European controversy, Richmond, Curzon.

Reichenbach, Hans. 1947. *Elements of symbolic logic*, New York, The Free Press; London, Collier-MacMillan Limited.

Reinhart, Tanya. 1982. Pragmatics and linguistics: An analysis of sentence topics, in *Philosophica 27 (1) pp. 53-93*.

Rothstein, Susan. 2012. Another look at accomplishments and incrementality, in *Telicity, change, and state – A cross-categorial view of event structure pp. 60-102*, Oxford, Oxford University Press.

Satō, Tomomi. 1992. 「抱合」からみた北方の諸言語 (The many languages of the North seen from the perspective of 'incorporation'), in *北の言語類型と歴史 pp. 191-201*, Tokyo, Sanseido.

Satō, Tomomi. 1997. Possessive expressions in Ainu, in *Studies in possessive expressions pp. 143-160*, Tokyo, Tokyo University of Foreign Studies.

Satō, Tomomi. 2006. アイヌ語千歳方言のアスペクト kor an, wa an を中心として (Focusing on aspects *kor an, wa an* in the Chitose dialect of Ainu), in *北海道立アイヌ民族文化研究センター研究紀要１２ pp. 43-67*, Sapporo, Center for the Study of the Ainu People.

Satō, Tomomi. 2007. アイヌ語のアスペクト日本語のアスペクトの対照 (A comparison of Ainu aspect and Japanese aspect), in *日本語学２６（３）pp. 44-52*.

Satō, Tomomi. 2011. アイヌ語千歳方言における推量の助詞 nankor の意味について (About the meaning of the inferential particle *nankor* as found in the Chitose dialect of Ainu), in *北海道立アイヌ民族文化研究センター研究紀要１７ pp. 1-18*, Sapporo, Center for the Study of the Ainu People.

Satō, Tomomi. 2013. アイヌ語千歳方言における siran の用法 (The uses of *siran* in the Chitose dialect of Ainu), in *北海道立アイヌ民族文化研究センター紀要１９ pp. 1-19*, Sapporo, Center for the Study of the Ainu People.

Shafer, R. 1965. Studies in Austroasian II, in *Studia Orientalia 30 (5)*.

Spencer, Andrew. 2010. Lexical relatedness and the lexical entry – A formal unification, in *Proceedings of the 17th International Conference on head-driven phrase structure grammar pp. 322-340*, CSLI Publications.

Spencer, Andrew. 2013. *Lexical relatedness – A paradigm-based model*, Oxford, Oxford University Press.

Squartini, Mario. 2008. Lexical vs. grammatical evidentiality in French and Italian, in *Linguistics 46-5 pp. 917-947*, Walter de Gruyter.

Stalnaker, Robert. 1974. Pragmatic presuppositions, in Munitz and Unger (eds.) *Semantics and philosophy pp. 197-213*, NYU Press.

Street, John C. 1962. Review of N. Poppe, *Vergleichende Grammatik der altaischen Sprachen*, Teil I (1960), in *Language 38 pp. 92-98*.

Takahashi, Yasushige. 2009. アイヌ語サハリン方言証拠性表現、特に伝聞を表す形式 manu について (Evidential expressions in the Sakhalin dialect of Ainu, especially on the form *manu* expressing reported news), in *サハリンの言語世界 pp. 57-61*, Sapporo, Hokkaidō Daigaku Daigakuin Bunka Kenkyūka.

Takahashi, Yasushige. 2013. アイヌ語十勝方言における証拠性と叙述類型 (Evidentiality and descriptive types as found in the Tokachi dialect of Ainu), in *北方言語研究 3 pp. 129-136*, Sapporo, Hokkaidō Daigaku Daigakuin Bunka Kenkyūka.

Takahashi, Yasushige. 2014. アイヌ語十勝方言における名詞化節の脱従属節化 (Nominalized clauses and insubordinated clauses as found in the Tokachi dialect of Ainu), in *北方言語研究4 pp. 149-155*, Sapporo, Hokkaidō Daigaku Daigakuin Bunka Kenkyūka.

Tamura, Masashi. 2010. *アイヌ語白糠方言の文法記述 (A grammatical sketch of the Shiranuka dialect of Ainu)*, thesis presented at Chiba University.

Tamura, Suzuko. 1970. Personal affixes in the Saru dialect of Ainu. In *Studies in general and oriental linguistics: presented to Shirō Hattori on the occasion of his sixtieth birthday pp. 577-611*, Tokyo, TEC Company.

Tamura, Suzuko. 2001 [1972]. アイヌ語沙流方言における「して」の表現 (About the expression 'and' as found in the Saru dialect of Ainu), in アイヌ語考 4 pp. 51-60, Tokyo, Yumani Shobō.

Tamura, Suzuko. 2001 [1973a]. アイヌ語沙流方言における ciki の用法 (The use of *ciki* as found in the Saru dialect of Ainu), in *アイヌ語考4 pp. 81-98*, Tokyo, Yumani Shobō.

Tamura, Suzuko. 2001 [1973b]. アイヌ語沙流方言における yak, yakune の用法 (The use of *yak, yakune* as found in the Saru dialect of Ainu) in *アイヌ語考4 pp. 121-134*, Tokyo, Yumani Shobō.

Tamura, Suzuko. 2001 [1973c]. アイヌ語沙流方言の合成動詞の構造 (The structure of complete verbs in the Saru dialect of Ainu) in *アイヌ語考 4 pp. 99-120*, Tokyo, Yumani Shobō.

Tamura, Suzuko. 2001 [1974]. アイヌ語沙流方言における動詞接尾辞-no および-nu について (About the verbal suffix *-no* or *-nu* as found in the Saru dialect of Ainu) in *アイヌ語考 4 pp. 68-80*, Tokyo, Yumani Shobō.

Tamura, Suzuko. 2000. *The Ainu language*, Tokyo, Sanseido Co.

Tsunoda, Tasaku (ed.). 2013. *Adnominal clauses and "mermaid construction": Grammaticalization of nouns*, NINJAL Collaborative Research Project Reports 13-01, Tokyo, National Institute of Japanese Language and Linguistics.

Van Der Sandt. 2004. Interpreting focus, in *Theoretical linguistics 30, pp. 1-44*

Vovin, Alexander. 1993. *A reconstruction of Proto-Ainu,* Leiden, E. J. Brill.

Wierzbicka, Anna. Semantics and epistemology: the meaning of 'evidentials' in a cross-linguistic perspective, in *Language sciences 16 (1) pp. 81-137*.

Willett, Thomas. 1988. A cross-linguistic survey of the grammaticalization of evidentiality, in *Studies in Language 12 pp. 51-97*.

Whorf, Benjamin L. 1956. *Language, thought and reality*, Cambridge MA, MIT Press.

Yap, Foong H., Grunow-Hårsta, Karen and Wrona, Janik (eds.). 2011. *Nominalization in Asian languages – Diachronic and typological perspectives*, Amsterdam/Philadelphia, John Benjamins Publishing Company.

Zubin, David A. and Hewitt, Lynn E. 1995. The deictic center: a theory of deixis in narrative, in *Deixis in narrative: a cognitive science approach pp 129-155*, Duchan J. F. et al. (eds.), Hillsdale Lawrence Erlbaum.