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Evidentials in the Shuri Dialect of Luchuan (Ryukyuan)

Tomoko Arakaki

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Declaration

I hereby declare that this thesis is my own composition, and that it contains no material previously submitted for the award of other degree or qualification. The work reported in this thesis has been executed by myself, except where due acknowledgement is made in the text.

Tomoko Arakaki

Abstract

This dissertation attempts to demonstrate that Luchuan is a language which has a grammatical category of evidentiality. Luchuan is the only sister language of Japanese; however, since they are considered to have diverged as early as the beginning of the 8th century, their vocabularies and grammars have developed in somewhat different directions. The grammatical category of evidentiality is one of the categories which Luchuan has developed in different ways from Japanese.

Evidentiality is a linguistic category which marks source of information. Evidentials have often been overlooked in the study of Luchuan, and the morphology has often been misanalysed as belonging to other grammatical categories because of failure to take account of the concept of evidentiality. On the one hand, some existing studies classify these evidential markers as temporal categories, such as tense or aspect, and on the other hand, some studies claim that these evidential markers should belong to the category of modality. I argue that both approaches have failed to describe Luchuan grammar accurately, and that the concept of evidentiality can resolve problems which other existing approaches could not deal with adequately.

The main purpose of this study is to analyze the evidentials in Luchuan systematically and to formulate a model of the evidential system of this language. The proposal I make and defend in this dissertation is that Luchuan has a grammatical evidential system which contains one direct evidential and three indirect evidentials (Inference, Assumed, and Reportative). I argue that these four evidential markers should be considered to belong to a single grammatical category. Further, I discuss the relation between evidentials and other grammatical categories such as tense, aspect, and modality. It is obvious that these categories are closely related in Luchuan, but I attempt to tease apart their functions as clearly as possible.

The Direct evidential *-N* is used when the speaker has ‘direct evidence’, such as direct experience or direct perceptions. When direct evidence is unavailable but ‘the best possible source of information’ is available, such as a report from a participant in the event, the use of *-N* is licensed. The Inferential evidential *tee* is used when the speaker makes an inference based on direct evidence. The Assumed evidential *hazi* is different from the Inferential evidential in that it does not require

direct evidence, but the speaker's assumption has to be based on knowledge of habits or general knowledge. Finally, Reportative evidential *Ndi* indicates that the speaker acquired information from someone else, mainly orally report but in any case through the use of language.

Luchuan is an endangered or moribund language which has very limited native speakers. Therefore, the principal focus of this dissertation is a descriptive study of verb forms whose syntactic features have not been fully described: for example, I set out whether or not each evidential can appear in negative or interrogative sentences, whether or not each evidential can have a non-past or a past form, whether or not each evidential markers can co-occur a subject of any person.

Although my primary focus is a description of the evidential system of this language; at the same time, I relate my discussion to cross-linguistic issues such as how evidentiality is related to epistemic modality, with the intention that this work should constitute a contribution to the typological and theoretical study of evidentiality. I propose that evidentiality should be distinguished from the category of modality because in Luchuan the Direct evidential and the Reportative evidential belong to the category of evidentiality, though the other two indirect evidentials — the Inferential and Assumed— might be regarded as an overlap category between evidentiality and modality.

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Conventions

Phonetic symbols

In this dissertation I use broad transcriptions. Instead of using special phonetic symbols, I attempt to utilize simple symbols as much as possible. Basically I follow the description used in the Dictionary of the Okinawan Language (1963), although when citing other authors I respect their descriptions and use the forms as other authors have originally described them.

[hw,hu] for a labial fricative

[ʔ] for a glottal stop

[c] for a voiceless palato-alveolar affricate

[z] for a voiced palato-alveolar affricate/fricative

[sj] for a palatal-alveolar fricative

[j] for a palatal semi-vowel

[N] for a syllabic uvular nasal

[Q] for a syllabic voiceless consonant

List of Abbreviation

ASSUM : assumed evidential

AP: adverbial particle

CON: continuative

COP: copula

COMP: complementizer

FC: focus

FP: final particle

GEN: genitive case

IMPF: imperfective

IRR: irrealis

INF: inferential evidential

LOC: locative

M: mood

NEG: negation

NM: nominative case

PART : (past) participle

PAST: past tense

PAS: passive

PERF: perfective aspect

PROG: progressive

PL: plural

Q: question

QUOT: quotative

RES: resultative aspect

REP: reportative evidential

TOP: topicalization

Contents

Abstract	i
Acknowledgement	iii
Conventions	v
List of Abbreviation	vi
Contents	vii

Chapter 1 Introduction	1
1.1 Aim of the study	1
1.2 Background of Ryukyu	3
1.2.1 Historical background and present situation of Okinawa Prefecture	3
1.2.2 Present situation concerning language use	4
1.3 A brief Introduction of Luchuan and Luchuan Grammar	5
1.3.1 History and variations	5
1.3.2 Sociolinguistic features	6
1.3.3 Linguistic features	8
1.3.4 Verb morphology	10
1.4 Data collection	11
1.5 Evidentiality in general linguistic theory	13
1.5.1 What is evidentiality?	13
1.5.2 Definitions of evidentials	14
1.5.3 Definition of other related concepts	21
1.5.4 Classification of evidentiality	22
1.6 Evidentiality in Luchuan	24
1.6.1 Overview of studies on evidentiality in Luchuan	24
1.6.2 Obligatoriness of evidentials in Luchuan	25
1.7 Organization of the dissertation	27
1.8 Summary	28

Chapter 2 The Direct evidential	30
2.1 Introduction	30
2.2 Overview of the Direct evidential in the literature	30
2.2.1 Preceding studies of evidentiality in Luchuan	30
2.2.2 Overview of verb morphology	35
2.3 Concept of best possible grounds	38
2.3.1 The shared feature between <i>-N</i> in Luchuan and <i>-mi</i> in Quechua	39
2.3.2 The differences between <i>-N</i> in Luchuan and <i>-mi</i> in Quechua	45
2.4 Epistemic modality and evidentials	59
2.4.1 Speaker's degree of certainty	59
2.4.2 Direct evidentials in negative and interrogative sentences	63
2.4.3 Challengeability tests	68
2.5 Summary	76
Chapter 3 Inferential and Assumed evidentials	78
3.1 Introduction	78
3.2 Indirect evidentials in literature	79
3.3 Inferential evidential <i>tee</i>	89
3.3.1 What kind of evidence licenses the use of <i>tee</i>	90
3.3.2 How <i>tee</i> interacts with aspect/tense and the direct evidential <i>-N</i>	96
3.3.3 Whether <i>tee</i> can appear in negative or interrogative sentences	99
3.3.4 Reasons for classifying <i>tee</i> as an evidential	102
3.4 Assumed evidential <i>hazi</i>	109
3.4.1 What kind of evidence licenses the use of <i>hazi</i>	123
3.4.2 How <i>hazi</i> interacts with aspect and tense	117
3.4.3 Whether <i>hazi</i> can appear in negative or interrogative sentences	122
3.4.4 Assumed evidential <i>hazi</i> and Inferential evidential <i>tee</i>	124
3.5 Whether Inferential and Assumed evidentials express the speaker's degree of (un)certainty	127
3.6 Summary	129

Chapter 4 The Reportative Evidential	131
4.1 Introduction	131
4.2 Reportative evidential <i>Ndi</i>	131
4.2.1 What kind of evidence licenses the use of <i>Ndi</i>	131
4.2.2 How <i>Ndi</i> interacts with aspect/tense and the Direct evidential <i>-N</i>	143
4.2.3 Whether <i>Ndi</i> can appear in negative or interrogative sentences ..	149
4.3 Whether Reported evidential expresses the speaker's degree of (un)certainty	157
4.4 Summary	159
Chapter 5 Evidentials as a grammatical category	161
5.1 Introduction	161
5.2 Double marking of evidentials	161
5.3 Epistemic modality and evidentials in Luchuan	169
5.3.1 Speaker's degree of certainty in the direct and indirect evidentials	169
5.3.2 Direct and Indirect evidentials in negative and interrogative sentences	173
5.3.3 <i>-N</i> is an evidential not an epistemic modality marker	173
5.4 Summary	177
Chapter 6 Conclusions	179
6.1 Introduction	179
6.2 Summary of the arguments	179
6.2.1 Main contributions to the study of evidentiality in Luchuan	179
6.2.2 Contributions to the typological and theoretical study	182
6.3 Remaining issues and possible solutions	183
6.3.1 Evidentiality and aspect	183
6.3.2 Mirativity	190
6.3.3 Other various remaining issues	192
References	194

Chapter 1 Introduction

1.1 Aim of the study

Evidentiality is a grammatical category which indicates the source of information, or how a speaker learns information (Chafe and Nicholas 1986; Aikhenvald 2003; 2004). Aikhenvald (2004) distinguishes grammatical evidentiality from ‘evidential strategies’ in which evidential-like meanings are conveyed by other grammatical categories, such as conditional mood, perfect, or passive. The term ‘evidential’ in this dissertation refers to the grammatical category in which evidential meaning is encoded, not merely pragmatically implicated (e.g. Anderson 1986). This also excludes lexical evidential expressions such as English *I guess* or *reportedly* from the target of this study.

There are four types of evidentials in Luchuan, illustrated in (1a) - (1d).

(1) a. *Yoko ga juubaN nic-ee-N.*

Yoko NM dinner cook-RES-**DIR**

p = Yoko has cooked dinner.

EV = Speaker has visual evidence of *p*¹.

¹ I apply the convention that Faller (2002) adopts for distinguishing propositional meaning and evidential meaning since I consider that this convention usefully reflects the two kinds of meaning (proposition and evidential) clearly. Moreover, since evidential meaning does not correspond to that of lexical verbs such as ‘see’ or ‘hear’, including evidential meaning in the translation could be misleading. I will use *p* for referring to the proposition and use EV for evidential. I do not apply this convention to examples quoted from other authors, or to ungrammatical/unacceptable examples.

b. Yoko ga juubaN nic-ee-N **tee**.

Yoko NM dinner cook-RES-DIR **INF**

p = ‘Yoko has cooked dinner.’

EV = Speaker infers p . (based on visual evidence of cooked meal)

c. Yoko ga juubaN nic-ee-ru **hazi**.

Yoko NM dinner cook-RES-ATTR **ASSUM**

p = ‘Yoko has cooked dinner.’

EV = Speaker assumes p . (based on reasoning)

d. Yoko ga juubaN nic-ee-N **Ndi**².

Yoko NM dinner cook-RES-DIR **REP**

p = ‘Yoko has cooked dinner.’

EV = Speaker heard that p . (based on the report of another speaker)

All of the examples in (1) are sentences with resultative aspect. Example (1a) is used by a speaker who has direct evidence of the event. Examples (1b)-(1d) show how the three indirect evidentials are used. The speaker of example (1b) makes an inference based on the visual evidence, namely a cooked meal. The speaker is certain that there is a cooked meal but he/she has to infer the identity of the cook. The Assumed evidential *hazi* in example (1c) is used to show that the speaker’s reasoning is based on general knowledge. Example (1d) indicates that the speaker acquired the information from another person, in this case, the agent herself or a person who sees the agent’s action.

This dissertation investigates these evidentials and explores the evidential system in Luchuan as a grammatical category on its own. The dissertation has two main purposes; the first is language-specific and the second is more general. The first purpose is to demonstrate that Luchuan has grammatical evidentials, providing a detailed description of the evidential system which, as we shall see, consists of four evidentials. This includes specifying evidential types according to a typological classification of evidentiality (here we use Aikhenvald’s). The second purpose is to

² The initial “N” of the reportative suffix is often not realized when it immediately follows the Direct evidential (the Dictionary of the Okinawan Language 1963: 435).

contribute to current theoretical discussions about evidential systems — e.g. whether or not evidentiality is marked obligatorily, how evidentiality is differentiated from epistemic modality, whether or not evidentials take a higher scope than other grammatical categories, and how evidentials are related to other categories such as tense and aspect. Moreover, in addition to these typological and theoretical contributions, this study will be able to contribute to sociolinguistic study in terms of language preservation, through the detailed examination and description of this endangered language.

To proceed to the investigation, in the remainder of Chapter 1 I will present the background of Ryukyu and Luchuan, and then I will provide an overview of the current discussions concerning evidentials in general linguistic theory and in Luchuan. In Chapter 2 I will examine the functions of the Direct evidential in Luchuan. I will then in Chapter 3 discuss the Inferential evidential and the Assumed evidential, and the Reportative evidential in Chapter 4. In Chapter 5, I will move on to the theoretical issues, the conceptual relations between epistemic modality and evidentials, examining all four of the evidentials in Luchuan. A summary of the contributions of this study and some remaining issues and possible solutions will be presented in Chapter 6.

1.2 Background of Ryukyu

1.2.1 Historical background and present situation of Okinawa Prefecture

In this section, I will briefly outline the social and historical background of Ryukyu. Luchuan languages are spoken in the Ryukyu Islands (Okinawa Prefecture), which are the southernmost islands of Japan. Okinawa is composed of about 160 small islands, 40 of which are inhabited. These islands are located in the Pacific Ocean and the East China Sea and surrounded by beautiful coral reefs. Because Okinawa has a subtropical oceanic climate, some varieties of plants and animals found in Okinawa are very different from those found in mainland Japan, and many of these species can only be seen in Okinawa.

In addition to indigenous plants and animals, the history, culture, and

languages of Okinawa differ considerably from those of the rest of Japan. Historically, Okinawa was an independent nation, the Ryukyu Kingdom, from 1429 to 1879, until mainland Japan invaded the islands. Despite having limited natural resources, the Ryukyu Kingdom flourished through overseas trade with many Asian countries, and as a transit trade nation in East Asia, under the authority of China. In this way the Okinawan culture developed, being influenced by many other countries. Shuri was an administrative center as the capital of Ryukyu, where Shuri Castle was located.

Due to the Japanese annexation of Okinawa, the effects of World War II, and subsequent control by the U.S. military, the circumstances surrounding Okinawa continue to change rapidly. Although tourism is flourishing, some portion of Okinawa's income still depends on military bases and national government spending. Accompanying this change of lifestyle and rapid Japanization, traditional Okinawan culture has been fading dramatically.

In terms of language, at the present day, education at all levels, official documents and politics are all in Japanese only. Through these turbulent years, Luchuan has not been linguistically affected by English, but influence from Japanese has been tremendous.

1.2.2 Present situation concerning language use

As a native language, Luchuan is in danger of extinction. This is true of Luchuan in the generic sense of all the regional variations, and also of the more strict understanding as referring to the Shuri dialect, spoken in Shuri, Naha City. In this chapter, I use 'Luchuan' as a generic term, although in the following chapters, where I discuss linguistic data and analysis, I will use Luchuan to refer to the Shuri dialect. The population of Okinawa is nearly 1.4 million people.³ Although accurate figures for native speakers of Luchuan are not available, the general picture is that younger generations (under the age of fifty) rarely speak Luchuan in daily life, and even among people over sixty, the opportunities for speaking Luchuan are very restricted. The population of Naha City is about 314,000 people, with about 57,400 people living in the Shuri district of Naha. According to the most recent census, carried out

³ According to statistics for October 2009, the population of Okinawa is 1,385,725.

by the government in 2005, the number of people over 65 who live in Shuri is about 10,000, and although this age group would be more likely to speak Luchuan, exactly how many of these 10,000 speak Luchuan daily cannot be estimated with accuracy. Note that there are more people who speak the Shuri dialect but live in different areas in Okinawa or outside of Okinawa, thus an accurate number of the native speakers of the Shuri dialect or Luchuan is unknown.

The younger generations under forty speak standard Japanese or a new language variant called the Uchina-Yamato dialect, which is a fusion of Luchuan and standard Japanese. Even people who can speak Luchuan are inclined to speak Japanese when they talk with younger generations or with people who come from different dialectal areas. Thus the number of Luchuan speakers is rapidly declining due to the decreased opportunity to use the language, and this is even affecting native speakers.

Languages which are no longer being learned as a mother tongue by children are called “moribund” (Kraus 1992:4). This is a much more serious category than mere endangerment. Parents in Okinawa do not speak Luchuan to their children anymore; therefore, Luchuan should be classified in the category of moribund languages. Show business such as local folk songs, dancing and plays are still performed in Luchuan and there are some radio programs in which Luchuan is spoken, but there are no TV programs in Luchuan. Although indigenous people have started to feel they should protect their language, and some organizations have been founded, to date no substantial measures to improve the situation (such as promoting bilingual education) have been implemented by the regional government.

1.3 A Brief Introduction of Luchuan and Luchuan Grammar

1.3.1 History and variations

The origin of Luchuan has not been completely established, but it is generally accepted that Luchuan is a sister language of Japanese, and the two are thought to have diverged from each other no later than the eighth century. Hokama (2000) estimates that ancient Luchuan split from its parent language some time between the

second or third century and the sixth or seventh century. Expressions and phonemes that are found in Japanese no later than the eighth century are still maintained in modern Luchuan (Dictionary of the Okinawan Language 1963⁴). Luchuan and Japanese have both been changing, and are now mutually incomprehensible. According to Hattori (1959), the first scholar who academically demonstrated the kinship between Luchuan and Japanese was probably Chamberlain (1895). Their kinship can be illustrated by various similarities such as correspondence of phonology, accent patterns, vocabularies and the patterns of verbal conjugations.

The contemporary dialects of Luchuan are divided into two large major groups: the dialects spoken in the north, and the dialects spoken in the south⁵ (Uemura 1992). According to Uemura (1992), the north dialect group is subcategorized into eight kinds of languages, and the south dialect group is further subcategorized into three. The north dialects consist of: *Kikai-jima*, *North Amami Oshima*, *South Amami Oshima*, *Tokunoshima*, *Okinoerabu*, *Yoron*, *North Okinawan*, and *South Okinawan*. The south dialects are: *Miyako*, *Yaeyama*, and *Yonaguni* (Uemura 2003). The Shuri dialect belongs to the former group.

It is a striking feature of Luchuan languages that regional variations among them are fairly rich and they are often mutually incomprehensible, even though they belong to the same language group. The differences between the north dialect group and south dialect group are especially huge. Ironically this rich regional variation is one of the reasons why the use of Japanese is preferred for communication between the speakers of different dialects. Although the Shuri dialect used to be a lingua franca among these different variations, it has now been replaced by Japanese.

1.3.2 Sociolinguistic features

Honorifics

One remarkable feature of the Shuri dialect is its strict honorific system, which makes distinctions according to the class, gender, and age of the addressee and

⁴ The Japanese name of this dictionary is *Okinawa-go jiten*. It is written in Japanese and published by Kokuritsu Kokugo Kenkyujyo (National Research Institute). For convenience, in this dissertation, I will call it *the Dictionary of the Okinawan Language*.

⁵ An alternative classification divides Luchuan into three groups: the north (*Amami • Okinawa*), the south (*Miyako • Yaeyama*), and the *Yonaguni* dialect (Hokama 2000).

speaker. According to the Dictionary of the Okinawan Language (1963), the classes were divided into three groups; the general population, called *hjakusjoo*, the members of the ruling class dynasty, *deemjoo*, and the *samuree*, who were warriors. The differences of rank were apparent, being reflected by the color of the belt or the design of the clothes, and it was rare for people who belonged to a different rank to be in contact with each other. Therefore, difference of language use among all ranks was strictly maintained. For example, there were three kinds of ways of saying ‘yes’, namely *ʔuu*, *ʔoo*, *ʔii*, according to the class, gender, and age of the addressee. The first one is for a higher class or guests, and the second one is for an addressee who is older but lower class, and the third one is for lower class or familiar people. Various kinds of words such as kin terms, pronouns, verbs, auxiliaries vary depending on these three factors.⁶

At the present time, the differences in class do not stand out. Class differences are no longer signaled by distinct clothing. Usage now depends mainly on the ages and genders of the speakers. Honorifics are necessary even at home, such as from children to parents, or from grandchildren to grandmother. Since the gender difference is still an important factor, women need to use honorifics to men; from wife to husband.

However, because of the rigidity and complexity of the honorific systems, people tend to use Japanese instead of Luchuan in order to avoid honorific mistakes in the conversation. Also Japanese is simpler because class and gender are less important when Japanese is spoken. This inability to use complicated honorifics is possibly one reason which contributes to the diminished opportunity use of Luchuan by younger speakers.

Writing system

It is estimated that Chinese characters and Japanese syllabary characters (kana) were imported in about 1265, although it was not till the beginning of the sixteenth century that these characters were actually used for purposes such as epigraphs, documents, and poems (Hokama 2000).

⁶ For detailed studies of honorifics, see Hattori (1955), Dictionary of Okinawan Language (1963), and Nishioka (2002). A detailed study of variations in vocabulary depending on classes is provided by Nakamoto (1983) and the honorifics of the highest class is analysed in Arakaki (2006).

In 1532, the first piece of classical literature in Luchuan, *Omoro Soshi*, was collected and edited by the government of the Ryukyu Kingdom. Twenty-two volumes of *Omoro Soshi* remain, although they have yet to be deciphered completely. *Omoro Soshi* is a collection of poems, written in a combination of Chinese characters and Japanese kana and a variant of both Chinese and Japanese characters. However, these poems were basically passed on orally, and it was the government of the Ryukyu Kingdom who collected and edited the written volumes. For ordinary people, Luchuan has been fundamentally only used orally and is not written or read on a regular basis. Thus it can justifiably be said that Luchuan has not had a written system which is routinely used by a large segment of the population.

Nowadays, special characters for Luchuan have been developed based on the Japanese kana,⁷ but it has not yet reached the stage where these characters are used on a regular basis. Conversations in Luchuan in contemporary literature are written in Japanese characters, and a newspaper in Luchuan is also written in Japanese characters.

Lastly, the fact that there is no fixed written system can be considered to have an influence on the whole system of the language. I assume that this fact has helped to develop the evidential system in Luchuan, or perhaps rather that this fact has helped to preserve the evidential system which the parent language may have possessed, because written descriptions of events tend to be objective, while spoken utterances are basically always subjectively oriented to the speaker and hearer.

1.3.3 Linguistic features

Since this dissertation aims mainly to investigate evidentials in Luchuan, I will in this section provide only very basic information on Luchuan's linguistic features so that the reader can gain some idea of what kind of language Luchuan is. More detailed accounts can be found in Uemura (2003), Tsuhako (1992), and Miyara (2000), in addition to the Dictionary of the Okinawan Language (1963).

⁷ For example, see Funatsu (1988), who has developed a specific implementation which is now integrated with Microsoft products and available on computers at some schools in Okinawa.

Phonemes

Luchuan has the following phonemes.

Vowels: / i, e, a, o, u /

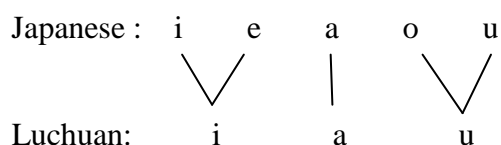
Consonants: / h, ʔ, ʼ, k, g, p, b, m, s, c, z, n, r, t, d, /

Semi-vowels: / j, w /

Syllabic phonemes: /N, Q/

Figure (1) below shows that, as far as short vowels are concerned, basically each vowel in Japanese corresponds to a vowel in Luchuan, with the five Japanese vowels corresponding to the three Luchuan vowels. Long vowels do not follow this pattern and Luchuan makes the same five way distinction that Japanese does. But note that not all words can be extracted by this correspondence of phonemes since many items in the vocabulary of Luchuan differ from Japanese by more than phonology.

(1) Correspondence of phonemes between Japanese and Luchuan



Mora

The basic constructions of the mora are as follows:

/CV/, /CSV/, /CN/, /Q/

where /C/ indicates consonant, /S/ semivowel, and /V/ (vowel) (Hattori 1955). (/N/ is a syllabic uvular nasal and /Q/ is a syllabic voiceless consonant.)

General Syntax

The basic word order in Luchuan is SOV (Subject-Object-Verb), and there is no grammatical agreement of gender, number or person. In the following chapters, I will discuss a phenomenon which looks like a kind of subject-verb agreement, but I will argue that this phenomenon is not grammatical agreement but is has its basis in evidentiality. There are two suffixes *-cha* or *-taa* which indicate plurality and can be attached to the noun, but their use is not strictly obligatory; thus, addressees usually infer the number depending on the given context.

Subjects and objects are often omitted when they are obvious between the speaker and the hearer. Postpositions and case markers appear after nouns and they are more varied than in Japanese. For example, there are two nominative case markers in Luchuan, *ga* and *nu*, while Japanese has only one nominative case marker, *ga*. One of the noticeable differences between these two languages is that Luchuan does not have an objective case marker. The use of the objective case marker *wo* in Japanese is considered to have appeared relatively recently (Chamberlain 1895). Luchuan also has a topicalization marker *ja*, which fuses with the final vowel of the word's ending; if there is a light syllable word-finally such as *i*, *u*, and *a*, the fused forms are *ee*, *oo*, *aa* respectively, although if the word ends with a long vowel or a syllabic phoneme, fusion does not occur (Uemura 2003).

There are two kinds of tenses, non-past and past, and future is expressed by time adverbs or by the context. A detailed discussion of tense and aspect will be given in Chapter 6 of this dissertation. There are three negative markers, *(r)aN*, *uraN*, and *nee(ra)N*, and there are two question markers, *-i* for yes-no questions, and *-ga* for content questions.

1.3.4 Verb morphology

There are not many studies of verb morphology in Luchuan except for Kina (1999) and Miyara (2000, 2002). Table 1 shows my analysis of verb morphology. This is fairly different from the existing work in terms of the slots that I have assumed for evidentials. Here I will simply give an overview of the system that I have arrived at, with a brief explanation of some of the features in Table 1, and will provide a discussion of the literature and a number of associated issues in 2.2.2.

stem	+aspect	+negation	+tense	+mood	+EV (1)	+EV (2)	+EV(3)
	<i>u</i>	<i>aN</i>	<i>(t)a</i>	<i>(t)ee</i>	<i>N</i>	<i>tee</i>	<i>Ndi</i>
	<i>oo</i>	<i>uraN</i>			<i>(ru)</i>	<i>hazi</i>	
	<i>ee</i>	<i>neeN</i>			<i>(sa)</i>		

Table 1. Morphology of finite verbs

Three morphemes indicate aspect: *-u-* indicates imperfective, *-oo-* indicates

continuative and *-ee-* conveys resultative aspect. There is only one tense marker, which indicates past tense, as non-past (present) tense is unmarked. I will discuss the functions of the mood marker in 3.3.4.

Where this table significantly departs from the literature is in identifying three slots for evidentials (1) - (3). The direct evidential *-N* appears in the slot for evidential (1) and the other two morphemes *-ru* and *-sa* which appear in the same slot as *-N* are evidentially neutral elements. I will return to this issue in Chapter 2, Section 2.2.2 to explain how my analysis is different from the analyses currently available in the literature. The Inferential *tee* and Assumed evidential *hazi* occupy the slot for evidential (2), and the Reportative evidential *Ndi* appears in the slot for evidential (3).

1.4 Data collection

The fieldwork processes which were undertaken for this thesis can be divided into approximately three periods. First, I conducted intensive fieldwork in 1999 with nineteen native speakers of Luchuan. Basic sentence constructions were investigated with the assistance of these speakers in elicitation sessions. The sessions followed a pattern according to a questionnaire which I had prepared beforehand with my supervisors' advice. The elicitation sessions took place in a nursing home, day-care facilities for elderly, and clubs for the elderly at a community center. I also visited the homes of some of the speakers, if they were willing to give more information.

The second period of data collection started in 2000 and is ongoing. The consultant over this long span has been my father, Gikei Arakaki. He was born in 1938 and his parents (my grandparents), who were born in the 1890s, spoke only Luchuan. They did not understand Japanese at all, and could neither read nor write Japanese or Luchuan. They moved from Shuri to Kadena when they were young, but they continued to speak only the Shuri dialect at home. My father spoke only Luchuan until he began to go to school. In general at that time, children used to start to learn Japanese at elementary school. However, my father lost the opportunity to attend the first four years of school, because of the Battle of Okinawa and the chaotic situation after the war. Luchuan was the only language which he spoke until he

started to go to school, when he was 10 or 11 years old. Because of this background and the fact that he had to speak only Luchuan with his parents, he is more fluent in Luchuan than many people of the same generation. His job was a village councilor in his twenties and thirties, and since then he has been a farmer. Now my parents use Luchuan most of the time for their daily life, though they seldom speak Luchuan to their children and grandchildren.

The third period of data collection was from 2007 to 2009. The consultant during this period was Ms. Masako Nakazato, who was born in 1923. Her parents, herself and her husband were all originally from Shuri. She was a primary school teacher for forty years. Now she is retired and does various kinds of volunteer work. She has also helped in the making of a sound database for the Dictionary of the Okinawan Language as one of the narrators recording examples. She is very willing to contribute to preserve her native language; therefore, she has spent a lot of time for my research. I visit her regularly.

Based on the survey I conducted in 1999, I developed a questionnaire for these two individual consultants, my father and Ms. Nakazato, and asked the two of them separately. For the purpose of collecting information relating to evidentiality, I have especially taken care to observe two points:

- (i) Trying to give the details of the context as much as possible.
- (ii) Trying to make the context one in which more than two people participate.

The first point is important because I do not want to gather literal translations from Japanese to Luchuan. Such a translation would sound unnatural and would fail to elicit possible variations. Therefore, contexts are set up where attention is paid to factors such as whether the speaker and/or the hearer are supposed to see the event or not, how much the speaker is supposed to know about the person in the topic, and so on. The second point is important in order to determine how the third person is described, since the use of evidentials could vary depending on persons. Aikhenvald's "Fieldworker's guide: How to gather materials on evidentiality systems" (Aikhenvald 2004) was useful for making appropriate context and examples.

In addition to the elicitation sessions, I collected data from people's daily

conversation, mainly from my parents and sometimes from relatives. Written materials are not used so much, but the data do include some examples from a book, a collection of folk tales.

1.5 Evidentiality in general linguistic theory

1.5.1 What is evidentiality?

Evidentiality is a grammatical category which refers to the source of information. According to Aikhenvald (2004), about a quarter of the world's languages have evidential systems, i.e., they specify the type of source of the information, whether the speaker saw it, or heard it, or inferred it from indirect evidence, or learned it from someone else. Aikhenvald (2004) states that the use of the concept of evidentiality is relatively recent, and until attention began to be paid to this concept, evidential particles had been misidentified in many languages. Jacobsen (1986) states that the concept of evidentiality in present usage probably derives from the study of Kwakiutl by Franz Boas (1911). For example, Boas (1938: 133) states that “while for us definiteness, number, and time are obligatory aspects, we find in another language location near the speaker or somewhere else, source of information — whether seen, heard, or inferred — as obligatory aspect.”

The term ‘evidential’ is introduced by Jakobson (1957/1971). One of the most important points in his study was that he analyzed evidentiality as a grammatical category an a par with the categories of person, voice, and tense. Another notable advance he made was to subcategorize the category of evidentiality according to the type of evidence available: hearsay evidence, relative evidence, and presumptive evidence.

In recent years, as the study of evidentiality has deepened, the meaning of the term evidential has diversified. An excellent collection of studies on evidentiality edited by Chafe and Nichols, *Evidentiality: the Linguistic Coding of Epistemology* (1986), stimulated the study of evidentiality. In brief, in this collection, Chafe presented a narrow sense and a broad sense of the term “evidential”: the narrow sense restricts the meaning to the source of information, whereas the broad sense also

contains the speaker's attitude towards the knowledge⁸ (Chafe 1986). The narrow sense appears to indicate evidentiality alone, but the broad sense seems to straddle the two categories of evidentiality and modality. Since then, the definition of evidentiality has been used differently among researchers and a great deal of discussion has revolved around whether these two concepts are in the relation of disjunction (completely different), inclusion (one category includes the other), or overlap (Dendale 2001). There are some studies which consider that evidentiality should be used to indicate both the sources of information and the speaker's degree of certainty toward the proposition.⁹ In fact, some researchers consider that evidentiality is a subcategory of modality, or the other way around¹⁰ (Bybee 1985, Palmer 1986), and some regard both categories as partially overlapping categories (Izvorski 1997, Garrett 2001, Faller 2002, McCready and Ogata 2007). On the other hand, de Haan (1999) claims that these two concepts should be distinguished from each other because they are semantically different, in that evidentiality indicates the source of information while modality evaluates the speaker's commitment to the statement; his conclusion, then, is that their overlap in some languages is not universal. Similarly Aikhenvald insists that evidentiality is an independent grammatical category (2003, 2004). Since the definitions of evidentiality vary depending on researchers, it would be premature to conclude that evidentiality should be regarded as a part of modality because it can express the speaker's degree of certainty about the proposition expressed, rather than being regarded as an independent grammatical category that indicates the source of information. Therefore, careful investigation is necessary to distinguish these categories.

1.5.2 Definitions of evidentials

Let us begin with clarifying the definition of evidentiality. Anderson (1986: 274-275)

⁸ Chafe (1986) identifies four criteria that are contained in the broad concept of evidentiality; 1) source of knowledge, 2) mode of knowing, 3) reliability, and 4) knowledge matched against (knowledge matched against verbal resources and against expectations) (p263).

⁹ For example, Ifantidou (2001:5) states that "Most authors agree that evidentials have two main functions: they indicate the source of knowledge, and the speaker's degree of certainty about the proposition expressed."

¹⁰ The broad definition of evidentiality that includes speaker's certainty or attitude (for example, Chafe (1986) and Mithun (1986)) appears to include the category of modality, though these authors do not explicitly claim so.

proposes to define archetypal evidentials based on empirical observations. The identification contains four criteria as follows:

- (a) Evidentials show the kind of justification for a factual claim which is available to the person making that claim.¹¹
- (b) Evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim about something else.
- (c) Evidentials have the indication of evidence as in (a) as their primary meaning, not only as a pragmatic inference.
- (d) Morphologically, evidentials are inflections, clitics, or other free syntactic elements (not compounds or derivational forms).

The criteria in (a) to (c) of this identification seem to be generally accepted among scholars, but criterion (d), which concerns the surface realization of evidentials, is more contentious. Faller (2002: 6) claims that criterion (d) might be too restrictive. According to Faller, it is too difficult to establish whether an expression has already become an element that conforms to criterion (d) for intermediate stages in the process, because evidential in many languages develop out of perception verbs. Similarly, Aikhenvald (2003:24, 2004:16) states that criterion (d) should not be included in the definition because this criterion would not apply in a system in which the distinction between inflectional and derivational categories is not clearly made. As these arguments show, the point in (d) appears to need to be carefully reexamined, but the criteria (a)-(c) stand as reasonable criteria. Anderson (1986:277) presents further generalizations about evidentials as follows:

- (i) Evidentials are normally used in assertions (realis clauses), not in irrealis clauses, nor in presuppositions.
- (ii) When the claimed fact is directly observable by both speaker and hearer, evidentials are rarely used (or have a special emphatic or surprisal sense).
- (iii) When the speaker (first person) was a knowing participant in some event

¹¹ To be precise, he elaborates this further as follows: “whether direct evidence plus observation (no inference needed), evidence plus inference, inference (evidence unspecified), reasoned expectation from logic and other facts and whether the evidence is auditory, or visual, etc” (Anderson 1986:274).

(voluntary agent; conscious experiencer), the knowledge of that event is normally direct and evidentials are then often omitted.

- (iv) Often, it is claimed, second person in questions is treated as first person in statements.

Again, Aikhenvald (2004:16) claims that the points (i)-(iii) above are highly debatable, from a typological perspective, citing some languages where evidential may be used in irrealis clauses, and she claims further that the distinction in point (iv) above is not at all necessarily linked to evidentiality.¹² These criteria also do not seem to fit the data from Luchuan, as we shall see in the following chapters. Therefore, so far, only Anderson's criteria (a)-(c), which I presented above, should be regarded as generally accepted properties of evidentials.

Next, we move on to the question of whether or not evidentials are an obligatory category. Aikhenvald (2004) claims that marking the grammatical evidential is *obligatory*, and the idea of obligatory marking of information comes from Franz Boas (Aikhenvald 2007). As for clarification about what "obligatory" means, Aikhenvald (2007:3) states that, "In languages with obligatory evidentiality, a closed set of information source has to be marked in every clause." However, whether or not this condition is criterial needs to be discussed, since items that have been argued to be evidentials in some languages do not seem to meet this condition. For example, the use of evidentials in Cusco Quechua is not obligatory (Faller 2002), and evidentials in Japanese are not obligatory (McCready and Ogata 2007), nor are evidentials in St'át'imcets (Matthewson et al. 2007). McCready and Ogata (2007:152) state 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."

As for evidentials in Luchuan, their usage is not obligatory in the strict sense that Aikhenvald states above. For example, I do not consider the use of the Direct evidential *-N* in Luchuan to be obligatory in the strict sense, since there are other non-evidential morphemes, *-ru* and *-sa*, which can occupy the same slot as *-N*, though its usage is obligatory in the sense that the slot in which *-N* appears is necessarily occupied in order for sentences to be grammatically well-formed. I will

¹² Aikhenvald (2004) pursues this issue further in the section on evidential and person.

return to this issue in 1.6.2. However, this does not mean that the case of Luchuan supports the hypothesis that evidentials are obligatory in languages that have them. What I can suggest from the case of Luchuan and studies of other languages such as Quechua, is that whether or not evidentials are obligatory is language specific. Thus, I conclude that the obligatory marking of information should probably be excluded from the basic definitional properties.

The discussion of whether evidentials are obligatory or not is also related to the issue of whether evidentials are closed grammatical systems or not. Aikhenvald distinguishes languages that have the grammatical category of evidentiality from languages in which non-evidential categories express evidential extensions. Aikhenvald (2007:1) states that, “The term ‘evidential’ primarily relates to information source as a closed grammatical system whose use is obligatory.” This simply means that if a closed set of information sources are not marked in every clause, the clause would be ungrammatical in languages with obligatory evidentiality. To explain the term ‘closed grammatical system’, Aikhenvald compares *tense* and *time*. The term *tense* expresses a closed set of grammaticalized expressions of location in time such as present, past and future. Contrastively *time* corresponds to sets of *lexical items* that refer to locations in time (such as yesterday, today, and tomorrow). Also, Aikhenvald explains that the options of closed grammatical systems are restricted, whereas the options of the lexicon are potentially open. Should this criterion, ‘closed grammatical system’, be part of the definition of evidential? As far as I can determine, the issue of whether or not evidentials should be a closed set of grammaticalized expression does not seem to be handled very fully in the literature. Anderson’s criterion in (d) above appears to be relevant to this issue, since he mentions that evidentials should be inflections, clitics, or other free syntactic elements. Although this criterion is questioned by Faller (2002) and Aikhenvald (2004) as we have seen above, as far as I understand, it does not mean that they completely deny Anderson’s criterion in (d). It seems that the focus of their disagreement is the fact that Anderson excludes compounds and derivational forms from the definition. In fact, “inflections, clitics, or other free syntactic elements” are considered to belong to ‘closed’ grammatical category.¹³ Therefore, the property of

¹³ I interpret ‘free syntactic elements’ in Anderson’s term as corresponding to ‘free grammatical morphemes’ in Bybee (1985). Bybee (1985:12) states that free grammatical morphemes “belong to a closed class and occur in a fixed position.”

being a closed grammatical category might well be included in the definition of evidentiality, although this issue has not yet been widely discussed.

My overview of the definitions of evidentiality so far have highlighted that there are at least three criteria for evidential (as Anderson presents in (a) to (c)). Although these criteria need to be slightly modified (as we shall see below, for example for the concept ‘primary meaning’ in (c)), I consider these three definitions to be generally agreed upon among scholars.

Now, we need to return to consider the difference between Anderson’s three criteria in (a)-(c) and the broad definition of evidentials that contains the speaker’s degree of certainty or commitment, as Chafe (1986) presents. Jacobsen (1986) considers that the speaker assumes that predications with evidentials are true, but that the speaker is unable to verify this assumption by direct observation or experience. Also, the definition of evidentiality given by Mithun (1986) contains not only the source of information, but also the degree of precision, probability, and expectation. In this approach, epistemic modality seems to be included in the concept of evidentiality. Another different perspective is to consider evidentiality to be able to indicate a speaker’s attitude, but some researchers claim that evidentiality need not necessarily signify attitude (Comrie 2000; Aikhenvald 2003). It is not surprising that indicating the source of knowledge or information is often accompanied by the speaker’s certainty or attitude, so it is natural to consider this part as an optional element; however, it should not be considered as an encoded meaning of evidentials since evidentials in some languages do not always have this meaning.

As we have seen, if evidentials are able to indicate the speaker’s attitude at all, then we need to consider how to differentiate evidentials from the category of modality. Although this issue is probably too complicated to reach a firm conclusion, since the number of studies concerning modality is very large, I will nevertheless be able to present what can be suggested on the basis of observing the features of evidentials in Luchuan. I will return to this issue in Chapter 5, after investigating the evidential systems in Luchuan in Chapter 2 to Chapter 4. Now I will turn to more general discussions.

Palmer (2001) classifies modality into two categories; propositional modality and event modality. Propositional modality is concerned with “the speaker’s judgement of the proposition” and event modality is concerned with “the speaker’s

attitude towards a potential future event”.¹⁴ Furthermore, propositional modality is subcategorized into ‘epistemic modality’ and ‘evidential modality’. The basic difference between these two is that “with epistemic modality speakers make judgments about the factual status of the proposition, whereas with evidential modality they indicate what is the evidence they have for it” (Palmer 2001:24). It seems that here the concept of evidential is included in the category of modality. In fact, Palmer (1986:70) claims that “It would be a futile exercise to try to decide whether a particular system (or even a term in a system in some cases) is evidential rather than a judgement. There is often no very clear distinction because speakers’ judgments are naturally often related to the evidence they have.” But also he admits that it would be necessary to pursue whether some systems might be predominantly evidential (e.g. Tuyuca).

The converse view, which denies the idea that evidentiality is a subcategory of epistemic modality, can be found in de Haan (1999). De Haan argues that both evidentiality and modality deal with evidence but that they should be distinguished as two distinct categories: “one, evidentiality, deals with the *evidence* the speaker has for his or her statement, while the other, epistemic modality, *evaluates* the speaker’s statement and assigns it a commitment value” (p.25 MS).

Along the same lines, Aikhenvald (2004:7) claims that “Evidentiality is a category in its own right, and not a subcategory of any modality” and supports the arguments by de Haan (1999)¹⁵ and Lazard (1999; 2001), as well as DeLancy (2001). Aikhenvald disagrees with the view which considers evidentials to be modals (Bybee 1985, Palmer 1986, van der Auwera and Plugian 1998, and Willet 1988). Aikhenvald claims that, “To be considered as an evidential, a morpheme has to have ‘source of

¹⁴ According to Palmer (2001:7), the sentences with ‘may’ or ‘must’ as in (i) can be paraphrased using ‘possible’ and ‘necessary’ as in (ii).

- (i) a. Kate may be at home now.
 b. Kate must be at home now.
 c. Kate may come in now.
 d. Kate must come in now.
- (ii) a. It is possible (possibly the case) that Kate is at home now.
 b. It is necessarily the case that Kate is at home now.
 c. It is possible for Kate to come in now.
 d. It is necessary for Kate to come in now.

Palmer (2001:7) states that “the important distinction between the two pairs is indicated by the words ‘that’ and ‘for’. The sentences with ‘that’ contain propositional modality and the sentences with ‘for’ contain event modality.

¹⁵ This does not mean that Aikhenvald (2004) agrees with de Haan (1999) on every point. She shows disagreement with Haan in terms of other issues such as arguments about definition.

information' as its core meaning" (p.3); therefore, an evidential may acquire secondary meanings such as reliability, probability, and possibilities, but these meanings are neither required nor primary meanings.

Faller (2002:8) considers evidentiality to be a grammatical category its own right, but argues that the categories of evidentiality and epistemic modality overlap. She provides four reasons for her conclusion: (i) these two concepts are closely related, although they are sufficiently distinct conceptually; (ii) "even though it is the case that many languages have elements that express both notions, there are clear cases of markers that only indicate one of them"; (iii) "there are methodological reasons for starting from the assumption that the two categories are distinct: a true evidential *encodes* a type of source of information, as opposed to (conversationally) *implicating* it"; and (iv) "the standard definition of epistemic modality is in terms of possibility and necessity" (p.9). She goes on to show that only the inferential evidential can be analyzed in these terms and this is why she considers there is an overlap between evidentiality and epistemic modality.

I find Faller's points (i) to (iii) convincing and I follow her analysis. In (i), Faller concurs with the conceptual distinction drawn by de Haan (1999), pointing out that the two concepts of evidentiality and epistemic modality are fairly different. The point noted in (ii) is cross-linguistically valid and cannot be overlooked. The third point concerning *encode* and *implicate* is essential in that this distinction improves the accuracy of the definition. The distinction is clearer than Anderson's criterion (c), or 'core meaning' or 'primary meaning' in Aikhenvald's terminology. However, the last point in (iv) depends on how modality is defined. Faller (2002:81) adapts the definition of modality proposed by van der Auwera and Plungian (1998), "for those semantic domains that involve possibility and necessity as paradigmatic variants, that is, as constituting a paradigm with two possible choices, possibility and necessity." Also Faller quotes the definition of epistemic modality from van der Auwera and Plungian (1998:80-1) that epistemic modality "refers to the judgment of the speaker: a proposition is judged to be uncertain or probable relative to some judgement(s)". Although Faller's explanation is comprehensible and consistent, however, I note that this conclusion would not hold given a different definition of modality such as that proposed in cognitive linguistics by Langacker (1991). Langacker does not consider modality from the viewpoint of 'possibility or necessity'; rather, modality is seen as a

grammatical category, one that indicates the relation between reality and irrealty.¹⁶ Sentences indicate irrealty as long as they contain modal verbs. If the definition of modality does not depend on possibility and necessity, as in Langacker's approach, the fourth point Faller makes may be weakened.

However, since I consider Faller's arguments in points (i)-(iii) to be sufficiently clear and convincing, I follow Faller (2002) in her conclusion that evidentiality and epistemic modality are different categories, choosing the narrow definition as in Aikhenvald (2004) and de Haan (1999). Considering evidentiality to be a category in its own right still does not exclude the possibility that the categories of evidentiality and epistemic modality might overlap. These two categories could be conceptually distinguished from each other, or they could partially intersect. My hypothesis is that these two categories in Luchuan do in fact partially overlap. That is, two of the indirect evidentials — the Inferential and Assumed evidentials — belong to both the category of evidentiality and epistemic modality. This will be discussed further in Chapter 5.

1.5.3 Definition of other related concepts

I have discussed the definition of evidentials in the previous section. In this section, I attempt to clarify the definition of other related concepts. Let us consider what "epistemic modality" means in this dissertation, reviewing briefly some definitions in the literature. According to Palmer (2001:24), "with epistemic modality speakers make judgments about the factual status of the proposition", and Haan (1999:25 MS) argues that epistemic modality, "*evaluates* the speaker's statement and assigns it a commitment value" (p.25 MS). These two definitions indicate that epistemic modality express the speaker's judgement or evaluation of the statement. Bybee et.al (1994) give a similar definition.

Van der Auwera and Plungian (1998:80-1) state that epistemic modality "refers to the judgment of the speaker: a proposition is judged to be uncertain or probable relative to some judgement(s)". Similarly Aikhenvald (2004) states that epistemic modality is associated with epistemic meanings, the meaning of which is (a)

¹⁶ Irrealty in this case indicates that events which are going to happen or events which cannot be observed.

possibility or probability of an event, or (b) of the reliability of information.

Considering these definitions, I define **epistemic modality** as the speaker's judgement, evaluation of (i) the factual basis of the statement or the reliability of information, or (ii) the possibility or probability of an event. Therefore, it is obvious that epistemic meanings are fairly different from those associated with evidentiality, which clarifies the source of information.

The next concepts that need to be clarified are "subjectivity" and objectivity". These concepts are essential in the analysis of natural languages because modality in natural languages generally expresses the speaker's subjective attitude to the proposition or the event (Halliday 1970, Lyons 1977, Coates 1983, Palmer 1986). Lyons (1977) uses the concepts of subjective and objective in investigating the meaning of epistemic modality.¹⁷ However, the terms "subjectivity" and "objectivity" used in this dissertation are more general in that **subjectivity** indicates that "the level of speaker's involvement or commitment is high" and **objectivity** indicates that the involvement or commitment is not restricted to the speaker him/herself only but it could be shared by others.

1.5.4 Classification of evidentiality

In this section, I will introduce the typological classification of evidentials and clarify each subtype of evidentiality. Classifications of evidential types abound,¹⁸ but according to Aikhenvald (2004:66), the most straightforward grouping is to classify them as belonging to sensory parameters, inference, and verbal report. Similarly, Willet (1988) also classifies evidential types into three categories; 'attested evidence' (sensory evidence), 'inferring evidence', and 'reported evidence'. According to Aikhenvald (2003, 2004), "the simplest evidentiality systems consist of just two distinctions; more complicated ones involve up to six (or possibly more)." Aikhenvald classifies evidential systems with two choices into five classes (A1-A5), evidential systems with three choices into five types (B1-B5), and evidential systems

¹⁷ For example, Lyons (1977:797) distinguishes subjective meaning from objective meaning in the sentence "*Alfred may be unmarried*".

¹⁸ These include Chafe's model of knowledge type, (1986) Palmer's model of epistemic modality (1986), Willett's model of the type of evidence (1988), Anderson (1986)'s framework constructing 'a "map" of evidential meanings, showing which meanings are more closely related or more distant from each other'(p.273).

with four choices into three types (C1-C3). Evidential systems with five choices are referred to as D1.

Systems with two choices:

- A1. Firsthand and Non-firsthand
- A2. Non-firsthand versus ‘everything else’
- A3. Reported (or ‘hearsay’) versus ‘everything else’
- A4. Sensory evidence and Reported (or ‘hearsay’)
- A5. Auditory (acquired through hearing) versus ‘everything else’

Systems with three choices:

- B1. Direct (or Visual), Inferred, Reported
- B2. Visual, Non-visual sensory, Inferred
- B3. Visual, Non-visual sensory, Reported
- B4. Non-visual sensory, Inferred, Reported
- B5. Reported, Quotative, ‘everything else’

Systems with four choices:

- C1. Visual, Non-visual sensory, Inferred, Reported
- C2. Direct (or Visual), Inferred, Assumed, Reported
- C3. Direct, Inferred, Reported, Quotative

Systems with five or more choices:

- D1. Visual, Non-visual sensory, Inferred, Assumed, and Reported

(Aikhenvald 2004)

Let me briefly explain the meaning of each semantic subtype according to Aikhenvald’s definition. **Firsthand** evidentials refer to something the speaker has seen, heard, or otherwise experienced. On the other hand, the **non-firsthand** evidential contrasts with the firsthand evidential, and refers to something the speaker has not seen, heard, or experienced. It may include inferred, assumed or reported information. The **direct evidential** is often treated as being the same as the **visual evidential**, which covers information acquired through seeing, but its meaning is

broader in that it covers speakers' or participants' own sensory experience through any of the senses. The **non-visual evidential** covers information that is gained directly through means other than visual perception: i.e., hearing, smelling, tasting, feeling, and sometimes also touching something. The **inferred evidential** is based on visible or tangible evidence or results, while the **assumed evidential** covers evidence other than visible results, such as logical conclusion or general knowledge and experience. The main meaning of the **reported evidential** is to mark what has been learned from someone else's verbal report. The **quotative evidential** also covers reported information but with an overt reference to the quoted source.

My hypothesis is that Luchuan has four types of evidential as illustrated in (1a)-(d) above, namely those belonging to C2 (Direct, Inferred, Assumed, Reported) in Aikhenvald's classification.

1.6 Evidentiality in Luchuan

In this section, I will briefly present the literature which is related to Luchuan evidentials and then discuss the obligatoriness of evidentials in Luchuan.

1.6.1 Overview of studies on evidentiality in Luchuan

In this section, I briefly review the development of studies concerning evidentials in Luchuan. The concept of evidentiality itself is relatively new and has not been applied to the study of Luchuan until recently. It is probably Tshako (1989) who uses the term 'witness' for the first time. This was a great achievement; however, she focuses on aspectual issues rather than evidential meaning, attempting to describe this phenomenon as a part of the aspectual system. Tshako draws attention to the past progressive form that is used to describe an event witnessed by the speaker. In the following chapters, I will demonstrate that direct evidential meaning should be regarded as carried by the morpheme *-N* rather than "the past progressive form" and will argue that all forms which contain this morpheme indicate that the speaker has direct evidence.

Shinzato (1991) deepens Tshako's argument, presenting a more specific hypothesis which departs from aspectual perspectives. She discusses three kinds of

epistemic information, such as (a) perceptual information from experience, (b) perceptual information from observation, and (c) inferentially acquired information. Subsequently, Shinzato's survey has been explored and developed by Miyara (2002), though again similarly to Tshako and Shinzato he does not appeal to the concept of evidentiality, but instead attempts to give an account for these phenomena within the sphere of modality.¹⁹

Kudo et al. (2007) use the term 'evidentiality' and focus on witnessed information and inferred information. They explore these topics in detail and develop an argument concerning evidentiality which also analyzes aspectual issues. Their use of the term 'evidentiality' emphasizes the importance of this concept; however, it seems that the concept of evidentiality is not used in the sense I defined above, that is, an independent grammatical category on its own. In fact, whether the evidential system as seen as a grammatical category is not clarified; nor does this paper address whether or not Luchuan has only direct and inferred evidentials, or whether or not the category which indicates 'Non-visual' or 'everything else' exists (as in classification of evidential systems provided by Aikhenvald (2004) in the previous section). Moreover, their study does not mention the Assumed and the Reportative evidential.²⁰ The data they provide suggest that the inferential form can indicate reported information (Kudo et al. 2007:152), but this analysis is not clear about what kind of reported information is involved, or what the difference is between the information marked by the inferential form and the Reportative evidential *-Ndi* in Luchuan; thus, the functions of the inferential form needs to be investigated further. This confusion might be derived from a failure to consider evidential as a grammatical category. Therefore, I focus on a systematic study to grasp the whole picture of evidentials in Luchuan.

1.6.2 Obligatoriness of evidentials in Luchuan

In 1.5.1 above, I outlined the existing discussions concerning whether evidentials should be obligatorily presented or not. Here I explain my view about this issue. As I

¹⁹ Miyara focuses on points (b) and (c) (observation and inferential information), and does not mention point (a) about direct experience.

²⁰ I assume that they do not consider these evidentials (Assumed and Reportative) to exist in Luchuan, since they do not mention them at all.

have mentioned, I consider that the use of evidentials in Luchuan is not obligatory in the strict sense that Aikhenvald (2004) identifies. Aikhenvald states that “In languages with grammatical evidentiality, marking how one knows something is a must,” and consequently, lack of the use of the evidential could cause serious problems in communication. This is not true in the use of the evidential in Luchuan. Most sentences contain one (or two) evidential markers as in (1a) - (1d), but sentences without any evidentials also do exist; therefore, evidentiality is not obligatorily marked in Luchuan.

In considering the issue of obligatoriness, let us begin with an overall survey. The first point I will make clear is that in morphosyntactic terms, the slot for the Direct evidential is obligatorily present. The direct evidential *-N* cannot simply be omitted because this slot appears to need to be filled morphosyntactically, as in (2a), so it should be substituted by evidentially neutral elements, *-sa* and *-ru* as in (2b) and (2c).

(2) a. *Yoko ga juubaN nic-ee.

Yoko NM dinner cook-RES

Intended meaning: ‘Yoko has cooked dinner.’

b. Yoko ga juubaN nic-ee-sa.

Yoko NM dinner cook-RES-FP

‘Yoko has cooked dinner.’

c. Yoko ga du juubaN nic-ee-ru.

Yoko NM AP dinner cook-RES-ATTR

‘It is Yoko who has cooked dinner.’

I consider that sentences with *-sa* and *-ru* like (2b) and (2c) do not encode evidential meaning, though they can implicate it.²¹ In other words, *-sa* can be used when the speaker has direct evidence but it can also be used without direct evidence when showing the speaker’s belief or guess. The sentence with *-sa* sounds objective and

²¹ These two morphemes are listed in the same slot as the Direct evidential *-N* in morphological template (Table 1) in 1.3.4, but they are in the parenthesis since they are not pure evidential markers.

tends to be used when the speaker shares the information with other participants. As for *-ru*, it is used with an adnominal particle *-du* and the combination with *-du* and *-ru* in the attributed form is called the *Kakari-musubi* construction. The phrase which is focused by *-du* (in this case, *Yoko*) expresses new information, and the rest of the part is given information. Considering the fact that there are choices among *-N*, *-sa*, and *-ru* as in (2a) - (2b), I consider that the choice of the direct evidential is not obligatory.

Let us move on to the indirect evidentials that I presented in (1b) to (1d) in 1.1. Even if these indirect evidentials are omitted, the sentences are grammatical, except for the example of the Assumed evidential in (1c). When the Assumed evidential is omitted, the adnominal particle *-du* must be attached, to make the *kakari-musubi* construction just mentioned. The other two indirect evidentials are not obligatorily required in order to produce well-formed grammatical sentences. However, when the speaker has corresponding evidence, they are required. For example, if the speaker acquires information from someone else, the Reportative evidential is required, as in (1d). This fact leads us to reconsider the meaning of ‘obligatoriness’. That is, if grammaticality is the only measurement of obligatoriness, the Inferred and the Reportative are completely optional; however, if the speaker has certain evidence, marking evidentiality in the sentence is obligatory. In this understanding, it should not be considered that evidential choice in Luchuan is simply optional.

Let me summarize the points I have established in this section.

- (i) The four morphemes presented in (1a) - (1d) are evidentials, while *-sa* and *-ru* as in (2b) and (2c) are not evidentials. Thus, marking evidentials is not obligatory, since sentences without evidentials exist.
- (ii) Sentences with the indirect evidential, like example (1b) - (1d), illustrate that evidential marking is necessary when the speaker’s assertions are based on inference, assumption, or reported information. Even without appropriate evidentials, sentences are not ungrammatical, but they convey different meanings.

1.7 Organization of the dissertation

In Chapter 1, I have briefly presented the background of Ryukyu and Luchuan. Then, I provided an overview of the current discussions concerning evidentials in general

linguistic theory and also the discussions relating to this topic in Luchuan.

In Chapter 2, I propose a radically new analysis that attempts to reexamine what has been discussed in the literature, and to establish the evidential system as an independent category. Especially I focus on revising the concept of the direct evidential from visual evidence to broader concepts, adopting the concept of *best possible ground* presented by Faller (2002) in her investigation of Cuzco Quechua. Considering the similarities and the differences in the behavior of the direct evidential between these two languages, I will present a specific proposal for the interpretation of the Direct evidential in Luchuan. I will also discuss the problem of whether or not the Direct evidential conveys the speaker's degree of certainty, or how the Direct evidential behaves in negative and interrogative sentences, in order to argue that in Luchuan, because evidentials take higher scope than other categories like negation or interrogatives, therefore evidentiality should be distinguished from epistemic modality.

Chapter 3 concentrates on discussing the semantic and syntactic functions of the Inferential and Assumed evidentials, and in Chapter 4, those of the Reported evidential will be described. This approach has not been explored so far; therefore, establishing the category of indirect evidentials in Luchuan is what has been missing and needed.

Chapter 5 discusses mainly two issues. First, I discuss double marking of evidentials to demonstrate there are no contradictions or inconsistencies in multiple uses of evidentials. Second, I return to the theoretical issues, the conceptual relations between epistemic modality and evidentials, examining all four of the evidentials in Luchuan.

In Chapter 6, I summarize the contributions of this study and discuss some remaining issues and possible solutions.

1.8 Summary

I have provided an overview of the basic background of Ryukyu and Luchuan, and of what has been discussed in the literature concerning evidentiality, both in the general linguistic and in Luchuan literature. I have pointed out that so far there has been no study of evidentiality as a grammatical category in Luchuan. I have proposed that

Luchuan has an evidential system with four choices; Direct, Inferential, Assumed, and Reportative. Although they are not all obligatory to make grammatically well-formed sentences, in certain contexts they may be required to make felicitous and appropriate utterances.

Chapter 2 The Direct evidential

2.1 Introduction

In 1.6, I briefly introduced the major issues in the literature on Luchuan grammar. In this chapter, I move on to look at some existing studies in a little more detail; not to attempt to dig deeper into those arguments but to demonstrate the necessity of a new approach (2.2.1). As a start to presenting my own work, I review my morphological template for the Luchuan verb, in 2.2.2. In 2.3, I introduce a new approach, departing from tradition by including evidentials as a grammatical category in the description of the Shuri dialect. After presenting my proposal concerning the Direct evidential in Luchuan, I will investigate whether the category of evidentiality can be distinguished from the category of epistemic modality, in 2.4.

2.2 Overview of the Direct evidential in the literature

2.2.1 Preceding studies of evidentiality in Luchuan

As we have seen in 1.6, although studies have been carried out into Luchuan verb forms, the phenomena that seem to bear on evidentiality have not yet been fully clarified, because existing studies are limited to the tense, aspect, and modality (TAM) system, neglecting the grammatical category of evidentiality. One of the factors that makes the existing analyses complicated is the lack of (or inconsistency in) morphological analysis. The traditional grammatical approach to the study of Luchuan does not clearly state which morpheme corresponds to which grammatical category.¹ For example, in most existing studies, the entire form *junuN* (read) is referred to as “basic aspect present” and *judoon* (be reading) as “continuative aspect present” without any word-internal morphological units/boundaries being indicated.

The lack of morphological analysis makes it difficult to understand which part of the whole form indicates evidentiality, aspect or modality. The complexity of the

¹ Miyara (2002) points out the problem of lack of morphological analysis and provides his own. I will briefly mention his analysis in 2.2.2, but my analysis is not the same as his.

tense, aspect, modality system in Luchuan is pointed out by Kudo et al. (2007), who state that it is not possible to describe Luchuan grammar by disconnecting tense, aspect and mood from each other. However, it is necessary to attempt to tease apart the entangled systems to clarify whether they really cannot be separated, or, if they are not separable, whether they should be considered to be a fused system. Without such discussion, no one can prove whether Luchuan has a grammatical evidential system or not.

Having provided an overview of existing studies on evidentiality in 1.6.1, we now move on to a slightly more detailed look at studies concerning evidentiality in Luchuan and some analysis concerning morphology as well, before providing a morphological analysis in 2.2.2. Even though in the early stage of traditional studies of Luchuan grammar, the term evidentiality is not used to describe the Luchuan verb forms, there are some indications that the concept of evidentiality seems to be important. Uemura (1963:75) states that positive definite past (*judeeN*) is used to express a past state/event as something with a certain factual basis (2003:145),² although there is no further explanation of what ‘a certain factual basis’ refers to. Tshako states that the definite past is used to make a conjecture about irrealis events (Tshako 1992:837). Unfortunately there is no further explanation about this form in her study, but the table that Tshako provides indicates that she interprets this form as encoding mood, not evidentiality or modality. It seems that Tshako (1989) was the first scholar to use the term ‘witness’ to explain ‘past continuative aspect’³ (*jumutaN*). This was a significant achievement in terms of drawing attention to the fact that the aspectual approach is not enough, although she nevertheless classifies this form as expressing continuative aspect rather than as a type of evidentiality. Uemura (1992:806) also called the progressive past ‘reported past’ and mentioned that the concept of ‘witness’ is relevant to this form. However, it was mainly aspectual properties which received the most attention at that time and the argument that the concept of evidential is crucial had not then been clearly presented.

² Uemura wrote the grammar section of the Dictionary of Okinawan Language (1963). In this section, I use the technical terms Uemura uses, as translated into English by Wayne P. Lawrence (2003). But I will employ the terminology based on my morphological analysis which I will present in 2.2.2.

³ Tshako claims that there are two types of continuative aspect; first past continuative (*judootaN* ‘was reading’) and second past continuative (*jumutaN* ‘was reading’). Uemura (1963, 2003) uses the term ‘continuative past’ for the former and ‘progressive past’ for the latter, but the differences between them are not well described.

Shinzato (1991:59, 2003) presented a fresh approach demonstrating that *-aN*, *-taN* and *-eeN* should be investigated in terms of an epistemological rather than a temporal account. According to Shinzato, *-aN* indicates ‘perceptual information acquired through experience’, *-taN* indicates ‘perceptual information acquired through observation’, and *-eeN* indicates ‘inferentially acquired information’. Although Shinzato’s claim has greatly contributed to developing the discussion, there are some problems in her analysis. One of them is her morphological analysis. She discusses *-taN* in the context of the progressive past⁴ *jumutaN* ‘was reading’; however there are other forms which contain *-taN*, such as *judootaN*, continuative past and *judeetaN*, resultative past.⁵ Since under this analysis these forms contain exactly the same morpheme *-taN* as the progressive past, if this morpheme really realized the feature of observation as Shinzato claims, consequently it would mean that these forms should share the same epistemic feature. But she does not mention this issue when referring to the other forms that contain *-taN*, although she introduces continuative aspect to distinguish it from progressive aspect. Also since she does not set a morphological boundary between *-a-*, *-ta-*, *-ee-* and *-N*, the contribution of *-N* is not discussed at all (in my analysis, *-a-* and *-ta-* are allomorphs which indicate past tense, and *-N* is a direct evidential, as I will explain below).

Another problem in Shinzato’s account is the analysis of subject restriction. She claims that *-taN* cannot co-occur with a first person subject, and *-aN* can only co-occur with a first person subject, and that the opposite is true in interrogative sentences. This description supports her hypothesis concerning the epistemic meaning of these forms. But this phenomenon needs to be observed more carefully, as the claims regarding this issue vary depending on scholars.⁶ In brief, then, while there are some problems in Shinzato’s analysis, her point of view casts a new light on the subject.

Miyara (2002) points out the lack of morphological analysis in Shinzato’s

⁴ Since the terminologies are different depending on the scholar, from now on, unless there is a statement to the contrary, Uemura’s (1963) terms will be used in order to be consistent with the Dictionary of Okinawan Language.

⁵ I consider that *-taN* consists of two morphemes, *-ta-* and *-N*, but as Shinzato does not separate them from each other, in discussing her analysis I follow her in using *-taN*.

⁶ For example, although Shinzato claims that *-aN* can co-occur with a first person subject only in positive sentences, other scholars do not support this analysis. I consider that this disagreement is due to the lack of taking evidentiality into account. But there is no scope to discuss the details in this dissertation.

account. Miyara states that there are two morphemes which indicate modality; *tee* and *yí*. (Miyara states that /*yí*/ has three allomorphs +*u*, +*yí*, and +*i*.) The morpheme *tee* indicates that speakers have made an inference based on their observation of a situation. The morpheme *yí* indicates that speakers have directly observed the action (witness). The definitions of their meanings given by Miyara are basically the same as provided by Shinzato but Miyara takes a closer look at the morphological details, claiming that the elements encoding the modal meaning are *tee* and *yí*, not *eeN* and *taN*, and separating *-N* as a mood marker. This claim of Miyara's raises the question of whether the morpheme *-N* is really irrelevant to the epistemic or modal meanings. My claim is that *-N* plays a crucial role in conveying epistemic and evidential meanings, as I will discuss below in Section 2.3.1 and 2.3.2. There are also some further unsolved problems in Miyara's morphological analysis, which will be discussed in Section 2.2.2 below. Kina (1999) also claims that *-u-* is an observational marker as Miyara does. Although I here use the term 'witness' to describe this form, in Arakaki (2002, 2003), I did not give 'witness' as a gloss for *-u-* because I was aware that this morpheme indicates more than witness, i.e., it also includes concepts such as inner state or past habit; therefore I simply glossed *-u-* as "U" in the previous discussion. In this dissertation, I regard *-u-* as imperfective aspect and *-N* as a direct evidential.

The most recent work on the Shuri dialect is reported in Kudo et al. (2007). In stark contrast to Miyara's approach, Kudo et al. imply that tense, aspect, and mood form a tripartite system which cannot be split apart. Kudo et al. do not present any morphological argument but they suggest that these forms have been evolving to express evidentiality and mirativity instead of tense and aspect.⁷ Since this dissertation does not take a diachronic approach, I will not be able to include any discussion concerning the evolution of grammatical categories, but I will show that the aspectual analysis of the traditional approach should be reexamined. It should also be noted that although it is possible that, as Kudo et al. suggest, tense, aspect, and mood should not be split apart, Kudo et al. do not actually show that such a separation is impossible, and I believe it is worth attempting to disentangle the

⁷ According to Kudo et al., mirativity indicates unexpected or surprised feelings (2007:152). They refer to a study of mirativity in Turkish by Slovin and Aksu (1982) and Kudo et al. claim that mirativity in Turkish and in Luchuan look similar though they are not completely identical. However, details about mirativity in Luchuan – for example whether it is obligatory or unmarked – are not clarified in Kudo et al.'s discussion.

system.

I now summarize the claims about the concept of evidentiality in Luchuan which have been made in the literature. Note that the concept of evidentiality in this case refers to what I interpret as phenomena which should be regarded as part of the category of evidentiality, since ‘evidentiality’ as a grammatical category is not used elsewhere in the literature. I will then evaluate whether these claims are defensible, and where they are not, I will attempt to modify them.

I. Direct evidentiality

- a. The progressive past *jumutaN* ‘was reading’ is used to describe information gained from direct observation (Tsuhaiko 1989, 1992; Uemura 1992; and Kudo et al. 2007).
- b. The morpheme *-u-* indicates information gained from observation (Kina 1999; Miyara 2000, 2002).
- c. The morpheme *-aN* indicates perceptual information acquired through experience and *taN* indicates perceptual information acquired through observation (Shinzato 1991).

II. Indirect evidentiality

- a. The positive definite past *judeeN* ‘must have read’ is used to express a past state/event as something with a certain factual basis (Uemura 1963, 1992).
- b. The definite past is used to make a conjecture about irrealis events (Tsuhaiko 1992).
- c. The morpheme *-ee-* indicates inferential information based on direct evidence (Miyara 2002).
- d. The morpheme *-eeN* indicates inferential information (Shinzato 1991).

This summary highlights three essential points.

1. There are considered to be two types of evidential in Luchuan in the literature: a direct evidential and an inferential evidential. However, some researchers do not adopt this analysis and consider that the forms in question express aspect instead of evidentiality.
2. Among researchers, there is no consensus about which part of the verb forms encodes evidential meanings.

3. There is no discussion in the literature of whether the elements which indicate evidential meanings are indeed evidential, or whether they express modality or something else.

The purpose of this chapter is to investigate these problems. To be precise, I will address the following three questions:

- (i) Does Luchuan have two evidentials, direct and indirect?
- (ii) If Luchuan has evidentials, how are they encoded morphologically?
- (iii) Do they belong to a distinct category of evidentiality, or are they a subtype of modality?

As for question (i), I will argue here and throughout the dissertation that there are four evidentials, not two. Concerning question (ii), I will clarify how each evidential is morphologically realized by the discussing morphological analysis and sets of semantic categories (section 2.2.2). After clarifying the functions of the direct evidential in Luchuan in 2.3, the question of whether it is necessary to recognize a category of evidentiality separate from epistemic modality, as described in question (iii), will be discussed in 2.4.

2.2.2 Overview of verb morphology

As we have seen in 2.2.1, since each scholar uses different technical terms, discussions are often difficult to follow. In this section, I will propose a revised terminology that attempts to overcome the problems which arise in existing discussions. I have already provided a morphological template for the Luchuan verb in 1.3.4 just for background information about Luchuan, but I have not explained it in any detail or presented any existing morphological study. Thus, the main focus of this section is to introduce my account and what has been discussed in literature. First, let me again present the morphological template that I am proposing (Table 1).

stem	+aspect	+negation	+tense	+mood	+EV (1)	+EV (2)	+EV(3)
	<i>u</i>	<i>aN</i>	<i>(t)a</i>	<i>(t)ee</i>	<i>N</i>	<i>tee</i>	<i>Ndi</i>
	<i>oo</i>	<i>uraN</i>			<i>(ru)</i>	<i>hazi</i>	
	<i>ee</i>	<i>neeN</i>			<i>(sa)</i>		

Table 1. Morphology of finite verbs

Table 1 shows the basic order of the morphemes that make up finite verbs. The stem is composed of two elements, the base and the inflectional ending. After the stem, the slots for aspect and evidential (1) are obligatorily filled in declarative sentences. The morphemes which appear in the slot for aspect are *-u-* (which indicates imperfective aspect), *-oo-* (continuative), and *-ee-* (resultative). There are three negation morphemes. One is *-aN*, which is used for negating imperfective aspect. However, when this negation *-aN* is used to make a negative form, the imperfective aspect *-u-* does not appear, as shown in the pair of forms *jumuN* ‘read’ and *jumaN* ‘not read’. The other negative markers are *-uraN* (which is used with continuative aspect) and *-neeN*, which is used with resultative aspect. As for tense, the past tense marker is *-ta-* (with an allomorph *-a-*); non-past tense is unmarked, i.e., has no overt morphology. There is a mood marker *-(t)ee-* next to the slot of tense, which is used to describe irrealis such as subjunctive mood. I will discuss this morpheme in Chapter 3 (Section 3.3.4) in the relation of the Inferential evidential.

According to this template, in the slot of evidential (1), *-N* denotes the direct evidential but *-ru* and *-sa*, shown in parenthesis, are not evidential markers, though they implicate an evidential meaning. When *-ru* appears in the root clause, the focus particle *du* is required to make the *kakari-musubi* construction. This construction is a descendant of the rule of *kakari-musubi* in Old Japanese (Tsuhaiko 1992:839). When the adverbial particle *du* is paired with *-ru* in the attributive form, the former is called *kakari-zosi* ‘relation opener’ and the latter is called *musubi* ‘tying conclusion’⁸ (Shibatani 1990:334). The phrase which is focused by *-du* expresses new information, and the rest expresses given information which has already been shared by other participants of the conversation. This implication is seen in the sentence with *-sa* as

⁸ Shibatani (1990:334-5) introduces these terms, which were proposed by Yamada (1908), but he states that he simply uses the term ‘adverbial particles’ following the terms used by Sansom (1908). I use the same terminology.

well. According to Uemura (1961), *-sa* is used to objectivize the information. When the speaker wants to convey direct evidence, the Direct evidential *-N* is used and when the speaker wants to express the information more objectively, *-ru* or *-sa* is chosen to mark information which is already shared with other participants.

In the slot of evidential (2), the Inferential evidential *tee* and the Assumed evidential *hazi* appear. When the Inferential evidential is used, *-N* should be chosen from the slot of evidential (1), while when the Assumed evidential is used, *-ru* should be chosen. The details of how to use these evidentials will be discussed in Chapter 3. None of the evidentials from the slot of evidential (2) is required when *-sa* appears. I will discuss the multiple uses of evidentials in Chapter 5. The Reported evidential occupies the right edge of the slot, and I will discuss its function in Chapter 4. I have explained my morphological analysis above. Now I move on to introducing the order of morphemes which has been proposed by Miyara (2002:97). This is shown in (1).

(1) root (+ continuative aspect) (+negation) (+modality *tee*, *yĭ*) (+tense) +mood⁹

According to Miyara, there are two morphemes which indicate modality: *tee* and *yĭ* (*-u-*). The former, *tee*, is used to mark inferential information based on the speaker's observation of a situation, and the latter, *yĭ*, marks direct observation of the action (witness). However, there are two problems with the analysis shown in (1). First, Miyara argues in his discussion that the morpheme *-ee-* indicates resultative, but he gives it no slot in his proposed sequence shown in (1). In my proposal, the resultative aspect *-ee-* falls into the slot for aspect.

The second problem is that the order in (1) excludes the co-occurrence of *-u-* and *-tee*, as these are both analysed as modality markers, competing for the same slot. However, these two markers *-u-* and *-tee* can in fact co-occur, in forms such as *kam-u-tee-N* 'would have eaten'. The morphological order I presented in Table 1 solves this problem, because *-u-* belongs in the slot for aspect, and *-tee* appears in the slot for tense, so they are correctly predicted to be able to appear simultaneously. Miyara proposes that there are two different homonymous morphemes *-tee-*, one a

⁹ I have deliberately omitted the category of politeness and honorification from the morphological order because they are not obligatory and irrelevant to this dissertation; Miyara puts them before negation (2002:97).

resultative and one a modal. In fact I agree with him that there are two distinct morphemes with this same form: I will discuss this further in Chapter 3. But this analysis still does not solve the problem of the double modal marking such as *kamuteeN* above, because under Miyara's approach this form has double evidential modality.

From here on, I will refer to the morphemes *-u-*, *-oo-*, *-ee-* as markers of aspect, *-a-* and *-ta-* as past tense, *-(t)ee-* as an irrealis marker, and *-N* as the Direct evidential. If further investigation were to prove that *-u-* and *-ee-* are actually evidential, as Miyara and Kina claim, rather than aspectual, I would need to revise my morphological analysis, but the argument below will clarify why I believe that this is not the case.

2.3 Concept of best possible grounds

In 2.2.1, I gave an overview of the discussions related to evidentiality in Luchuan. In this section, I outline my own analysis of the direct evidential, which is rather different from any of the existing approaches. No other researchers of Shuri dialect have regarded evidentials as grammatical category, although Izuyama (2005, 2006, and 2008) studies other dialects spoken on other isolated islands such as Miyara and Yonaguni and presents an analysis similar in some respects to mine, but other than these, there are no studies which admit the existence of evidentiality as a grammatical category in the study of the Shuri dialect, which is a sort of lingua franca in Luchuan. Since there are common characteristics in the other dialects Izuyama studies and Shuri dialect, it will be worthwhile to do comparative studies among these dialects in the future. For example, Izuyama claims that there are three kinds of evidentials in the Yonaguni dialect in Luchuan; Direct, Inferred and Reported (2008).

In my analysis, the direct evidential (including the concept of 'witness') is encoded by *-N*; therefore, all forms ending in *-N* indicate direct evidential. Claiming that *-N* is a direct evidential may sound too bold because this view is quite different from the existing work that we have reviewed so far, but I will argue that in fact this proposal fits very well into the overall evidential system of Luchuan. To explain my analysis of *-N* as a direct evidential, however, the concept of the direct evidential

needs to be clarified. In 2.3.1, I will introduce the basic and common feature between *-N* in Luchuan and *-mi* in Quechua, and then in 2.3.2, I will explain the differences between them, in order to discuss how I should incorporate the differences into my proposal.

2.3.1 The shared feature between *-N* in Luchuan and *-mi* in Quechua

According to Shinzato (1991:59), “*an* entails information that is experienced.’ However, what I am going to clarify first is the fact that *aN* indicates more than the speaker’s direct experience. It should also be noted that in my analysis, the morpheme *-a-* indicates past tense and *-N* indicates the Direct evidential; thus, I claim that what Shinzato describes as “perceptual information acquired through experience”¹⁰ is conveyed by *-N*, and not by the combination of *-a-* and *-N*. Might it then be possible to conclude that *-N* indicates “direct experience”? I claim that this is not a possible conclusion, since there are some conditions which license the use of *-N* without any direct experience being involved. This is shown in example (2). Suppose that it is Saturday morning and Ryu tells his mother that he is going to school at 1pm for club activity, although there is no school on Saturday. When his mother comes back from shopping at half past one and she finds that Ryu is not there, she understands that he has gone to school. Then, a friend of Ryu’s drops by and asks if Ryu is at home. In this case, Ryu’s mother can use *-N*, as in (2).

(2) a. Ryu’s friend : Is Ryu at home?

b. Mother: Ryu ja gaQkoo Nkai ?Nz-*aN*.

Ryu TOP school to go-PAST-DIR

‘Ryu went to school.’

¹⁰ I understand that the term “perception” usually refers to the five senses (e.g. sight, hearing, etc.) without including ‘experience’. However, the term ‘perceptual’ in Shinzato’s definition of *aN* is different from this general meaning. Shinzato considers that there are two types of perceptual information: 1) information acquired through experience, 2) information acquired through observation. The first type includes only “internal stimuli, such as sensations, feelings, or thoughts which originate inside oneself and are not accessible to others”, whereas the second type includes “external stimuli, such as events or external states, which originate outside oneself and are similarly accessible to others” (Shinzato 1991:55).

This example illustrates two facts, regardless of whether *-aN* or *-N* is used. First, Shinzato's analysis that "*an* entails information that is experienced" is not fully accurate because it is clear that the mother does not experience 'going to school'; it is Ryu who is the agent of the verb 'go'. Shinzato claims that "*an* entails information that is experienced, and for the speaker the information represents something he himself performed" (1991:59). This would mean that *-aN* can be used only if the mother herself performs the action described in the speech act, but this is not true of the example in (2). Second, the felicity of (2) shows that it is not even necessary for the speaker to witness an event in order for them to be able to use *-aN*. Obviously the mother did not see Ryu going to school; he left while she was out shopping. What then licenses the use of *-aN* (or *-N*) in (2)?

To answer this question, we need to clarify the concept of direct evidence - whether or not it should be witness, direct experience, or something else. Here I introduce the concept of the direct evidential of Cuzco Quechua presented by Faller (2002). This is the most important concept in order to account for the direct evidential *-N* in Luchuan. One of the main proposals in this dissertation is that the definition of "direct evidential" which Faller proposes for the analysis of Cuzco Quechua should also be adopted for the analysis of *-N* in Luchuan. Since understanding this concept is crucial at this stage, let me introduce examples from Cuzco Quechua.

According to Faller, the direct evidential *-mi* in Cuzco Quechua conveys that 'the speaker has the best possible grounds for making the assertion' (Faller 2002:121). The concept of the '**best possible grounds**' includes witness but also other reliable information such as report from the agent or information from authority. According to the typological study of Aikhenvald (2004:65), the direct evidential basically covers visual evidence, and other sensory evidence as well, depending on the evidential systems of the specific language. But Faller's 'best possible grounds' is not restricted to visual or even other sensory evidence. So what does the concept of 'the best possible ground' semantically cover? Consider the example from Cuzco Quechua in (3).

(3) Inés-**mi** llalli-rqa-n.

Inés-**mi** win-PST1-3

p = ‘Inés won.’

EV = speaker saw that *p*

(Faller 2002:125)

According to Faller, a sentence with *-mi* as in (3) is usually interpreted to convey both that the speaker has direct visual evidence and that the speaker is certain that the statement is true.¹¹ The Cuzco Quechua examples in (4a) and (4b), however, indicate that *-mi* can be used without direct visual evidence.

(4) a. Paqarin Inés-qa Qusqu-ta-**n** ri-nqa.

tomorrow Inés-TOP Cuzco-ACC-**mi** go-3FUT

p = ‘Inés will go to Cuzco tomorrow.’

EV = Inés told speaker that she will go to Cuzco tomorrow

b. Inés-qa llakiku-n-**mi**.

Inés-TOP be.sad-3-**mi**

p = ‘Inés is sad.’

EV = Inés told speaker that she is sad

(Faller 2002:127)

If direct evidence refers to witness or experience, the speaker of (4a) does not have direct evidence because the described event is supposed to happen in the future. An event which has not taken place yet can neither be observed nor experienced. In a similar way, the internal state of another person such as *sad* in (4b) is not observable nor can it be experienced by the speaker.¹² In contrast, in sentence (3), the speaker must have witnessed the event. That is, the evidential requirement for the use of *-mi* in this case is not optional but obligatory. However, for unobservable events like (4a)

¹¹ Faller points out that adopting the translation ‘*I see...*’ for *-mi* would be wrong because *I see* is the main predication of the sentence though *-mi* as in (3) is not. Thus, she uses her own representation that separates the proposition from the evidential meaning.

¹² Faller notes that the experiencer Inés does not look sad in the situation in which (4b) was uttered. Therefore, an observable sign such as Inés’s outlook or facial expression is not a necessary precondition for uttering this sentence.

and (4b), this evidential requirement cannot be fulfilled, given the nature of future events and other people's internal states. Therefore, in this case, it is the fact that the speaker has 'the next best thing' to direct evidence – the report of the agent/experiencer him/herself – which seems to license *-mi* in (4a) and (4b).

This feature of *-mi* in Cuzco Quechua is quite similar to *-N* in Luchuan. Example (2) above (the utterance by Ryu's mother with *-N*) shows that despite the claim that *aN* indicates that the speaker has direct experience (Shinzato 1991), *-(a)N* can in fact appear without the speaker's direct experience or witness. Rather, the two things that are required to license the use of *-N* are the report of the agent and the observation of some related situation (in (2), the agent's (Ryu's) absence). In this way, *-N* in Luchuan and *-mi* in Cuzco Quechua have a shared feature, in that both cover more than witnessed evidence. Based on this feature of *-N*, I suggest that existing analyses which view only *-u-* or (*utaN*) as indicating witness (Shinzato 1991, Miyara 2002, Kudo et al. 2007) should be withdrawn and instead, I adopt the concept of the best possible ground to characterize *-N* in Luchuan.

Faller presents three possible analyses of the Cuzco Quechua direct evidential *-mi*; here I limit myself to discussing one of them, as it is the most relevant for the analysis of *-N* in Luchuan. This analysis is summarized in (5).

- (5) *-mi* encodes the evidential value that the speaker possesses the best possible source of information for the type of information conveyed by the utterance. The same evidential value is *implicated* by simple assertions.

(Faller 2002:123)

Following Faller's terms in (5), I propose that the meaning of *-N* in Luchuan is as follows:

- (6) *-N* encodes the evidential value that the speaker possesses the best possible source of information for the type of information conveyed by the utterance.

(6) differs slightly from Faller's definition in (5) because, as I mentioned in 2.2.2, there are other forms which appear in assertions in Luchuan (*-ru* and *-sa*) but they do not implicate the same evidential value that *-N* encodes, though they implicate the

similar evidential value.

The ‘best possible ground’ in Faller’s theory means visual evidence if the event is observable; or, if the event is not observable, what licenses *-mi* is ‘the fact that the speaker has the next best thing to direct evidence’ (Faller 2002:131). Thus, the case of (4a) is the report of the agent, Inés herself, which means the speaker of (4a) cannot have had witnessed or experienced evidence. This is also true in case of Luchuan, example (2). For maximum accuracy, I will use “**direct evidence**” to mean “direct experience” or “direct perception”, and I will use “**the best possible ground**” (or, best possible source of information) to include both “direct evidence” and the more indirect cases. Thus the case of (4a) does not involve “direct evidence”, but it does involve “best possible grounds”, since the best possible grounds in the case of example (4a) is the reported information from the agent herself. I will use “**best evidence**” as a shorthand for ‘best possible ground’. Therefore, I propose that *-N* is licensed to be used if and only if the speaker has best evidence.

As I discussed above with respect to (2), *aN* can co-occur with a third person subject when there is ‘best evidence’ such as a report from the agent. Since under my analysis *-N* conveys the direct evidential and *-a-* indicates past, the speaker needs to have direct/best evidence that shows that the events happened in the past. If the event describes the speaker’s own actions, the direct evidence can be his/her own direct experience; however, it is obvious that a second or third person’s activity cannot be experienced by the speaker. Therefore, instead, the speaker needs firm evidence such as visual evidence, or alternatively, other best evidence (such as reported information from participants in the events) as in the case of example (2). Thus, some existing studies refer to the subject restriction,¹³ but it would be better to consider that the apparent subject restriction arises from the feature of *-N* as above rather than as a type of syntactic agreement.

Next, I show that what licenses *-N* can be different in different situations even though the same verb is used. To see a subtle difference, let us consider a very slightly different context to that in (2). Suppose that you happened to meet a friend of

¹³ Shinzato (1991) claims that *aN*, which (according to her analysis) indicates the speaker’s direct evidence, can only be used with first person subject. Furthermore, it has been claimed in the literature that the past forms containing *-u-*, imperfective aspect, cannot take first person subjects and this restriction is considered to derive from the meaning of observation (Tsuahako 1989, Shinzato 1991, Miyara 2002).

yours, Yuki, in a café when you finished your coffee and were about to leave. You had a chat with her and she told you she would go to university after a coffee break. You left the café and thirty minutes later, you passed the café again, but she was not there anymore. Later you tell your friend that you met Yuki at the cafe. In this case, you cannot use *-N*, as (7) indicates, although you have two sources of information just as was the case in (2): hearsay from the agent (Yuki said she would go to university) plus visual evidence (Yuki's absence from the café), which one might expect to qualify as best evidence in this case.

(7) # Yuki ja daigaku Nkai ?Nz-*aN*.
 Yuki TOP university to go-PAST-DIR
 'Yuki went to university.'

There are two factors which make sentence (7) infelicitous in this context. First, the relationship between the speaker and Yuki is not as close as the relation between mother and son in (2). Second, the given situation in (7) is public (a café) rather than private (the home in (2)). These facts decrease the strength of the evidence, and therefore the co-occurrence of the third person and *-aN* is excluded.

The difference in felicity between (2) and (7) may raise a question about whether this difference derives from reliability of information. I will give an example that excludes this possibility. For example, suppose there is an autobiography written by the popular singer, Bono, from the band 'U2'. The front cover of the book shows the name of the author, so the name on it is absolutely reliable in terms of evidence for who wrote the book. But even in this case, *aN* cannot be used, as shown in (8).

Context: Speaker finds the book written by Bono at the book store and tells her friend that this book is written by Bono.

(8) # kunu sjumuce-e Bono ga kac-*aN*.
 this book TOP Bono NM write- PAST-DIR.
 'Bono wrote this book.'¹⁴

¹⁴ The word order in the translation is SVO and the topicalization is not reflected in the translation. But this does not affect the acceptability of the information.

Example (8) implies that reliable information is not a crucial factor for the use of *-N*, but rather the most significant factor is whether or not the speaker has direct/best evidence or not. Then, what about a case in which someone saw Bono finish writing this book? If, for example, the speaker had actually seen Bono write the autobiography and complete it — for example, because the speaker is some relative of Bono's — then (8) could be used. The only person likely to have seen him write the book is a family member, but the crucial thing licensing *-N* would be here the observation of the event.

My consultants often comment that ‘if you are a member of the family,’ then you can use a sentence like (2) or (8). However, I believe that what is really crucial is whether or not the speaker has had the chance to see the events carried out by the third person (e.g. the speaker sees the agent do something), or to see the result of the action as well (e.g. an empty room). Thus, the important issue is not whether the speaker is actually a kin of the agent but how much they share private information.¹⁵ A family member is usually supposed to know about other family members’ habits or schedules if they live together.¹⁶ On the other hand, information arising from coming across someone at a café like in example (7) is subject to many unexpected factors; for example, Yuki could go to a beauty salon or the department store, not university. On its own, Yuki’s report that *she would go to university* cannot be considered best evidence because, since she is not related to the speaker, her statement of intent alone is not considered firm enough evidence. This implies that the criteria for the use of *-N* in Luchuan are stricter than for *-mi* in Cusco Quechua. I will discuss this issue further in the next section, where I will also provide a more accurate definition of *-N*, revising (6) to reflect the differences between *-mi* and *-N*.

2.3.2 The differences between *-N* in Luchuan and *-mi* in Quechua

In the previous section, I introduced the concept of best possible ground as proposed by Faller (2002) and adapted this framework to account for the direct evidential in

¹⁵ Uchima (1990) states that the concept of whether one is inside or outside the community is important for Okinawans, and that this concept of self or others is reflected in language use.

¹⁶ The traditional style of housing in Okinawa is open and there are not many segmented rooms; it was rare to have private rooms for each member of family, though this has been changing in modern times.

Luchuan. I illustrated the common points observed in the direct evidentials *-N* in Luchuan and *-mi* in Cuzco Quechua. In this section, I will specify the nature of the difference between *-N* in Luchuan and *-mi* in Cuzco Quechua in order to discuss how these differences should be incorporated into my proposal of what the direct evidential in Luchuan precisely means. The main claim which I will make is that the use of the Direct evidential *-N* is more restricted than that of *-mi* in Cuzco Quechua.

First, I will mention the morphosyntactic difference between the two languages, although since this difference does not affect the meaning of the direct evidential, I will simply remind the reader of the difference and not discuss the details. As the ungrammaticality of the sentences in (9a) indicates, the slot in which *-N* appears needs to be filled. In contrast, Cuzco Quechua allows forms both with *-mi* and without *-mi*.

- (9) a. *waN-nee juubaN kam-u.
 I-TOP dinner eat-IMPR
- b. waN-nee juubaN kam-u-N.
 I- TOP dinner eat- IMPR-DIR
 ‘I will eat dinner.’
- c. waN-nee juubaN kam-u-**sa**.
 I- TOP dinner eat- IMPR -FP
 ‘I will eat dinner.’
- d. waN ga du juubaN kam-u-**ru**.
 I-TOP AP dinner eat- IMPR -ATTR
 ‘It is I who eat dinner.’

As we have seen in 2.2.2, there are other morphemes in Luchuan which can appear in the slot which *-N* occupies, namely *-sa* and *-ru*, which do not encode direct evidence. As shown in (10a) and (10b), in Cuzco Quechua, sentences with or without *-mi* are grammatical,¹⁷ but in Luchuan, if *-N* is not used, *-sa* or *-ru* should be used in

¹⁷ The sentence without *-mi* conveys a similar meaning to the sentence with *-mi*, but in the

affirmative forms as in (9c) and (9d) respectively.

(10) a. Para-sha-n.

rain-PROG-3

‘It is raining.’

b. Para-sha-n-**mi**.

para-sha-n-**mi**

‘It is raining.’

Next, I will move on to the main discussion in this section, which is the strictness of the evidential requirement. That is to say, Luchuan has a stricter requirement on what counts as evidence that legitimizes the use of *-N*; and as a result *-N* can be used in only a subset of the contexts in which *-mi* is used in Quechua. Faller (2002) classifies information into two kinds; *personal information* and *encyclopedic information*. Personal information describes “events in the speaker’s private life” and encyclopedic information includes “knowledge that is taken for granted within a culture, and knowledge that is typically taught in school or found in encyclopedias” (Faller 2002:133). First, let me briefly review examples of personal information from Cuzco Quechua, to compare with the corresponding examples in Luchuan, and then move on to investigating encyclopedic information. In 2.3.1, I provided examples of “personal information” in (3) and (4), both of which contain the direct evidential *-mi*, but example (3) is a case where the speaker has visual evidence, whereas (4a) and (4b) are examples in which the speaker does not have visual evidence.

I now compare examples (3), (4a) and (4b) from Cuzco Quechua with corresponding sentences in Luchuan in order to examine the similarities and differences between the direct evidentials in these two languages. First, (11), which corresponds to (3), is felicitous; so *-N* and *-mi* behave in the same way in this type of case, where visual evidence is available.

sentence without *-mi* the direct evidential meaning is implicated due to the feature of assertion, while on the other hand, *-mi* encodes the evidential meaning. Thus, the degree of strength varies depending on whether or not *-mi* is present; without *-mi*, the degree of strength is zero, while with *-mi*, the degree of strength is greater than zero. See Faller (2002).

(11) Ken ga kaQc-a-N.

Ken NM win-PAST-DIR

p = 'Ken won.'

EV = speaker saw that p

When visual evidence is unavailable, however, *-N* does not behave exactly like *-mi*. The context that licensed the use of the evidential in Cuzco Quechua in (4a) is not sufficient to allow the use of *-N* in Luchuan, as sentence (12) indicates.

(12) # Hitoshi ja ?acaa Tokyo Nkai ?ic-u-N.

Hitoshi TOP tomorrow Tokyo to go-IMPR-DIR.

'Hitoshi is going to Tokyo tomorrow.'

Even if the agent of (12), Hitoshi himself, has told the speaker that he will go to Tokyo tomorrow, it is still awkward to use the *-N* ending as in (12). Only a very limited situation would allow (12); to utter (12), the speaker ought to know Hitoshi's schedule very well, for example in the way that his mother, wife, or secretary might. Since closeness of relationship appears to be a significant requirement in terms of the use of *-N* in Luchuan, we can pursue this issue further here.

As just stated, the acceptability of example (12) can improve in a restricted context, for example, if the speaker of (12) is a member of Hitoshi's family, especially his spouse. Further, in addition to the relation between the agent (or the other participant in the event, if there is one) and the speaker, what needs to be noticed is the relation between the speaker and the addressee. When the agent's wife tells information to someone who is less close to her, such as Hitoshi's colleague, the acceptability becomes higher. However, the crucial thing is not whether the speaker is officially married to the agent or a kin of the agent. Rather, the issue is the extent to which they share private information. I propose that the theory of *territory of information* presented by Kamio (1997) may be a clue to account for this phenomenon. Kamio claims that the crucial factor in evidential choices is whether information resides within or outside the speaker's territory or the hearer's territory. According to Kamio, the scales that decide on which side information falls (i.e.,

whether speaker's or hearer's) vary depending on individual languages, but the concept of territory of the *self* as opposed to the *other* is universal. If sentence (12) is used by Hitoshi's wife to someone in the neighborhood or workplace, this information completely falls within the speaker's (Hitoshi's wife) territory and not the hearer's. In this case, the awkwardness of (12) decreases markedly. On the other hand, if Hitoshi's neighbor utters (12) to Hitoshi's wife, the sentence sounds fairly awkward.¹⁸ In this way, the territory of information seems to be relevant to the evidential requirement.

Unlike in Luchuan, in Cuzco Quechua, the report from the agent him/herself is sufficient to license the use of the direct evidential *-mi*. As far as I am aware, Faller (2002) mentions the theory of *territory of information* in her discussion about the choice of direct evidential and reportative evidential, but this argument is not developed further. It would be very interesting to know if the choice of evidential and the relation between the speaker and the agent (or the other participant of the described event), or the relation between the speaker and the hearer is an important factor in Cuzco Quechua as well, but there is no mention of this in Faller's work. What is clear at this stage is that in Luchuan, even if the speaker acquires this information from the agent himself, the direct evidential cannot be used. Instead, the reportative evidential as in (13) will be required.

- (13) Hitoshi ja ?acaa Tokyo Nkai ?ic-u-N Ndi.
 Hitoshi TOP tomorrow Tokyo to go-IMPR-DIR REP
 '(Hitoshi said) he is going to Tokyo tomorrow.'

Next, let us consider what happens in the past tense. Sentence (14) is the past form of (12) with *aN*, replacing the temporal adverb *?acaa* 'tomorrow' with *cinuu* 'yesterday'.

¹⁸ Note however that Hitoshi's superior could utter (12) to his other subordinates, although in this case, the superior should have irresistible authority to control his people in terms of his post.

- (14) Hitoshi ja cinuu Tokyo Nkai ?Nz-a-N.
 Hitoshi TOP yesterday Tokyo to go-PAST-DIR.
 ‘Hitoshi went to Tokyo yesterday.’

Sentence (14) can be used if Hitoshi told the speaker that he would go to Tokyo beforehand, but additionally the speaker has to be sure that Hitoshi has actually gone. Again, the relationship between the speaker, the participant in the event, and the hearer influences sentences with the past as well, as we have just seen above in the case of the non-past as in (12). That is, if the speaker is close to the agent like Hitoshi’s wife, (14) sounds much better than the case in which the speaker is one of Hitoshi’s colleagues. However, this restriction does not seem to be as strict as in the sentence in the non-past as in (12) above, since (12) can be used if a speaker has direct evidence. The difference between (12) and (14) seems to be the certainty of the realization of the event. Events which have already taken place are inherently more certain than events which have not taken place. Therefore, the inherent uncertainty of the future tends to prevent the occurrence of *-N*, although past events known from reliable information can be reported with *-N*.¹⁹ In fact, cross-linguistically it is reported that the frequency of occurrence of the evidential is different among tenses. That is, ‘many languages do not distinguish evidentiality in future’ (Aikhenvald 2004:263); ‘more evidential choices are likely to be available in past tenses than in other tenses’ (Aikhenvald 2004:266).

Given what we have seen about how the direct evidential behaves in Luchuan, I speculate that this typological feature may be explained by the difference in how much direct evidence is available for past, present, and future events. What we have seen so far indicates that the relation between the agent, speaker, and hearer is involved with the use of *-N*. The Direct evidential *-N* in Luchuan can describe a third person’s action if and only if the speaker has reliable information from a person who is close to the speaker. If the hearer is closer to the agent than the speaker is, *-N* cannot be used, since the information falls only into the hearer’s and not the speaker’s territory of information.

¹⁹ This feature of *-N* does not exclude the use of *-N* when talking about future. If the speaker has concrete evidence, *-N* can appear with the future. The typical example would be the speaker’s own plan in the future. Other than that, when the speaker knows extremely well about an event in the future, *-N* can appear.

Now I present one more example which shows that Luchuan *-N* and *-mi* in Cuzco Quechua are different. Let us return to the example (4b). Example (4b) shows that *-mi* can be used to describe another person's inner state when the speaker has direct/best evidence; in this case, the report from the experiencer him/herself. But the use of *-N* in Luchuan is not licensed in this context. Even if the conditions are the same as the ones in (4b)—where the experiencer him/herself tells the speaker that she is sad—sentence (15) is extremely awkward.

(15) #Yoko ja sikaraasa-N.

Yoko TOP sad-DIR

'Yoko is sad.'

In the case of *-mi* in Cuzco Quechua, the speaker of (4b) does not need to observe the experiencer's external expression. Thus, the only evidential requirement for (4b) is the report of the experiencer, which is the best possible ground for the speaker. But in the case of *-N* in Luchuan, even if the speaker hears a report from the experiencer, or even if the speaker of (15) directly observes the experiencer's external sign such as facial expression, (15) is still not licensed. The use of the direct evidential with internal states is strictly restricted to the internal states of the experiencer in Luchuan; to describe other person's internal states, *-N* cannot be directly attached to the adjective 'sad', but the additional element is required as in (16).²⁰ By attaching the verb *soo* 'doing' plus *-N* as in (16), the sentence indicates that the speaker is not an experiencer.

(16) Yoko ja sikaraasa-soo-N.

Yoko TOP sad-doing-DIR

'Yoko seems to be sad.'

Even *soo* 'doing' is attached to *-N*, the condition that the speaker has to have evidence should be maintained for use of (16). In this case, like the case of *-mi*, a report from the experiencer is required as best evidence. In other words, the speaker

²⁰ The fact that *-N* can express only the experiencer's sensations is one of my pieces of evidence for claiming that direct evidence is encoded by *-N* not *-u-*, contrary to the literature (e.g., Miyara (2002)).

can use (16) if he/she has a report from the experiencer (Yoko). Alternatively, if the speaker has a report from the experiencer him/herself, the speaker can also use sentence (17) with the reportative evidential.

- (17) Yoko ja sikaraasa-N Ndi.
 Yoko TOP sad-DIR REP
 ‘(Yoko said) she is sad.’

Interestingly this restriction is applied to the emotive adjectives only, which express human feelings such as ‘sad’, ‘happy’, and ‘frightened’. Contrastively descriptive adjectives which are not relevant to human’s feelings such as ‘big’, ‘tall’, and ‘small’ does not show this restriction.²¹

- (18) a. ?aQtaa kii ja takasa-N (doo).
 their tree TOP tall-DIR FP
p = ‘Their tree is tall.’
 EV = Speaker knows *p* because he/she has seen it before.
- b. ?aQtaa cjakusi ja magisa-N (doo).
 their oldest son TOP big-DIR FP
p = ‘Their oldest son is big.’
 EV = Speaker knows *p* because he/she has seen their oldest son before.

Both (18a) and (18b) are acceptable without *soo* ‘doing’, although the subject is the third person. This fact suggests that the restriction we have seen above is not due to syntactic regulations to obligate the third person subject to use *soo* ‘doing’ in the case of sentences with adjectives. Rather, the usage seems to be dependent on the

²¹ It should be noted that similar examples can be observed in other dialects such as Miyara and Kuroshima, variations of Yaeyama dialects (Izuyama 2004). Emotive verbs in these dialects require an additional morpheme which derives from the verb ‘to do’. Also, emotive adjectives in Japanese behave differently between sentences with a first person experiencer and sentences with a third person experiencer (Aoki 1986). Japanese and Luchuan share the feature that an emotive adjective needs an additional element to describe the third person’s experience, although the required element for each is different: *suN* ‘to do’ or ‘doing’ for Luchuan, versus *gar* which is attached to emotive adjectives in Japanese means ‘to show a sign of, behave like -ing’ (Kuno 1973:84).

evidence which is available to the speaker. Whereas the experience of a third person is not observable, the status of a third person is objectively observable, as in (18a) and (18b). Therefore, *soo* ‘doing’ cannot be used with descriptive adjectives, as shown in (19a) and (19b).

(19) a. #ʔaQtaa kii ja takasa-soo-N.

their tree TOP tall-doing-DIR

Intended meaning: ‘Their tree looks tall’.

b. #ʔaQtaa cjakusi ja magisa-soo-N.

their oldest son TOP big-doing-DIR

Intended meaning: ‘Their oldest son looks big.’

In the case of interrogative sentences, the third person subject with an emotive adjective is not acceptable, as in (20b), while the third person subject with descriptive adjectives is acceptable, as in (20c). If a speaker wants to ask how the experiencer him/herself feels, as in (20a), the question sounds natural, compared to putting the same question to a non-experiencer as in (20b).

(20) a. hwiisa-m-i?

cold-DIR-Q

‘‘Are you cold?’’

b. #ʔare-e hwiisa-m-i?

he-TOP cold- DIR-Q

‘‘Is he cold?’’

c. ʔare-e magisa-m-i?

he-TOP big- DIR-Q

‘‘Is he big?’’

I have illustrated how the Direct evidential *-N* behaves in sentence with adjectives. That is, in the case of emotive adjectives, *-N* cannot be directly attached to adjective

but needs to be associated with *soo* ‘doing’ as *sooN* (‘doing’ + *-N*) to describe a third person’s experience. Even with *soo*, *-N* requires best evidence such as a report from an experiencer. If a report from an experiencer is not available, but a speaker wants to express his conjecture based on experiencer’s appearance, the speaker has to use an additional morpheme *gisa* before *sooN*. This *gisa* comes from *gisa* ‘seem’, which is a derivational verb used with adjectives or other verbs.

(21) a. *Ryu ja hwiisa gisa soo-N.*

Ryu TOP cold seem doing- DIR

‘Ryu seems to be cold.’

b.# *waN-nee hwiisa gisa soo-N.*

I-TOP cold seem doing- DIR

‘I seem to be cold.’

To utter (21a), the speaker needs to see the scene in which the experiencer is feeling cold, for example, shivering from cold or having goose bumps. This indirect expression with *gisa* cannot be used to describe the experiencer’s own experience since one’s own perception is obvious for an experiencer.

Now let me summarize what I have discussed in the points concerning the direct evidence with adjectives. There are three levels of expression depending on the level of information. First, if the experiencer is the speaker him/herself, *-N* can appear alone with an emotive adjective. Second, when the experiencer is a third person *soo* ‘doing’ needs to appear with *-N* and the speaker has to have a report from the experiencer him/herself. Third, when the experiencer is a third person and a report from the experiencer is not available, *gisa* is required before *soo*. This discussion concerning evidentials with adjectives is really interesting and could be expanded further, but since the goal of this dissertation is mainly to clarify the evidential system in verb forms, I will not pursue this issue further here. The important thing that needs to be grasped from this discussion about evidentials with adjectives is the fact that use of the Direct evidential *-N* is more restricted and subject to more complex conditions than *-mi* in Cuzco Quechua.

The examples we have seen so far belong to the personal information, which

describes “events in the speaker’s private life”. Now let us move on to investigating encyclopedic information which includes “knowledge that is taken for granted within a culture, and knowledge that is typically taught in school or found in encyclopedias” (Faller 2002:133). Faller states that *-mi* can be used to mark information acquired from authority such as encyclopedic information after a process of assimilation.

(22) a. Yunka-pi-**n** k’usillu-kuna-qa ka-n.

rainforest-LOC-**mi** monkey-PL-TOP be-3

p = ‘In the rainforest, there are monkeys.’

EV = speaker knows as part of Quechua culture that there are monkeys in the rainforest.

b. Africa-pi-**n** elefante-kuna-qa ka-n.

Africa-LOC-**mi** elephant-PL-TOP be-3

p = ‘In Africa, there are elephants.’

EV = speaker learned in school that there are elephants in Africa.

(Faller 2002:20,133)

Faller explains that the proposition in (22a), ‘In the rainforest, there are monkeys’ can be considered a fact of Quechua culture whether or not they have actually been to the rainforest. Since this fact is known as general cultural knowledge, *-mi* is licensed in (22a). On the other hand, the proposition in (22b), ‘In Africa, there are elephants’ is something which the speaker might have learned in school or read in an encyclopedia for Quechua speakers, which means that the speaker does not actually have direct evidence. But in fact *-mi* is licensed here only when the speaker has learned it from an authority such as a teacher. Additionally, the speaker has to have ‘authority’ over the information conveyed. Faller states that “the speaker should have authority over this information in the sense that they should be able to expand on the topic, that is, (s)he should be able to also say what kind of creatures monkeys and elephants are, and that Africa is a continent” (p20). Let us now examine whether this usage is possible for *-N* in Luchuan.

(23) a. kusa-nu-mii Nkai ja habu nu ʔu-N (doo).

bush-GEN-in LOC TOP snake NM be- DIR (FP)

p = ‘There are snakes in the bushes.’

EV = speaker knows as part of Okinawan culture that there are snakes in the bushes.

b.ʔ ʔahurika Nkai ja zoo nu ʔu-N (doo).

Africa LOC TOP elephant NM be- DIR (FP)

p = ‘There are elephants in Africa.’

EV = speaker learned in school that there are elephants in Africa.

Example (23a) sounds natural in Luchuan as did example (21a) in Cuzco Quechua, while (21b) sounds a little unnatural. It sounds as if a mother is telling this general intelligence to her small children. The fact that there are elephants in Africa is too general to be clearly stated, although whether this unnaturalness should be attributed to the use of the evidential or the content of the utterance cannot be detected. Thus, let me provide a different example.

(24) ʔ ʔahurika Nkai ja, manatii nu ʔu-N.

Africa in TOP manatee NM be- DIR

In Africa, there are manatees.

The information which example (24) conveys is not as apparent as information in (23b), so the content of the sentence should not make the acceptability low, but still (24) does not sound fully natural. Example (24) would sound fully natural if the speaker has direct evidence, for example, he/she actually seen manatees in Africa before. Without such experience, if the speaker of (24) has specialized knowledge about animals or particularly manatees, and he thinks that unlike him, the hearer does not have such detailed knowledge, he may use (24). The difference of acceptability between (22a) and (24a) implies that *-N* seems to be stricter than the use of *-mi*.

The difference between *-N* and *-mi* becomes more clear in past tense. Faller (2002) states that historical facts can be also marked with *-mi*, even when the speaker does not have the most direct source of information. That is, *-mi* is felicitous even

when the speaker was not born at the time, and learned this historical fact in school. This is not true of *-N* in Luchuan.

(25) a. (#)1893nin, Chamberlin ga Uchinaa Nkai mensooc-a-N.

1893 year Chamberlin NM Okinawa to come-PAST-DIR

“In 1893, Chamberlin came to Okinawa.”

b. (#)1977, ?uhu nee nu juti, ?uhooku nu cuu nu maac-a-N.

1977 big earthquake NM happen many of people NM die-PAST-DIR

“In 1977, a big earthquake happened, and many people died.”

To be exact, two of my main consultants give slightly different judgments on these sentences. One consultant said that the use of *-N* can be acceptable because historical facts are completely different from private information, and evidence for such a “non-private” fact is neither expected nor required. The other consultant said that the Reportative evidential or other indirect expression is necessary because the described fact has not been actually perceived by the speaker.²² However, the judgement of the two consultants coincides when a slightly different example is considered. The historical events in (25a) and (25b) happened in Okinawa, where they have lived and still live in. Obviously these facts are more familiar to them compared with other events which happened in other countries. In the next example, the historical event took place in a much more distant.

(26) # jooroQpa ?utooti, pesuto Nd?iru jaNmee si, ?uhooku nu cuu nu

Europe in plague so-called disease by many of people NM

maac-a-N.

die-PAST-DIR

“In Europe, many people died of a disease called plague.”

In this case, the two consultants agree that *-N* is infelicitous and the Reportative

²² The difference in judgement between two consultants might derive from the difference in their ages. The consultant who suggests accepting the use of *-N* is much younger than the other consultant. If this is the case, it may suggest that the strictness of the use of *-N* is getting moderated. This change might be caused by influence of Japanese which does not have a direct evidential.

evidential or other indirect expressions must be used, for example, report speech or its passive ‘It is said that...’. Considering this judgment of the consultants, we can conclude that historical facts should be marked by indirect expressions not by the direct evidential. This suggests that the choice of evidentials in Luchuan attaches great importance to ‘self’, the speaker’s cognition, rather than to authority. As for the issue of whether or not the direct evidential is felicitous when the facts are known as general cultural knowledge, further investigation will be required in the future.

Now let us redefine the Direct evidential *-N* taking into consideration the differences between *-N* and *-mi*. The first definition I presented in (6) in 2.3.1 is repeated below as (27).

(27) *-N* encodes the evidential value that the speaker possesses the best possible source of information for the type of information conveyed by the utterance.

Also in 2.3.1, I defined **direct evidence** as referring to “direct experience” or “direct perception/sense”, and I defined “**the best possible ground**” (best possible source of information) as including both “direct evidence” and “more indirect cases” such as a report from a participant in the event. I use “**best evidence**” as a shorthand for best possible ground. Therefore, *-N* is licensed to be used if and only if the speaker has best evidence.

Now, I will add three clarifications as in (28) based on the detailed restrictions we have just investigated above. The first and second clarifications are related to personal information, and the third one is associated with encyclopedic information.

(28)

- i. When direct (sensory) evidence is not available, the use of *-N* is determined by the relationship between the speaker, agent (or other participants in the event if there are any), and the hearer. That is, when the best possible information is not the speaker’s own perception, the speaker has to be close to the agent (or any other participant) mentioned in the report; further, if information falls into the hearer’s territory of information and not the speaker’s, *-N* cannot be used.

- ii. The use of *-N* with adjectives is stricter than its use with verbs. That is, when the speaker is not the experiencer of the state described by the adjective, *-N* cannot be directly attached to the adjective; additional elements such as *soo* or *gisa-soo* are needed depending on the kind of information.
- iii. Information which is neither direct evidence nor covered by the cases discussed above, and which is not taken as general knowledge in the culture cannot be marked by *-N*. Even in the case of well known historical facts, indirect expressions such as the Reportative evidential, or reported speech is preferred.²³

2.4 Epistemic modality and evidentials

2.4.1 Speaker's degree of certainty

In this section, I investigate the issue of whether or not the Direct evidential in Luchuan encodes the speaker's degree of (un)certainty. To do so, I apply a test called Moore's Paradox, which is usually used to illustrate that assertions have the sincerity condition that speaker believes that *p*. The test is used to see whether or not the speaker can deny the truth of the asserted proposition, as in, "*It's raining, but I don't believe it*". A speaker generally has to believe the asserted proposition to be true when he/she makes an assertion.²⁴

In Chapters 3 and 4, I will show that the Inferential evidential *tee* and the Assumed evidential *hazi* convey the speaker's degree of (un)certainty, whereas the Reportative evidential does not convey information about the speaker's degree of certainty or the speaker's commitment to the proposition. In this section, I will apply this test to the Direct evidential *-N* and demonstrate that the speaker cannot felicitously deny a sentence that they have just uttered if it includes the direct evidential *-N*.

First, let us consider examples of non-past tense (29).

²³ As I have just stated, this issue needs further investigation; therefore, at this stage, I cannot clearly say that *-N* should be excluded from descriptions of historical facts as I know there is variation in the judgments of the native speaker consultants.

²⁴ This requirement is usually dealt with in terms of the sincerity condition in speech act theory (Faller 2002:159).

(29) a. ?ami hut-oo-N.

rain rain-CON-DIR

p = It is raining.

EV = Speaker has direct evidence of *p*.

b. # ?ami hut-oo-N. jasiga ?aN ?umuw-aN.

rain rain-CON-DIR but so think-NEG

It is raining but I don't think so.

Example (29b) shows that the speaker cannot immediately deny the truth of a proposition that s/he has just expressed in a sentence that makes use of the Direct evidential.

Next, let us consider the past tense.

(30) a. ?ami hut-oo-ta-N.

rain rain-CON-PAST-DIR

p = It was raining.

EV = Speaker has direct evidence of *p*.

b. # ?ami hut-oo-ta-N. jasiga ?aN ?umuw-aN.

rain rain-CON-PAST-DIR but so think-NEG

It was raining but I don't think so.

The awkwardness caused by denying the truth of a proposition that has been expressed using a Direct evidential remains when the past tense is used, as shown in (30b). The examples (29b) and (30b) show that sentences with the direct evidential communicate a high degree of certainty on the part of the speaker.

Now we have to consider whether or not the direct evidential should be considered to belong to epistemic modality because the direct evidential seems to convey the speaker's certainty. In other words, if certain elements convey the speaker's certainty, must we then conclude that these elements should be regarded as epistemic modality? There are two kinds of arguments that suggest it is too soon to come to this conclusion. First, for some languages at least it has been argued that

epistemic modality does not always encode speaker's certainty. De Haan (1999) claims that the notions of evidentiality and modality should be distinguished as two distinct categories: "one, evidentiality, deals with the *evidence* the speaker has for his or her statement, while the other, epistemic modality, *evaluates* the speaker's statement and assigns it a commitment value" (p.25 MS). However, Matthewson et al. (2007) reject this distinction proposed by de Haan, and claim that modal elements do not always encode certainty. For example, they analyze data from St'át'imcets and demonstrate that "marking quantificational strength is not an intrinsic property of modal elements" (2006:2). If their contention is right, expressing speaker's degree of certainty does not prove that this element encodes epistemic modality. Although it is true that their survey provokes a question about how to define epistemic modality, this language-specific case of St'át'imcets would not be strong enough to draw the conclusion that epistemic modality does not have to contain the speaker's degree of certainty.

Second, there is an argument that the element which shows the speaker's degree of certainty does not have to encode a modal value. For example, Faller (2002) states that the direct evidential *-mi* in Quechua appears to encode a high degree of certainty, and this analysis has been supported in the literature;²⁵ however, in fact, *-mi* does not encode a high degree of certainty. Faller (2002:125) states that "*-mi* only encodes an evidential value—which is however not direct in the simple sense—and that the speaker's commitment is a result of the fact that the speaker is making an assertion." This means that a high degree of certainty is expressed in all assertions in standard speech act theory, and therefore, it is not necessary to consider that *-mi* encodes this meaning.

These two perspectives have different grounds; the first argument shows that epistemic modality does not always encode speaker's degree of certainty, and the second one shows that the element that expresses degree of certainty does not have to be considered to be epistemic modality since this value is shared in all assertions. However it follows from both that indicating the speaker's degree of certainty is not a necessary condition for epistemic modality. This suggests that the data from

²⁵ According to Faller (2002:125), "Previous proposals have attempted to derive the speaker's commitment to the truth of the embedded proposition from the evidential meaning of *-mi* (Weber 1986), to derive the evidential meaning from the claim that *-mi* is assertive (Nuckolls 1993), and to recognize both aspects as encoded by *-mi* (Floyd 1999)."

Luchuan presented in (29) and (30) does not require us to conclude that the Direct evidential *-N* in Luchuan should be classified as epistemic modality.

There is one more important argument that suggests that the Direct evidential in Luchuan is not an epistemic modal. In the literature, it has been discussed that modal assertions are weaker than non-modal assertions²⁶ (Papafragou 1998, Radden & Dirven 2007). If the Direct evidential *-N* is an epistemic modal, the assertions with *-N* would sound weaker than the non-modal assertion; however, I will demonstrate that this generalization does not apply to examples in Luchuan. That is to say, a sentence with *-N* does not sound weaker than a sentence without *-N*. Consider example (31).

- (31) a. wain ja Ken ga kooj-u-N.
 wine TOP Ken NM buy-IMPR-DIR
 ‘Ken will buy wine.’
- b. wain ja Ken ga kooj-u-sa.
 wine TOP Ken NM buy-IMPR-FP
 ‘Ken will buy wine.’

Note that the sentences above are different in terms of the use of the Direct evidential *-N* as in (31a) versus the evidentially neutral *-sa* as in (31b). Example (31a) with the direct evidential is not weaker than the one without the direct evidential at all. Rather, example (31a) sounds stronger than (31b).

It should be noted that the Inferential evidential *tee* and the Assumed evidential *hazi* do not behave in the way that *-N* does in (31). Sentences with *tee* and *hazi* sound weaker than sentences without them. That is to say, the meanings of (32a) and (32b) sound weaker than those of the sentences in (32a), in which the Direct evidential *-N* is used. Compared with (31b) with *-sa*, (32a) and (32b) sound slightly weaker.

²⁶ For example, Radden and Dirven (2007:234) compares the modal assertions and non-modal assertions to illustrate that sentences with epistemic modality sound weaker than assertions as in the examples in (i) below.

- (i) a. There is someone living in the house. [strong assertion]
 b. There isn't anyone living in the house. [strong assertion]
 c. There must be someone living in the house. [weak assertion]

(32) a. wain ja Ken kooj-u-ru hazi.
 wine TOP Ken NM buy-IMPR-ATTR ASSUM
 ‘Ken will buy wine.’

b. wain ja Ken ga kooj-u-N tee.
 wine TOP Ken NM buy-IMPR-DIR INF
 ‘Ken will buy wine.’

Considering this fact in addition to the two points above, I conclude that the Direct evidential *-N* is not a type of epistemic modality. On the other hand, the Inferential and Assumed evidentials could convey modal meaning as epistemic modality. I will further show in the following two sections that there is additional evidence in favor of the argument that the Direct evidential *-N* does not belong to the category of modality (2.4.2 and 2.4.3). As for *tee* and *hazi*, I will show in Chapter 3 that they might overlap with the categories of epistemic modality and evidentiality, but their meanings do not contribute to the proposition.

2.4.2 Direct evidentials in negative and interrogative sentences

In this section, I investigate whether or not the Direct evidential can be the focus of negation or questioning. This will allow us to see whether or not the evidential takes wider scope than other grammatical categories including epistemic modality (for example, see de Haan (1999)). In brief, the survey will show that the meaning of the Direct evidential is not negated in negation, and in questions, the meaning of direct evidential is not questioned. In Chapter 3 and 4, I will show that evidential meanings in all three indirect evidentials are not negated nor questioned

The three negation markers *-raN*, *neeN*, and *uraN* contain the phoneme *N*, but this is morphologically different from the Direct evidential *-N*.²⁷ At a glance, the Direct evidential does not seem to appear with any of these negative markers, but it

²⁷ In addition to the synchronic morphological analysis, it is worth noting that historically this *N* in negation is argued to derive from *-nu*, which is a negative marker in Old Japanese (Tsuhaiko 1992), whereas the Direct evidential *-N* is assumed to come from *-m* in Old Japanese, which indicates volition and conjecture (Uemura 1992).

is possible that the Direct evidential *-N* is actually assimilated by the /N/ sound in the negation marker. Consider the examples in (33).

- (33) a. Ken ja koohii num-aN
 Ken TOP coffee drink-NEG
 “Ken doesn’t drink coffee.”
- b. *Ken ja koohii num-aN-N.
 Ken TOP coffee drink-NEG-DIR
 Intended meaning: I have direct evidence that Ken doesn’t drink coffee.
- c. Ken ja koohii num-u-N.
 Ken TOP coffee drink-IMPR-DIR
p = ‘Ken drinks coffee’
 EV= Speaker sees Ken drink coffee every day.

While the sentence apparently without the direct evidential sounds fine as in (33a), sentence (33b) with the direct evidential appearing as a second *N* is unacceptable. However, I should note that the negative sentence without any apparent direct evidential also implies that the speaker has the direct evidence, the same as the positive sentence in (33c).

There are two possible reasons why *-N* does not appear in negation, the second of which is likely to be the more feasible. The first possible analysis is as follows. As I have stated, although sentences such as example (33a) do not have an overt realization of the direct evidential, the sentence conveys that the speaker has direct evidence. This evidential meaning could be considered to be implied rather than being encoded. This phenomenon is similar to what Faller (2002) states for Quechua, although they are not exactly the same. Faller (2002) states that, in Quechua, sentences without the direct evidential are usually interpreted in the same way as sentences with the direct evidential. She claims that sentences without the direct evidential implicate evidential meaning; on the other hand, the evidential meaning is encoded in the sentences with the direct evidential.²⁸ In the same way, it might be

²⁸ Faller (2002:149) proposes “an evidential version of Grice’s second Maxim of Quality to take

possible to consider that sentences like (33a) in Luchuan implicate the direct evidential meaning, while evidential meaning is encoded in sentences with the direct evidential as in (33c). This account about implication could be an applicable to the analysis of negative sentences in Luchuan; however, it is rather complex.

The second hypothesis which I will provide sounds more plausible because of its simplicity. The second possible hypothesis is the proposal that the Direct evidential *-N* actually exists after the slot of negation, but it is omitted because it is phonetically identical to the final consonant immediately after the negative morphemes; “double *N*” is reduced to a single segment. This hypothesis would coherently solve the question why the sentence (33a) without overt evidential marker indicates the same evidential value as (33c), which is the sentence with the Direct evidential *-N*. In fact, there is a similar phenomenon of ellipsis of *-N* as illustrated in (34).

- (34) ?ari ga noocj-a-N Ndi.
 he NM fix-PAST-DIR REP
p= ‘He fixed.’
 EV=Someone told the speaker that *p*

There are two “*N*” sounds in (34); the first *N* is the Direct evidential and the second *N* is the initial consonant of the Reportative evidential. This initial “*N*” of the Reportative evidential is not realized when it immediately follows the sound of “*N*” (Dictionary of Okinawan Language 1963:435); therefore, the initial consonant of “*Ndi*” in (34) is not pronounced, though morphologically it is there. This phenomenon supports the hypothesis I presented above. That is, the Direct evidential *-N* is not realized because of this phonological reason.

There is one more reason why I consider that this second hypothesis is better than the alternative proposal. Consider example (35).

into account that evidence is gradable in terms of strength: ‘Base what you say on the strongest account that evidence available to you.’”

- (35) Ken ja koohii num-aN-ta-N
 Ken TOP coffee drink-NEG-PAST-DIR
p = ‘Ken didn’t drink coffee.’
 EV = Speaker has direct evidence of *p*.

As example (35) indicates, the Direct evidential *-N* appears in a past tense sentence because ellipsis of *N* does not occur due to the existence of *-ta-*. The meaning conveyed by the direct evidential in (35) is that the speaker has direct evidence that the event did not happen (for example, the speaker was with the agent (Ken), and the speaker knows that Ken did not drink coffee). The direct evidential does not scope below negation since the evidential meaning cannot be negated. Considering the fact that none of the indirect evidentials is the focus of negation as I will illustrate in 5.3.2, and the fact that the direct evidential cannot be negated as I have shown above, the generalization that can be made is that none of the evidentials in Luchuan can scope below negation.

Next, I will show that the Direct evidential *-N* appears in interrogative sentences but only in non-past tense. The examples in (36) indicate that evidential meaning is retained even in interrogative sentences.

- (36) a. Ken ga sjuku cukuj-u-m-i?
 Ken NM desk make-IMPR-DIR-Q
 ‘Will Ken make a desk?’
 EV = Speaker expects the addressee to base his or her answer on direct evidence.
- b. Ken ja sjuku cukut-oo-m-i?
 Ken TOP desk make-CON-DIR-Q
 ‘Is Ken making a desk?’
 EV = Speaker expects the addressee to base his or her answer on direct evidence.

c. Ken ja sjuku cukut-ee-m-i?

Ken TOP desk make-RES-DIR-Q

‘Has Ken made a desk?’

EV = Speaker expects the addressee to base his or her answer on direct evidence.

The evidential meaning of *-N* is maintained regardless of the kind of evidential, as illustrated in (36a)-(36c). Since the speaker expects the addressee to base his or her answer on direct evidence, these questions are not appropriate if the speaker doubts that the addressee has direct evidence. In cases where the speaker does not expect the addressee to have direct evidence about the proposition in question, another expression without *-N* would be chosen, as in (37).

(37) Ken ga sjuku cukuj-u-ga jaa.

Ken NM desk make-IMPR-Q FP

‘I wonder if Ken will make a desk.’

Example (37) can be interpreted as a question but it does not always require ‘yes’ or ‘no’ as a reply; therefore (37) is not really an interrogative sentence in the strict sense. However examples like (37) should be used when the speaker does not expect the addressee has direct evidence.

As for interrogative sentences in the past tense, the Direct evidential *-N* does not appear, as demonstrated in (38a).

(38) a. *Ken ga sjuku cuku-ta-m-i?

Ken NM desk make-PAST-DIR-Q

Intended meaning: ‘Did Ken make a desk?’

b. Ken ga sjuku cuku-ti-i?

Ken NM desk make-PART-Q

‘Did Ken make a desk?’

- c. Ken ga sjuku cuku-ti, Miki ga ii cuku-ta-N.
 Ken NM desk make-PART, Miki NM chair make-PAST-DIR
 ‘Ken made a desk, and Miki made a chair.’

Let me briefly explain the constitution of (38b). To be precise, the question marker *-i* follows the participial *cukuti* ‘make’ rather than *cuku-ta-N* (make-PAST-DIR)²⁹ since the past form used in interrogative sentences derives from the participial. The participle is usually used in the sentence, being followed by another clause like in (38c).³⁰ The reason why the Direct evidential *-N* does not appear in the past in interrogatives, even though *-N* does appear in non-past interrogatives, seems to come from the different construction of the sentences rather than for any reason concerning evidentiality. That is, the interrogative in the non-past derives from conclusive forms, while interrogatives in the past are derived from a participle which does not contain *-N*. The fact that *-N* cannot appear in the past tense is congruent with my proposal that evidential meaning cannot be the focus of a question. As a result, we can conclude that the Direct evidential cannot be the focus either of negation or question, just like the other evidentials in Luchuan.

2.4.3 Challengeability test

The relation between evidentials and epistemic modality has been discussed by many

²⁹ The past form ‘*cuku-ta-N*’ (make-PAST-N) is considered to derive from the constituent of the participial ‘*cuku-ti*’ and ‘*-a-N*’ (PAST + Evidential). Chamberlain (1895) hypothesizes that past forms such as *cuku-ta-N* ‘make-PAST-N’ historically derive from the participial and *aN* ‘existential verb’, and it is feasible to consider that the interrogative form of a past sentence was originally the interrogative form of the participial.

³⁰ Uemura (2003:137) explains that the participial can be used in sentence-final position with a meaning similar to the past form. This is true, but usage of this form in the root clause is restricted. It can be used in a sentence as in (ia), which is used without speaker’s direct evidence. On the other hand, (ib) indicates that the speaker has direct evidence. Also, (ia) can be used when the event is still going on. In this sense, these two sentences are fairly different, in addition to the feature that a participial that can be combined with other verbs such as *cjukuti-kara* ‘after making’.

- (i) a. ami nu uhooku hu-ti.
 rain NM much rain-PAST
 ‘It rains a lot.’
 b. ami nu uhooku hu-ta-N.
 rain NM much rain-PAST-DIR
 p=‘It rains a lot.’
 EV= speaker has direct evidence of p.

scholars, as mentioned in 1.5, and I consider that they constitute two different categories. In this section, I demonstrate that these two categories should be differentiated from each other within Luchuan. Although I have suggested that the two indirect evidentials (Inferential and Assumed) may overlap with the category of epistemic modality, because of how they convey the speaker's certainty, I will show that the test which I apply below indicates that they seem not to operate on the propositional level.

With respect to the question of how to distinguish evidentiality from epistemic modality, several tests have been proposed and used by various scholars (see for example, Papafragou 2000, Faller 2002, 2006, Matthewson et al. 2007). Here, I will demonstrate how the tests can be applied to Luchuan since investigating this question in Luchuan using the same criteria that have been applied in other languages may at the least contribute to the typological and theoretical study of modality and evidentiality.

Faller (2002) distinguishes evidentiality from epistemic modality using what she calls the 'challengeability test'. There are some claims in the literature that epistemic modals do not contribute to the truth conditions of the proposition;³¹ Faller demonstrates that the test shows whether or not an element contributes to the proposition expressed.³² The challengeability test is described in (39).

(39) Check whether the meaning of the element in question can be questioned, doubted, rejected or (dis)agreed with. If yes, then it contributes to the truth conditions of the proposition expressed, otherwise, it does not.

(Faller 2002:110)

Let us examine the direct evidential *-mi* in Faller's examples from Quechua. Faller explains that consultants all agree that the only questioned or (dis)agreed part in any of (41a-c) is the proposition that *Inés visited her sister yesterday*, not the source of

³¹ According to Faller (2002:110), "Outside of possible world semantics, it is often claimed that epistemic modals do not contribute to the truth conditions of the proposition expressed, but only comment on it (see, for example, Lyons (1977), Sweetser (1990), Palmer (2001))."

³² Faller points out that the result of the test may look equivocal for epistemic modals; however, this does not indicate that the test is defective, but is rather due to the unclear status of epistemic modality. She presents three arguments to support the validity of the challengeability test. See Faller (2002) for the detailed discussion.

information. This fact shows that this evidential does not contribute to the proposition expressed.

(40) Ines-qa qaynunchay ñaña-n-ta-**n** watuku-rqa-n.

Inés-TOP yesterday sister-3-ACC-**mi** visit-PST1-3

p = 'Inés visited her sister yesterday.'

EV = speaker saw that p

(41) a. Chiqaq-chu.

tre-QUEST

'Is that true?'

b. Mana-**n** chiqaq-chu.

non-**mi** true-NEG

'That's not true.'

c. Chiqaq-**mi**.

true-**mi**

'True.'

Next, I apply this test to a sentence with the direct evidential in Luchuan (42). The test shows that the source of information is not the focus of the question, negation or agreement, just as in Quechua.

(42) Yoko ja cinuu waQtaa jaa Nkai cuu-ta-N.

Yoko TOP yesterday our house to come-PAST-DIR

p = 'Yoko came to our house yesterday'

EV = speaker has direct evidence of p .

(43) a. makutu-i?³³

true-Q

‘True?’

b. ?ar-aN (doo)³⁴

COP-NEG (FP)

‘That’s not true.’

c. makutu ja-N (doo)

true COP-DIR (FP)

‘True.’

When the addressee questions the speaker as in (43a), what is questioned is the proposition that *Yoko came to our house yesterday* but not the source of the information. Similarly in (43b), the addressee negates only the proposition part of the sentence. The source of information is not negated, as the infelicity of the next example shows.

(44) ?ar-aN doo. #?jaa ‘NNd-aN-ta-N.

COP-NEG FP you see-NEG-PAST-DIR

‘That’s not true. You didn’t see (this).’

On the other hand, the proposition expressed is the focus of the negation, as example (45) illustrates.

(45) a. ?ar-aN doo. Keiko nu du cuu-ta-ru.

COP-NEG FP Keiko NM AP come-PAST-ATTR

‘This is not true. It is Keiko who came (to our house yesterday).’

³³ In this sentence, copula *jaN* also can appear such as *ja-m-i?* ‘copula-DIR-Q’, but I chose the simple form with just a question marker attached directly to the predicate “true”.

³⁴ This sentence-final particle is optional but the sentence with it sounds more natural, so I put it in parentheses. Without this sentence final particle, the utterance could sound abrupt but not unacceptable.

- b. ʔar-aN doo. Yoko ja cuu nu ʔasa du cuu-ta-ru.
 COP-NEG FP Yoko TOP today GEN morning AP come-PAST-ATTR
 ‘This is not true. It is this morning Yoko came.’

The speaker of (45a) disagrees with the identification of the person who came to their house, whereas the speaker of (45b) disagrees with the time that Yoko came to their house. As these examples illustrate, the meaning of the direct evidential is not negated; only the proposition is negated.

In the same way, I move on to the sentences with indirect evidentials, which I will examine in Chapter 3 and Chapter 4. I have not yet provided the details about these indirect evidentials; however, let me apply this test to them here so that we can compare them with the results of the Direct evidential. Let us begin with the Inferential evidential *tee*.

- (46) a. Yoko ga juubaN nic-ee-N tee.
 Yoko NM dinner cook-RES-DIR INF
 $p =$ ‘Yoko has cooked dinner.’
 EV = speaker infers p .

- b. makutu-i?
 true-Q
 ‘True?’

The issue is whether or not the inferential meaning is questioned when the addressee replies using (43a), ‘True?’ as in (46b). There are two logical possibilities; first that the proposition that *Yoko has cooked dinner* is questioned, as in (47a), and second that the evidential meaning that speaker infers p is questioned, as in (47b).

- (47) a. Is it true that Yoko has cooked dinner?
 b. Is it true that you infer p ?

It seems that (47b) is not what my consultants intend. But it is difficult to conclude this definitively because neither of the interpretations in (47a) or (47b) seems to be

natural as a response to (46a). That is, in the case of the direct evidential, a response such as (43a) to (42) makes sense because the speaker makes an assertion. The addressee can ask the speaker if the assertion is true or not. But the Inferential evidential already indicates that he/she is not 100% sure as long as inference is involved; therefore, I do not expect the addressee would question the truth of the sentence with the Inferential evidential as in (46b). Therefore, let us try another case, responding with a negation as in (43b). Example (48) is a possible reply to (46a).

- (48) ʔar-aN doo. Keiko nu du nic-ee-ru.
 COP-NEG FP Keiko NM AP cook-RES-ATTR
 ‘This is not true. It is Keiko who has cooked (dinner).’

The use of (48) is restricted to the case in which the speaker of (48) knows the fact that it is Keiko, not Yoko, who has cooked dinner. In this case, the negated part is a proposition, not evidential meaning. On the other hand, when the truth is not known, the speaker would not be able to negate either the proposition or the inferential part. This suggests that the evidential meaning cannot be negated regardless of whether the truth is known or not.

Next, let us investigate whether evidential meaning is challenged or not when the speaker disagrees with utterance (46a), as in (49).

- (49) waN-nee ʔaN ʔumu-w-aN³⁵. Yoko ja ʔicunasa kutu, zoi nar-aN doo.
 I-TOP so think-NEG Yoko TOP busy because at all can-NEG FP
 ‘I don’t think so. Yoko is so busy that she cannot make it.’

The speaker of (49) does not know whether Yoko actually cooked or not; however, he/she disagrees that Yoko cooked dinner based on what he/she knows. This means that the speaker of (49) is again challenging the proposition, and he/she is not challenging the fact that the speaker of (46a) makes an assumption. Therefore, a sentence which challenges evidential meaning, as in (50), cannot follow the sentence which shows disagreement like (49).

³⁵ I had hoped to use the verb ‘believe’ here; but, there is no verb that corresponds to ‘believe’ in Luchuan.

(50) I don't think so. # You did not assume that. You saw that.

In the same way, Faller's challengeability test shows that the Assumed evidential *hazi* also behaves in the same way as the Inferential evidential *tee*.

(51) a. Yoko ga juubaN nic-ee-ru hazi.
 Yoko NM dinner cook-RES-ATTR INF
p= 'Yoko has cooked dinner.'
 EV= speaker assumes *p*.

b. waN-nee ?aN ?umuw-aN
 I-TOP so think-NEG
 'I don't think so.'

The speaker of (51b) is replying to (51a) claiming that he/she disagrees with the proposition, but (51b) does not disagree with the fact that the speaker of (51a) made an inference. This analysis clarifies that evidential meaning cannot be challenged, and that both the Inferential and Assumed evidentials pass the challengeability test.

Next we move on to test the Reportative evidential *Ndi*.

(52) Yoko ga juubaN nic-ee-N Ndi.
 Yoko NM dinner cook-RES-DIR REP
p= 'Yoko has cooked dinner.'
 EV= speaker hears *p*.

(53) a. makutu-i?
 true-Q
 'True?'

b. ?ar-aN (doo)³⁶

COP-NEG (FP)

‘That’s not true.’

c. makutu ja-N (doo)

true COP-DIR (FP)

‘True.’

The addressee in (52) could respond with any of (53a)-(53c); in each case the response would not focus on the evidential but rather on the proposition. For example, the speaker of (53a) is questioning the proposition that *Yoko has cooked dinner*.³⁷ If the sentence is negated, as in (53b), the addressee would have to know that the proposition is not true. The speaker of (54), for example, points out that the proposition expressed in (52) is not accurate.

(54) ?ar-aN doo. Keiko ga du cukut-ee-ru.

COP-NEG FP Keiko NM AP cook-RES-ATTR

‘This is not true. It is Keiko who has cooked (dinner).’

To sum up, the direct evidential and all three indirect evidentials cannot be challenged, and this result shows that all the evidentials in Luchuan do not operate on the propositional level.

³⁶ This sentence final particle is optional but the sentence with it sounds more natural, so I put it in parentheses. Without this sentence final particle, the utterance could sound abrupt but not unacceptable.

³⁷ If the speaker of (52) is notorious as a liar, (53a) might be used to check whether the speaker of (52) has really heard the proposition. But in this case, the speaker of (53a) would doubt both the proposition itself and the source of information. That is, the speaker of (52) is considered to lie in two possibilities: first he/she did not hear that *Yoko has cooked dinner* but he/she hears something different from what is stated, and second, he/she did not hear anything. In the first possibility, the proposition is questioned and in the second possibility, the evidential value can be questioned. In this way, if there is a premise that the speaker is liar, the evidential part may be challenged. But I do not highlight this part because rather, it sounds like a rhetorical question not a typical question.

2.5 Summary

This chapter has explored the definition of the Direct evidential *-N* in Luchuan, adapting the concept of “best possible source of evidence” presented by Faller (2002). After demonstrating in 2.2 that the existing studies of Luchuan cannot provide an account for the evidentiality, I proposed my own analysis based on the conceptual similarities and differences between *-N* in Luchuan and *-mi* in Quechua in 2.3. The Direct evidential *-N* encodes the evidential value that the speaker has the best possible source of information (best evidence) for the type of combination conveyed by the utterance. I use the term ‘direct evidence’ to refer to “direct experience” or “direct perception/sense”. Even if direct evidence is unavailable, *-N* can appear when the best evidence consists of, for example, a report from a participant in the event.

In addition to the concept of direct/best evidence, I have proposed that another crucial factor is whether or not the information falls into the speaker’s territory of information rather than the hearer’s. If information falls into the hearer’s territory of information rather than the speaker’s, *-N* cannot be used. Furthermore, I have shown that the use of *-N* is restricted when it appears with an emotive adjective. The fact that the behavior of *-N* does not show any such restrictions with descriptive adjectives suggests that the concept of evidentiality is important for the use of *-N* with an emotive adjective. The use of *-N* is also restricted when the speaker is talking about encyclopedic knowledge or historical facts. Information to be taken as general knowledge in the culture needs to be marked by *-N*. These facts show that how close information is for the speaker is one of the crucial criteria for the use of the direct evidential in Luchuan.

In 2.4, I explored some theoretical aspects of the relation between the categories of evidentiality and epistemic modality. The Direct evidential *-N* conveys the speaker’s degree of certainty, so it may look as if it belongs to the category of modality; however, I rejected this idea because the meaning which a sentence with *-N* conveys is not weaker compared with the meaning of a sentence without *-N*, unlike epistemic modality. Moreover, I showed that the meaning of the direct evidential cannot be challenged; it cannot be questioned, agreed, or negated. As this pattern is that of an evidential rather than a modal, I conclude that *-N* is indeed an evidential rather than an expression of modality.

Similarly, I argued that the Reportative evidential *-Ndi* is a pure evidential which encodes only the source of information, since it does not convey any epistemic meaning, and also the evidential meaning which it conveys is not challenged. It may be that the Inferential and Assumed evidentials constitute a category where modality and evidentiality overlap. They convey the speaker's certainty, and unlike the case of the Direct evidential *-N*, a sentence with *tee* or *hazi* sounds weaker than a sentence without them. Thus, though the test shows that the Inferred *tee* and the Assumed *hazi* do not contribute to the proposition, since they possess modal features and convey the speaker's degree of certainty, I propose that the Inferential evidential and the Assumed evidential may belong to both categories of modality and evidentiality.

Chapter 3

Inferential and Assumed evidentials

3.1 Introduction

In Chapter 2, I argued that verb forms which contain *-N* should be considered to be the Direct evidential. Direct evidentials indicate that the speaker has the information via direct evidence (evidence such as witnessing the event), while Indirect evidentials indicate that the speaker acquires the information from indirect evidence, such as reported evidence from another speaker or inferred evidence based on the situation or on reasoning (Willet 1988). According to Willet (1988), Indirect evidentials thus include Reported and Inferring,¹ and it is my proposal that Luchuan has both of these evidentials. Furthermore, Willet (1988) divides the Inferring evidential into two kinds, result and reasoning, and again, both these kinds of evidentials can be seen in Luchuan. Typologically, INFERENCE² is based on visible or tangible evidence, while ASSUMPTION is based on evidence other than visible results, such as logical reasoning, assumption, or general knowledge (Aikhenvald 2004: 63). REPORTATIVE is for information reported by another speaker. In this chapter, I will present two Indirect evidentials from Luchuan: (1) Inferential *tee*,³ and (2) Assumed *hazi*. These two indirect evidentials occupy the same morphological slot, directly after the position for evidential (1) in which the Direct evidential *-N* appears. Luchuan's third Indirect evidential, reportative *Ndi*, will be discussed in Chapter 4.

As mentioned in the overview in 2.2.1, the literature mentions one morpheme *-ee-*, which seems to be treated as a marker of indirect evidentiality, though some

¹ The terms 'Reported' and 'Inferring' are used by Willet (1988:57). In regards the discussion of terminology, see Chapter 1.

² Following Faller (2002: 6), I use all capitalized letters for *evidential types* to distinguish them from language-specific evidentials which are expressed with an initial capitalized letter.

³ The basic function of *tee* is to make an inference based on visual evidence, but its use is a little complicated. Sometimes it does not require visual evidence; therefore, it behaves like the assumed evidential. This will be discussed in Section 3.2.

scholars discuss it in the category of modality or aspect. In this chapter, I will point out the problems of treating this morpheme as an indirect evidential (Section 3.2), objecting to the literature. Instead, I will propose that there are two indirect evidentials: *tee* (discussed in Section 3.3) and *hazi*, discussed in Section 3.4. In addition, there is a Reportative evidential, which I will present in Chapter 4. After presenting the basic functions of the Indirect and Assumed evidentials, I will examine the semantic analysis of these two evidentials, focusing on whether or not these evidentials express the speaker's degree of (un)certainty, and how they behave in negative and interrogative sentences.

The purpose of this chapter is to describe the functions of these two indirect evidentials and to discuss whether these evidentials should be categorized as grammatical evidentials. More precisely, I will clarify how these two evidentials behave in negative sentences and interrogative sentences in order to investigate whether or not these evidentials can be negated or questioned. Indirect evidentials are not actually negated nor questioned, which suggests that evidential takes high scope, and in particular, taking higher scope than negation could mean that the evidential does not contribute to the proposition expressed, since negation in general is a part of the proposition. This will support the idea that evidential is different from modality, which contributes to the proposition expressed.

3.2 Indirect evidentials in the literature

Verb forms which contain the morpheme *-ee-* have been characterized as **inferential** in existing studies. For example, Shinzato (1991) states that *eeN* indicates inferential information. Miyara (2002) claims that this observation is not accurate because Shinzato does not give a morphological analysis to clarify which morpheme indicates inferentiality, and argues that inferential meaning is conveyed by the morpheme *-ee-* rather than *-N*. Kudo et al. (2007) state that verb forms which contain the morpheme *-ee-* have an inferential meaning, but they do not clarify whether *-N* should be included as part of the inferential marker. In addition to the lack of morphological analysis, the arguments concerning this morpheme are complicated by the existence of another, homophonous morpheme *eeN*, which expresses resultative aspect. The analysis that there are two homophonous *eeN* forms seems to be agreed among

researchers (Uemura 1963, 1992, 2003, Shinzato 1991, Miyara 2002). Uemura calls this second *eeN resultative aspect*⁴ and the *eeN* which carries an inferential meaning *definite past*. It is used ‘to express a past state/event as something with a certain factual basis’ (Uemura 1963: 75, 2003:145).⁵ It should be noted that Uemura uses the word ‘definite’ instead of ‘inferential’. ‘Definite’ in Uemura’s (1963, 1992, 2003) definition suggests assertion with a certain factual basis, though Shinzato (1991) modified its interpretation and instead uses the term inference.⁶ Shinzato attempts to examine the ambiguity caused by the homophony of these two forms. According to her analysis, when *eeN* appears with a non-first person subject, it can have both inferential and resultative meaning as in (1); on the other hand, when *eeN* appears with a first person subject, it loses the inferential reading and has a resultative reading only, as in (2).

- (1) aree kazjihici nu kusui nud-een.
 the cold of medicine take
 ‘He must have taken cold medicine.’
 ‘He has just taken cold medicine.’

(Shinzato 1991:59)

- (2) wannee kazjihici nu kusui nud-een.
 I cold of medicine take
 ‘I have just taken cold medicine.’

(Shinzato 1991:59)

I do not agree that (1) is ambiguous; my data shows that the inferential reading (“He must have taken cold medicine”) requires in addition the presence of the Inferential evidential *-tee* at the end of the verbal complex. I will set out my claim in 3.3 and 3.4, but first let me briefly outline what other researchers have said. Miyara pointed out the deficiency of Shinzato’s morphological analysis which treats *eeN* as

⁴ Uemura also uses the term completed aspect (2003:89).

⁵ This direct quote is from Uemura (2003), but he made the same claims in 1963 in the Dictionary of the Okinawan Language.

⁶ Based on the claim that *eeN* is used when the speaker reported reliable, objective information (Uemura 1961, 1963; Osio 1985), Shinzato states that “By ‘reliable’ and ‘objective’, they seem to mean that it is a ‘reliable’ and ‘objective’ inference” (1996:56). For this reason, she uses the term inference rather than assertion.

one morpheme, despite the ambiguity; Miyara says instead that the ambiguity should be captured by positing the existence of two distinct but homophonous morphemes (2002:96).⁷ Since investigating morphological analysis in detail is not the main aim of this dissertation, I do not go too deeply into this discussion; however, I agree that resultative *-ee-* is morphologically different from inferential *-ee-*, for three reasons. First, resultative *-ee-* can co-occur with the past tense marker *-ta-*, whereas inferential *-ee-* cannot, as shown in (3). This point is also mentioned in Miyara (2002). According to my morphological analysis, this phenomenon can be easily explained because inferential *-ee-* is a kind of mood marker which appears in a different slot to past tense.

- (3) ʔare-e juubaN kad-ee-ta-N.
 he-TOP dinner eat-RES-PAST-DIR
p= ‘He ate dinner.’
 EV= I saw he finished having dinner (eg. empty plate).
 EV= # I infer he finished having dinner.

As seen in (3), *-ee-* does not have the inferential reading when it appears with the past tense marker *-ta-*. Utterance (3) conveys a resultative meaning only and the direct evidential meaning is contributed by *-N*.

Second, inferential *-ee-* appears neither in interrogatives nor with negation, but resultative *-ee-* can appear in both of these contexts; see (4).

⁷ Miyara claims that the resultative *-ee-* is derived from /+ti a/ (ti + existential verb) (→ [tee]), while inferential *-ee-* is not a derived form. This analysis is different from the traditional approach. In the Dictionary of the Okinawan Language (1963), this form is treated as a compound, composed of the positive basic participle, the topic marker *ja* and ʔaN ‘have’. I do not fully understand what Miyara means by /+ti/ because his gloss is just marked in Japanese *te*, but *a* comes from the existential verb ʔaN ‘be/have’. For his morphological analysis, see Miyara (2000, 2002).

- (4) a. $\text{?are-e juubaN kad-ee-m-i?}$
 he-TOP dinner eat-RES-DIR-Q
 $p = \text{'Has he eaten dinner?}'$
 EV= Speaker is asking if the addressee has direct evidence.
 EV= # Speaker is asking if the addressee infers p .
- b. $\text{?are-e juubaN kad-ee-neeN.}$
 he-TOP dinner eat-RES-NEG
 $p = \text{'He hasn't eaten dinner.'}$
 EV= Speaker sees the evidence of p .
 EV= # Speaker infers p .

Sentence (4a) shows that only a resultative reading is expressed in an interrogative and that in this context, eeN has no inferential reading. Similarly, in a negative sentence, the inferential reading cannot be conveyed and only a resultative reading is available, as (4b) shows.⁸

The third piece of evidence for treating this as a case of homophony between two distinct morphemes is that the two morphemes can co-occur, as sentence (5) shows. The first $-ee-$ has a resultative meaning and the second $-(t)ee-$ expresses irrealis.⁹ The speaker of (5) would use this sentence when he/she acquires the source of information that makes him/her infer the event took place and was completed; for example, it is used when the speaker infers that Kimiko cooked dinner based on visual evidence, in this case, a cooked meal.

- (5) $\text{Kimiko ja juubaN nic-ee-tee-N tee.}$
 Kimiko TOP dinner cook-RES-M -DIR INF
 'Kimiko must have cooked dinner.'

Based on the three differences observed in (3), (4), and (5), I have distinguished “resultative $-ee-$ ” from inferential $-ee-$, which is a kind of a mood marker used in irrealis such as subjunctive. I will refer to sentence final tee in (5) as “the Inferential

⁸ Negative $neeN$ conveys direct evidential reading. This aspect has been discussed in 2.4.2.

⁹ The underlying form of $-ee-$ includes [t] and that this is dropped after any consonant-ending stem.

evidential” (glossed by ‘INF’), distinguishing it from “resultative *-ee-*” (glossed by ‘RES’) and “mood marker *-ee-*” (glossed by ‘M’). The details about these three (*t*)*ee* forms will be discussed again in 3.3.4. The third reason presented in (5)—the co-occurrence of these two morphemes—argues strongly that they are different morphemes. Resultative *-ee-* appears in the slot of aspect, and the other *-ee-* appears in the slot of mood in my morphological analysis in 2.2.2.

Now that I have demonstrated that these two morphemes are different, here let me clarify the terms for these two once again. I will use “the resultative *-ee-*” versus “the irrealis mood marker *-(t)ee-*”. Additionally, there is the Inferential evidential *tee* which I classify as an grammatical evidential, to be discussed in 3.3¹⁰.

In various languages it has been found that perfect and inferential markers are identical in form (Comrie 1976, 2000, Bybee 1994), for example in Bulgarian, Georgian, and Estonian. Although this difficulty has hampered the accurate description of these two forms in Luchuan, I will attempt to distinguish them as much as possible.

What I want to clarify here is that the *-ee-* form which ends with *-N* conveys resultative meaning only. That is, *-N* indicates that the speaker has direct/best evidence, as I have demonstrated in 2.3; therefore I analyze *ee-N* as a resultative plus the Direct evidential, not an inferential, unlike existing studies. However, the mood marker *-ee-* can also occur before *-N*; but only if *-N* in turn is followed by what I am calling the Inferential evidential *tee* in final position. If there is no Inferential *tee* after *-N*, as in example (6), *-sa* appears instead of *-N*. Therefore example (1) above is not actually ambiguous because *eeN* alone, without sentence final *tee*, does not express inferential but resultative only.¹¹ It might appear that I am being rather bold because my claim is quite different from other researchers (Uemura 1963, 1992, 2003, Shinzato 1991, Miyara 2002). However, if we examine carefully, we can see that existing studies do not pay attention to the difference between *-N* and *-sa*. For example, Kudo et al. (2007) presented sentence (6) as an example of inference. In this example the speaker makes an inference based on sensory evidence.

¹⁰ When I cite the data from other authors, I will use their glosses as they originally used. If there are no glosses, I will use my own glosses or capitalized letters such as EE if their meaning is not clear.

¹¹ I assume that the reason for example (1) being treated as ambiguous in the literature is because the Inferential evidential *tee* is ignored, and mistakenly considered as merely a final particle which does not influence the meaning of the sentence.

Context: The speaker smells alcohol in the room.

(6) juubi kumaNzi saki nudeeN / nudeesa jaa.

last night here alcohol drink-EEN / drink-EE SA FP

‘Someone must have drunk here last night.’¹²

(Kudo et al. 2007)

Note that this example includes both *eeN* and *eesa jaa*, separated by a slash. Since they are presented as alternatives, it appears that they should convey the same meaning. However, in fact, *eeN* and *eesa jaa* behave differently when they are used with an adverb which expresses uncertainty such as ‘maybe’ or ‘perhaps’ as shown in (7).

(7) a. ?? ?uukata, juubi kumaNzi saki nud-ee-N.

maybe last night here alcohol drink-RES-DIR

‘Maybe, (someone) must have drunk here last night.’

b. ?uukata, juubi kumaNzi saki nud-ee-sa jaa.

maybe last night here alcohol drink-M-FP FP

‘Maybe (someone) must have drunk here last night.’¹³

As can be seen in (7), the acceptability of these two sentences is different; (7a) with *eeN* sounds awkward, while (7b) with *eesa jaa* sounds acceptable. The difference in acceptability between them indicates that these two expressions should be treated differently. This is the reason why I claim that the distinction between *-N* and *-sa* is important and why it is important to separate the *-ee-* morpheme from *-N* and *-sa*. In fact, there is no example in which an inferential ends with *-N* in Miyara’s data either. Let me briefly explain why *sa jaa* is not treated as an evidential here. There are two reasons. First, *sa jaa* itself does not convey inferential meaning, as illustrated in example (8).

¹² I have assigned this gloss because there is no gloss in original text.

¹³ Although the English translation is awkward because of the epistemic disparity between ‘maybe’ and ‘must’, there is not such awkwardness in the example in Luchuan.

Context: The speaker walks in the room and sees Yoko writing a letter. Then the speaker utters (8) to the addressee (who is not Yoko).

(8) Yoko ja tigami kac-oo-sa jaa.

Yoko TOP letter write-CON-FP FP

‘Yoko is writing a letter.’

The speaker of (8) does not have to do any inference: it is immediately obvious that Yoko is writing a letter in front of the speaker at the time of utterance. I therefore argue that this example demonstrates that *sa jaa* does not encode inference.

Second, *sa jaa* is not a pure evidential, because the inferential meaning that *sa jaa* conveys is cancelable. This is a crucial difference between *sa jaa* and *tee*. These two expressions have a similar meaning, as examples (9a) and (9b) show, but I will also present cases which show that they are different.

Context: The speaker finds dinner is ready on the table. It is the specialty of the speaker’s daughter.

(9) a. Miki ga nic-ee-sa jaa.

Miki NM cook-RES-FP FP

‘Miki must have cooked (the meal).’

b. Miki ga nic-ee-N tee.

Miki NM cook-RES-DIR INF

‘(I infer) Miki has cooked the meal.’

With this context, both examples (9a) and (9b) appear to carry a fairly similar meaning. To use these sentences, the speaker needs to have sufficient information that implies that the meal was cooked by Miki. The speaker of examples (9a) and (9b) is able to infer this because of Miki’s habit, for example, the meal is Miki’s specialty, or Miki cooks every day. Also if the context is restricted, for example, Miki is the only person who has been in the house, (9a) and (9b) are licensed to be used. As examples (9a) and (9b) show, there is a common point between *sa jaa* and *tee*, but the next example shows that they are significantly different. Whereas *eesa jaa* can be used when the speaker sees visual evidence, *eeN tee* cannot.

Context: Speaker sees a cooked dinner on the table.

(10) a. juubaN nic-ee-sa jaa.

dinner cook-RES-FP FP

‘Dinner has been cooked.’¹⁴

b. #juubaN nic-ee-N tee.

dinner cook-RES-DIR INF

‘(I infer) dinner has been cooked.’

The speaker of example (10a) simply states the fact that there is a cooked dinner. It sounds like an objective description of the present situation rather than inference. On the other hand, example (10b) is unacceptable once the speaker sees the evidence. The unacceptability of example (10b) implies that *tee* cannot describe a present situation, without inference, unlike *eesa jaa*. Moreover, the fact that example (10a) is acceptable demonstrates that *sa jaa* does not necessarily convey inferential meaning. That is, the inferential meaning that *sa jaa* conveys is cancelable, depending on the context.

The unacceptability of example (10b) thus suggests that *tee* is purely inferential because it cannot be used when the speaker has visual evidence. This means that the inferential meaning and the fact that the object is observable in front of the speaker conflict with each other, as stated earlier. On the other hand, *eesa jaa* in example (10a) does not give rise to such a conflict because it simply describes the situation. It is true that *eesa jaa* can convey an inferential meaning, as example (9a) indicates. In example (9a), the speaker is certain that the meal is cooked because of the visual evidence; but there is room for inference about who the agent is because the speaker has not seen the meal actually being cooked. Therefore, *eesa jaa* is compatible with an inferential interpretation when the speaker infers who cooked dinner. On the other hand, *tee* always carries inferential meaning, as the unacceptability of example (10b) suggests. Also, when *tee* appears with aspects other than resultative *-ee-*, the sentence always conveys an inferential meaning, as we will see in 3.3.2. Also, inferential

¹⁴ I have used passive for the corresponding translation in English for (10a) because the meaning is closer, but the construction of Luchuan is different from passive.

meaning is always maintained in negation, as we have seen in 3.3.3. This is the reason why I classify *tee* as an inferential. As I have discussed in 1.5, in order to classify an element as belonging to a distinct category of evidentiality, the evidential meaning should not be just a pragmatic implicature (Anderson 1986, Faller 2002, Aikhenvald 2003, 2004). Inferential *tee* always encodes inferential meaning and this meaning is not cancellable.

Given this kind of evidence, why is *eeN* regarded as inferential in the literature (Shinzato 1991, Kudo et al. 2007)? The reason for this is the function of the sentence final particle *tee/dee* (which I will refer to as *tee* from now on.) The investigation of this final particle *tee*, which I call the Inferential evidential, has been neglected but its function is significant. When the Inferential evidential *tee* occurs after *-N*, as in (8), it allows the adverb of uncertainty to co-occur with *-ee-*, which was otherwise not allowed, as we saw in (7a) above. Therefore, it is not a sentence final particle which does not change the meaning of the sentence, but rather, it plays an important role in terms of evidentiality. So, I consider that *tee* which appears after the slot of *-N* is an Inferential evidential. I will discuss this evidential in more detail in the next section.

- (11) ?uukata, juubi kumaNzi saki nud-ee-N **tee**.
 Maybe last night here alcohol drink-M-DIR **INF**
 ‘Maybe (someone) must have drunk here last night.’

Generally the particles which appear in the end of the sentence, an additional element to the verb conjugations, are considered as sentence-final particles which do not contribute to the meaning expressed. Although the study of sentence-final particles in Luchuan has been neglected, Japanese sentence-final particles have attracted a lot of attention lately, being classified as a part of modality. According to Nitta (2003:239), ‘communicative attitude modality’ possesses a dialogical feature which expresses the way that speakers try to convey information to hearers. This communicative attitude modality is realized by sentence-final particles such as *ne* and *yo* in Japanese. This function seems to be a cross-linguistically unique and distinct feature found in Japanese (Masuoka 1991:92). Masuoka (1991:93) states that the meaning which sentence-final particles conveys does not contribute to the proposition expressed, and therefore the content of the proposition is not changed regardless of whatever

communicative attitude modality is expressed by sentence-final particles. Because this observation has been applied to studies of Luchuan, sentence-final particles have been omitted from the data in the literature; they are simply considered not to influence the grammaticality of the sentences. For instance, Kudo et al. (2007:156) explicitly state that sentence-final particles such as *doo* are frequently used in actual discourse, but they are omitted from the data because sentences are still grammatical even without them; although when sentences do not sound natural without them, they are to be included (such as *sa jaa*).¹⁵

In this way, sentence-final particles are not examined consistently; sometimes they are included and sometimes not. This omission causes serious error. As I have shown above, although sentence (7a) without *tee* is grammatical, as Kudo et al. state, it nevertheless expresses a different meaning from sentence (11) which does contain *tee*. In the same way, according to Miyara (2002:91), the sentence-final particle *doo* which Kudo et al. omit from their data is reported to play an important role in changing the meaning of the sentence.¹⁶ The important point is not only whether a certain component decides grammaticality or not but also whether its presence or absence changes the meaning of the sentence. For this reason, although sentence-final particles are regrettably often omitted, they should never be neglected. I assume that it is this mistake which allows for an analysis of *eeN* as inferential. To be precise, basically the mood marker *-ee-* cannot occur with *-N*, unless *-N* is in turn followed by the inferential evidential *tee*. As a result, sentences with *-ee-* followed by *-N* alone can only be interpreted as resultative.

Let us briefly summarize what we have discussed so far. I introduced the studies in the existing literature which claim that there are two *ee(N)* forms; namely one with a resultative interpretation, and one with a mood interpretation which also carries the meaning of inference. I claim that *-eeN* without *tee* is a resultative, and that the inferential meaning should be expressed by either the Inferential *tee* or *sa jaa*. These two expressions usually do not appear with a first person subject since speakers are basically supposed to know what they did. Thus, *tee* cannot be attached after

¹⁵ Kudo et al. call *sajaa* a sentence-final particle, but *-sa* in *sajaa* should not be regarded as a part of a sentence-final particle because, as we have seen in 2.2.2, this morpheme appears in the same slot as *-N*. If the morpheme *-sa* is omitted, the sentence will be ungrammatical. Thus, as *jaa* can be omitted, only *jaa* should be considered as a sentence-final particle.

¹⁶ Miyara (2002) claims that there are cases where unacceptability can be recovered by assigning the sentence-final particle *doo*.

resultative *eeN*, as in (12b), and *sa jaa* also sounds unnatural, as in (12c).

- (12) a. waNnee juubaN nic-ee-N.¹⁷
 I-TOP dinner cook-RES-DIR
 ‘I have cooked.’
- b. #waNnee juubaN nic-ee-N tee.
 I-TOP dinner cook-M-DIR INF
 ‘I must have cooked.’
- c. #waNnee juubaN nic-ee-sa jaa.
 I-TOP dinner cook-RES-FP FP
 ‘I must have cooked.’

But in a situation in which a speaker has completely forgotten what he or she did, which is unlikely to happen often, but is not inconceivable, speakers can infer what they did. That is, the acceptability of (12b) and (12c) is contextually determined.

In this section, I have argued that when *-ee-* is followed by the Direct evidential *-N* alone, it can only be interpreted as resultative. When *-ee-+N* is in turn followed by the Inferential evidential *tee*, or when *sa* occurs instead of *-N*, the mood marker *-ee-* can appear. In this section, I have demonstrated how my position toward the analysis of the inferential evidential differs from what has elsewhere been proposed in the literature. In the next section, I will present what I consider to be the Inferential evidential and discuss its semantic and syntactic functions. Then, I will move to the Assumed evidential in 3.4.

3.3 Inferential evidential *tee*

I have mentioned this morpheme in section 3.2, in the section providing the literature review. I argued that the basic meaning of *ee+N* in the absence of a following *tee* is resultative. In this section I will closely examine the function of the Inferential

¹⁷ This sentence sounds more natural with the sentence final particle *doo*, but in order to avoid confusion I will not include it in the example when it does not change the meaning.

evidential *tee*. The main points that I will examine in order to clarify the function of *tee* are as follows:

- (1) What kind of evidence licenses the use of *tee*
- (2) How *tee* interacts with aspect/tense and the direct evidential *-N*
- (3) Whether *tee* can appear in negative or interrogative sentences
- (4) Reasons for classifying *tee* as an evidential

Point (1) concerns the description of the semantic features of *tee* and points (2) and (3) concern its morphological or syntactic properties. The last point (4) gives the arguments in favor of classifying *tee* as an evidential. The more complex conceptual issue of whether expressions conveying indirect evidence should be classified as evidentiality or modality will be discussed in Chapter 5.

In the existing literature, *tee* has been neglected because, as explained in section 3.2, it is often assumed to be a final particle which does not contribute to the meaning of the proposition.¹⁸ However, this assumption is not justified when evidentiality is taken into account. This particle requires analysis because without it, sentences express resultative aspect, but with it, they express inferentiality.

3.3.1 What kind of evidence licenses the use of *tee*

The first thing that needs to be done is to introduce the primary types of evidence that license the use of *tee*. After that, the other more marginal types of evidence will be introduced. First, the primary usage of *tee* is to mark information based on visual evidence. Let us begin by considering a simpler example which has one argument, before returning to sentences with two arguments.

¹⁸ Kudo et al. (2007) include this particle in their data, although they note that they generally exclude final particles in their paper. They explain that they include it because sentences sound better with this particle. However, as we will see more than just “naturalness” is at stake, as *tee* contributes evidential meaning.

Context : Speaker sees wet ground and infers that it has rained.

(13) ?ami hut-ee-N tee.

rain rain-RES-DIR INF

p = 'It has rained.'

EV = Speaker infers p

The speaker of example (13) makes an inference based on visual evidence, wet ground. In this case, the speaker's inference to utterance process can be represented as in (14).

(14) Visual evidence \rightarrow inference \rightarrow utterance

Since the process of inference to utterance illustrated in (14) has to take place for the use of the evidential to be licensed, someone who actually sees it raining cannot use sentence (13). Presenting the situation simultaneously as directly observed and inferred would create conflict. Moreover, the speaker must be able to see a broad area of wet ground; the speaker needs to be sure that the ground is wet because of rain, not because of other reasons, such as somebody watering flowers or washing a car. If the speaker thinks the ground is wet, but it may not be caused by rain, the speaker would use a different form which indicates doubt. Putting all this together, we can say that inferential *tee* can be used when the speaker has sufficient evidence; in the case of (13), wet ground because of rain. In other words, first the speaker should obtain visual evidence and this evidence should be concrete enough to link the cause (rain) and the effect (wet ground).

Next, let us consider an example with two arguments, as in (15). The speaker's inference process to utterance is basically the same as (14), but when the agent is animate, naturally the inference process is a little complicated because the number of choices increases.

(15) Yoko ga juubaN nic-ee-N tee.

Yoko NM dinner cook-M -DIR INF

p = Yoko has cooked dinner.

EV = Speaker infers p . (based on visual evidence of cooked meal)

In the case of (15), it is certain that dinner is ready since it is right before the speaker's eyes. It is, in fact, unnecessary that the speaker directly sees the object - in this case, 'dinner' - he or she can use *tee* based on other evidence, as long as the evidence indicates that the event definitely happened. For example, if there is a cake tin which has remains of cake in it, this information is sufficient to infer that someone has baked a cake. If the speaker sees an opened packet of flour or an eggbeater with a piece of dough, resultative aspect cannot be used because this situation implies that somebody is baking a cake, but not that the activity is completed, an important element of resultative aspect. In order to use resultative aspect with the Inferential evidential *tee*, it is important for the speaker to directly see the object or other evidence that indicates completion of activity. If either type of evidence is available, then the element that requires inference is the identity of the agent. Drawing an inference just by seeing visual evidence is not enough to utter (15). The speaker needs more definitive evidence to combine the visual evidence and the person who cooked it, for example, the dish is Yoko's specialty, or there was only one person in the house who can cook. The combination of the fact that there is a cooked meal on the table and the reasonable grounds which convince the speaker of who cooked the meal is necessary for the use of *tee* with this transitive verb. Because there are these factors, the inference process that leads up to the utterance in (15) can be represented as in (16).

(16) One of the possible paths of deduction underlying (15)

Cooked meal → Who cooked it? → The dish is Yoko's specialty. → Yoko cooked it.

The inference process to utterance in (16) implies that what the speaker needs in order to use the inferential evidential is, first, visual evidence and second, substantial reasons to combine cause (Yoko did it) and effect (cooked meal). This use of inferential *tee*, when the speaker makes an inference based on visual evidence, is the

primary use of this morpheme. However, it is important to note that *tee* is also used with other sensory - auditory and olfactory - senses. A speaker can use *tee* based on auditory information, as in (17), or olfactory evidence, as in (18).

Context: Speaker hears the sound of rain on the roof and infers that it is raining now.

(17) ?ami hut-oo-N tee.

rain rain-CON-DIR INF

p = ‘It is raining.’

EV = Speaker infers *p*.

Context: Speaker smells something which has been burned black in the oven.

(18) jana kazja su-N. nuugara kugarit-oo-N tee.

strange smell do-DIR. something burn-CON-DIR INF

‘(I) smell (something) strange. Something is burned.’

p = ‘Something is burned.’

EV = Speaker infers *p*.

These examples show that the use of *tee* can be licensed not only by visual evidence but also by other sensory input such as sound and smell. Thus, to be precise, *tee* can be used if the speaker has sensory evidence. This feature of *tee* corresponds to the typological semantic parameter of INFERENCE which Aikhenvald (2004) proposes, since it covers visible and tangible evidence gained through perception.

It should be observed that there are also non-primary usages of inferential *tee*. When sensory evidence is not available, another, less dominant meaning of *tee* can be observed. Other available grounds, such as habit, can serve as evidence for inference instead of sensory evidence. Next, I will discuss this usage, which is not common.

Having seen the primary usage of *tee*, we may now turn to investigate what kind of evidence can license the use of inferential *tee* in more marginal cases. I have explained that the primary usage of *tee* is based on visual evidence and also to a lesser extent on auditory and olfactory evidence as in examples (17) and (18) above. In addition to such sensory evidence, I will introduce a less dominant meaning of *tee*.

Context: On the phone, a son says to his mother that there is bread on the table. The mother, the speaker, infers that her own mother came, because she is good at baking bread and sometimes brings it for her grandson (the speaker's son).

- (19) ʔajaa ga muQci-c-ee-N tee
 mother NM bring-come-M -DIR INF
p = 'My mother has come to bring (bread).'
 EV = Speaker infers *p*.

In example (19), the speaker does not have visual evidence but she acquired reported information from her son and makes an inference based on this information and on her knowledge of the habits of the relevant people. The speaker's inference process can be assumed to be as in (20).

- (20) Evidence: Son's oral report → Information: bread is on the table.
 Habit: Speaker's mother likes baking bread and often brings it to her grandson.
 → Inference: Speaker's mother has brought bread.

The ground for the inference is given orally on the phone in example (19). It might perhaps be thought that this reported information could be still considered as a type of auditory evidence since the reported information is input through the auditory sense. However, recall example (17), which I presented as a core case of an inferential based on auditory information. In the context for example (17), the speaker is directly listening to the sound of rain; this is very different from the situation in sentence (19), which does not include the speaker's direct perception of the event. Having considered this difference, it would seem that inference based on reported information and inference based on speaker's direct auditory sense should belong to different levels of evidence. This implies that the marginal meaning of *tee* is not based on sensory evidence, but other evidence such as reported information as in example (19). It is actually more relevant to focus on the point that example (19) is uttered based on the reporter's (speaker's son) visual evidence. When *tee* is used with resultative aspect, sensory evidence is significant regardless of whether it is acquired directly (the speaker's own perception) or indirectly (a third party's perception).

Note that this does not mean that (19) should be marked by the Reportative

evidential. Inferential information is not simply a report of someone's utterance, but the speaker's inference based on someone's report, hence, the appropriate evidential for the context in (19) is the Inferential evidential rather than Reportative.

Consider the next example (21) which shows that the speaker uses *tee* based on reasoning from habitual information when sensory evidence is unavailable. The speaker can use *tee* even though the information he received is written information.

Context: On the departmental meeting agenda, there is a report that someone in the department has to attend a linguistics conference. The speaker infers that Professor Brown will go because his specialty is linguistics and he never misses conferences.

(21) ?ari ga ?ic-u-N tee.¹⁹

he NM go-IMPF-DIR INF

p = 'He will go there.'

EV = Speaker infers *p*.

The information which the speaker of (21) obtains is simply that someone has to attend the conference. He or she infers the proposition that Professor Brown will go based on his or her knowledge about the agent, not sensory information. Again, it might be possible to consider that the information is obtained via visual sensory input because the speaker reads the sentence on the agenda. But this case is to be distinguished from the cases in which speaker sees the result of the event because what the speaker sees is just a written sentence. Just as example (19) should be distinguished from typical auditory evidence, so sentence (21) should be distinguished from typical visual evidence. This example implies that although usage of *tee* frequently requires sensory evidence, sensory evidence is not a 'must'.

It is worth noting that the cases which do not require sensory evidence seem to be observed in non-past basic form more often than in other forms. The non-past basic form expresses future or habitual events. *Tee* is probably allowed to appear without typical sensory evidence when it appears in the non-past basic because an

¹⁹ Luchuan has strict honorific regulations as I mentioned in Chapter1, Section 1.4.2. A honorific expression should be used in sentence (21) if Prof. Brown is elder to the speaker. But since the study of honorification is out of the domain of this dissertation, the sentence in (21) is appropriate as long as the speaker is in the same age group as the referent.

event which has not taken place cannot be perceived.

How does this less dominant usage of *tee* affect the analysis of evidentiality? Typologically an Inferential evidential is based on visual or tangible evidence and an Assumed evidential is based on general knowledge or reasoning (Aikhenvald 2004). According to the typological classification presented by Aikhenvald (2004), the evidential system of Luchuan appears to belong to either the B1 system or the C2 system. Both systems have one Direct (or Visual) evidential but they differ in that the B1 system has two indirect evidentials, while the C2 system has three indirect evidentials. The indirect evidentials which a B1 system possesses are Inferred and Reported,²⁰ and a C2 system also has these two evidentials. In addition to these two Indirect evidentials, a C2 system also has an Assumed evidential. In a B1 system a (Direct, Inferred, Reported) Inferential can cover reasoning in addition to visual evidence. That is, when the system does not distinguish the Inferential evidential from the Assumed evidential, the domain of Inferential can be extended to reasoning, in addition to inference based on visual evidence. On the other hand, in a C2 system (Direct, Inferred, Assumed, Reported), Inferential covers visual or tangible evidence but not reasoning. In languages which distinguish Inferential from Assumed evidential, Inferential does not cover reasoning. Examples (19) and (21) with *tee* appear to be fairly close to reasoning. How we deal with *tee* will affect how we analyze the whole evidential system in Luchuan. I will return to this problem after overviewing two other indirect evidentials. For now, I just claim that *tee* is used primarily based on evidence obtained through the sensory system (visual, auditory, and olfactory), and that less dominant cases as seen in examples (19) and (21) can also be observed. This differentiates it from *hazi*, in that the primary usage of *hazi* is based on general knowledge, as I will examine in 3.4. The question of how *tee* and *hazi* are different will be discussed in 3.4.4.

3.3.2 How *tee* interacts with aspect/tense and the direct evidential -*N*

Now that I have presented the semantic features of *tee*, I will move on to the question

²⁰ The terms “Inferential” and “Reportative” in this dissertation correspond to “Inferred” and “Reported” in Aikhenvald’s terminology respectively.

of how this evidential is used, and in particular how *tee* interacts with aspect and tense. I will pay attention to the problem of how *tee* interacts with the direct evidential *-N* at the same time. Let us start with observing cases of non-past tense.

Context: Yoko is walking. The speaker infers that Yoko is going to school because she is heading in the direction of school, wearing a school uniform.

(22) Yoko ja gaQkoo Nkai ic-u-N tee.²¹

Yoko TOP school to go-IMPF-DIR INF

p = ‘Yoko will go to school.’

EV = Speaker infers *p*.

The non-past form²² can be used with *tee* as (22) indicates. As can be seen, the inference is made based on the visual evidence that Yoko is heading to school wearing her school uniform. The next sentence—(23)—also indicates that *tee* can appear with non-past continuative aspect when the speaker makes an inference based on visual evidence.

Context: Speaker sees black clouds far away and infers it is raining there.

(23) ?ama-a ?ami hut-oo-N tee.

there-TOP rain rain-CON-DIR INF

p = ‘It is raining there.’

EV = Speaker infers *p*.

The speaker infers that it is raining in the area where he or she sees black clouds. Examples (22) and (23) indicate that the Inferential evidential *tee* can be compatible with non-past tense both in imperfective and continuative aspect. Moreover, resultative aspect can be compatible with *tee* as (13) shows.

As we have seen in examples (17) and (18) in the previous section, the Inference evidential can be used based on sensory evidence other than visual. I will not repeat those examples here, but I should point out one interesting point: sensory

²¹ It is more natural to omit the subject or use a pronoun when both the speaker and the hearer know who they are talking about, but I use the person’s name in examples to avoid confusion.

²² Recall that the morpheme *-u-* indicates imperfective aspect as we have seen in 2.2.2. Since non-past tense is unmarked, a sentence like (22) without any tense marker means non-past tense.

evidence other than visual (and auditory and olfactory) is frequently associated with continuative aspect, though *tee* is more typically used with resultative aspect. This is perhaps because an ongoing event can be easily heard or smelled, but it is more difficult to hear or smell a finished event and hence to report it with resultative. Conversely, if a speaker sees an ongoing event s/he typically cannot use the inferential because s/he should instead use the Direct evidential. Thus, when Inferential *tee* co-occurs with continuative aspect, the sensory evidence is typically either auditory or olfactory, whereas when it co-occurs with resultative aspect the sensory evidence is mainly visual.

Note that the question arises: I have claimed that *-N* is a direct evidential marker, but this morpheme also appears with *tee* which I call an Inferential evidential.²³ This issue will be discussed in Chapter 5.

Now let us return to the issue of tense and aspect. The sentences above show that the particle *tee* can be used with non-past tense (basic, continuative, resultative); the next examples show that this particle cannot appear with past tense.

(24) *Yoko ga ?Nz-a-N tee.

Yoko NM go-PAST-DIR INF

Intended meaning: 'I infer Yoko went (there).'

In 2.3.1, I discussed the claim which has been made in the literature that the past form *-a(N)* does not co-occur with the third person (Shinzato 1991), but I demonstrated that *-a(N)* can be used when the speaker has direct evidence. Therefore, the unacceptability of example (24) is not triggered by a problem about the person of the subject. Instead, the reason why example (24) is unacceptable is that *tee* is not compatible with past tense. The next examples support this conclusion:

(25) a. *?ami hut-oo-ta-N tee.

rain rain-CON-PAST-DIR INF

Intended meaning: 'I infer it was raining.'

²³ For the time being, I simply point out that the co-occurrence of *-N* and *tee* indicates that the speaker's inference is based on his/her direct evidence.

b. *ʔami huj-u-ta-N tee.
 rain rain-IMPF-PAST-DIR INF
 Intended meaning: ‘I infer it was raining.’

c. *ʔami hut-ee-ta-N tee.
 rain rain-RES-PAST-DIR INF
 Intended meaning: ‘I infer it has rained.’

As examples (25a)-(25c) show, sentences that contain the past marker *-ta-* cannot also include the inferential marker *tee*. What is the cause of this incompatibility? I consider that *tee* expresses an inference drawn primarily from sensory evidence available at the time of utterance. This is probably one of the reasons why *tee* frequently appears with resultative aspect which describes the result of a past event. The morpheme *-ta-* indicates that the event took place in the past and *-N* indicates that the speaker has direct/best evidence for the event. Thus, since *-(t)aN* expresses that the speaker has direct/best evidence of the event in the past, the co-occurrence of *(t)aN* and the Inferential *tee* makes them conflict with each other.²⁴

I have examined two main points so far; first, inference is basically based on visual evidence; and second, inferential *tee* cannot be used with past tense. As for the issue that the Inferential evidential *tee* appears with the Direct evidential *-N*, I will demonstrate in Chapter 5 that there are no redundancies or contradictions with the double marking of evidentials and that the Indirect evidential seems to take scope over the Direct evidential.

3.3.3 Whether *tee* can appear in negative or interrogative sentences

In this section I will investigate whether *tee* can appear in negative and interrogative sentences. First, let us consider cases of negative sentences. There are three negative

²⁴ In the case of *-N* in non-past, there is no problem for *tee* to co-occur with *-N* as we have seen, but it does not co-occur with a past tense with the direct evidential *(t)aN*. This could suggest that *(t)aN* indicates that the speaker acquired direct/best evidence in the past. However, that implies that tense scopes over the evidential, rather than the other way around. This would be different from what is generally held, namely that an evidential may not take scope under any operator contained within the propositional content. This issue requires further study.

markers in Luchuan, $-(r)aN$, $-neeN$, $-uraN$,²⁵ and all of them can be used with *tee*. Consider the following examples (26) and (27).

Context: Speaker hears that Yoko has a prior appointment at the same time as a party is being held. Speaker infers that Yoko will not go to the party because she always respects her prior engagements.

- (26) ʔaNshee paatii Nkai ʔik-aN tee
 so party to go-NEG INF
p = ‘(Yoko) won’t go to the party.’
 EV = Speaker infers *p*.

The speaker of example (26) makes an inference based on information from another person and also Yoko’s character that she always puts previous appointments ahead of others. Sensory evidence is not necessarily required. The next examples indicate that *tee* can be used with *neeN* and *uraN* as well.

Context: Ryu came back home late and said he was hungry. Speaker infers that Ryu has not eaten dinner yet.

- (27) ʔaNshee naara juubaN kad-ee-neeN tee.
 so yet dinner eat-RES-NEG INF
p = ‘(He) hasn’t eaten dinner yet.’
 EV = Speaker infers *p*.

Context: Speaker hears Ryu laughing in his room. Speaker infers that Ryu is not studying.

- (28) ʔare-e benkyo sh-ee-uraN²⁶ tee.
 he-TOP study do-CON -NEG INF
p = ‘He isn’t studying.’
 EV = Speaker infers *p*.

²⁵ The last sound *N* of these three negative morphemes is synchronically a different morpheme from the direct evidential $-N$. This does not mean that they are diachronically irrelevant but this issue is not included in the purpose of this dissertation.

²⁶ $-uraN$ is connected to continuative aspect. It means the negative form of continuative aspect; compare *judoon* ‘reading’ and *judeeuraN* ‘not reading’ (Uemura 1963:76).

Sentence (27) is a negative form of the resultative with inferential *tee* and sentence (28) is a negative form of the continuative with inferential *tee*. Sentence (27) is based on a report from the subject himself. Sentence (28) is based on auditory information; however, it does not have to be directly perceived by the speaker. That is, the speaker of example (28) could obtain the information that Ryu is laughing from someone else and make an inference based on this information. Hence, as both sentences suggest, evidence of inference could be based on speaker's sensory input but is not necessarily restricted to such sensory evidence.

In considering examples (26), (27), and (28) it is important to observe the scope of negation. The generalization to be made here is that negation never negates indirect meaning but only the proposition: that is to say, negation never takes scope over the inferential evidential. For example, sentence (26) never means "speaker does not infer that Yoko will go to the party". The speaker in fact, does infer a proposition: a negated proposition.

As for the past forms of negative sentences, they are not acceptable. This is unsurprising because *tee* is not compatible with past forms as we have seen in example (24) and examples (25a)-(25c) above.

Concerning the interaction of *tee* and interrogative sentences, the two are incompatible. That is, *tee* cannot appear in interrogative sentences. Even resultative aspect, which is most frequently used with *tee*, cannot be used in interrogative sentences. A question marker cannot be attached either to *tee*, as in (29a), or to *-N* (*-mi*), as in (29b).

(29) a. *ʔami hut-ee-N tee-i?

rain rain-RES-DIR INF Q

Intended meaning: 'Must it have rained?'

b. *ʔami hut-ee-m-i tee?

rain rain-RES-DIR-Q INF

Intended meaning: 'Must it have rained?'

Other kinds of aspect such as continuative or imperfective cannot appear in interrogative sentences with Inferential evidential *tee*. Even rhetorical questions are

not possible. Since there are general properties among all three indirect evidentials including the other two, Assumed and Reportative,²⁷ I will return to this issue in Chapter 5.

3.3.4 Reasons for classifying *tee* as an evidential

As we have already seen, the discussions concerning the inferential in existing studies are rather complicated because—as I have analysed the situation—there are two morphemes *-ee-*, in addition to the Inferential evidential *tee*. In this section, I attempt to demonstrate why I claim the Inferential *tee* should be categorized as an evidential marker but the other two *-ee-* morphemes should not. I use the terms “resultative *-ee-*” and “mood marker *-ee-*” for the sake of convenience, and I refer to final *tee* as “the Inferential evidential”. Table 1, which was presented in Chapter 2, Section 2.2.2, is repeated below.

stem	+aspect	+negation	+tense	+mood	+EV (1)	+EV (2)	+EV(3)
	<i>u</i>	<i>aN</i>	<i>(t)a</i>	<i>(t)ee</i>	<i>N</i>	<i>tee</i>	<i>Ndi</i>
	<i>oo</i>	<i>uraN</i>			<i>(ru)</i>	<i>hazi</i>	
	<i>ee</i>	<i>neeN</i>			<i>(sa)</i>		

Table 1. Morphology of finite verbs

It is generally agreed among researchers that word-internal *-ee-* has these two meanings (Uemura 1963, 1992, 2003, Shinzato 1991, Tshako 1992, Miyara 2002), although their terminologies are different. Miyara (2002) calls one *-ee-* ‘resultative’ and the other ‘modality’ which indicates the speaker’s inference. My analysis is similar to his approach, although to be precise I use the term ‘mood’ not ‘modality’ and also my overall picture of the evidential system is quite different from his analysis since his study focuses on modality not evidentiality.²⁸ According to Shinzato (1991), who points out the ambiguity caused by the homophony of these two forms, either the inferential or the resultative can occur with a non-first person

²⁷ To be precise, the Reportative can appear in interrogative sentences; however in these cases the evidential meaning is not questioned. See section 4.2.3.

²⁸ For example, Miyara (2002) does not discuss the indirect evidentials which are considered in my proposal; *tee*, *hazi*, and *Ndi*.

subject.

In 3.2, I argued that these two morphemes should belong to different categories, for three reasons. First, mood marker *-ee-* cannot co-occur with a past tense marker.²⁹ In other words, when *-ee-* appears in the past tense, it has the resultative reading, not the inferential reading. Second, mood marker *-ee-* appears neither in interrogatives nor with negation. Third, resultative *-ee-* and mood marker *-ee-* can co-occur in a single verb form. Because of these three morphological properties, I consider that these two forms belong to different categories.³⁰

On the other hand, the Inferential evidential *tee* can clearly be distinguished from these two *-ee-* morphemes. It appears at the end of the sentence. The slot in which *tee* appears is not obligatorily filled; sentences are grammatically well-formed without any element occupying this position. *Tee* occupies this slot only when a speaker is conveying inferential information.

Resultative *-ee-*, mood marker *-ee-* and the Inferential evidential *tee* all occupy different morphological slots. Although the Inferential evidential *tee* occupies the slot after *-N* and no morphemes can follow after *tee*, resultative *-ee-* appears in the slot of aspect and mood marker *-ee-* occupies the slot of mood.³¹ That is, both resultative *-ee-* and mood marker *-ee-* share the same characteristic, that they never appear after the slot of *-N*. In this sense, the Inferential evidential *tee* behaves fairly differently from the other two.

Now let me provide an example which contains both resultative and mood maker *-ee-* morphemes in one sentence.

Context: Speaker sees that dinner is ready on the table and found a memo from Kimiko saying that she cooked the dinner before she left.

- (30) Kimiko ga juubaN nic-ee-tee-N.
 Kimiko NM dinner cook-RES-M-DIR
 ‘Kimiko must have cooked dinner.’

²⁹ Miyara (2002) also points out this morphological property to distinguish these two morphemes from each other.

³⁰ Note that the underlying form of resultative *-ee-* and modality *-ee-* should be /tee/ and [t] is dropped after any stem which ends in a consonant.

³¹ When both aspect and mood appear, aspect comes first; stem+aspect+mood+EV(1). For example, *kac-oo-tee-N* ‘write+continuative+mood+direct evidential’.

Example (30) shows that a sentence can contain both the resultative *-ee-* and the mood marker *-ee-* without the word-final *tee* since the speaker is sure that Kimiko cooked the dinner because of the note from the agent herself. It is true that the speaker does not have visual evidence of the action; however, since he/she has a memo from the agent, it is difficult to say that the speaker is making an inference. If there is no memo and visual evidence alone is available, the Inferential evidential *tee* is required, as (31) shows.

Context: Speaker sees that dinner is ready on the table. He/she infers that Kimiko cooked the dinner because it was her specialty.

- (31) Kimiko ga juubaN nic-ee-tee-N **tee**.
 Kimiko NM dinner cook-RES-M-DIR **INF**
 ‘Kimiko must have cooked dinner.’

Example (31) contains both the resultative *-ee-* and the mood marker *-ee-* (as well as the Inferential evidential *tee*). The speaker is certain that dinner has been cooked, but as the speaker does not have direct/best evidence about who actually cooked it, the Indirect evidential *tee* is necessary. So what then does this mood marker *-ee-* convey? Consider how it behaves when the agent is the speaker him/herself. Example (32a) is simple. It conveys resultative meaning. Example (32b) contains both resultative *-ee-* and modality *-ee-*, but note that the use of this kind of sentence is fairly restricted. A possible context is when the speaker completely had forgotten his/her own action and then remembered that the action had already been performed by him/herself basically based on evidence such as a cooked meal. It is awkward to add the Inferential evidential to (32b) as in (32c).

- (32) a. (wannee) juubaN nic-ee-N.
 (I -TOP) dinner cook-RES-DIR
 ‘I have cooked dinner.’

b. (wannee) juubaN nic-ee-tee-N.
 (I -TOP) dinner cook-RES-M-DIR
 ‘(Now I remember) I have cooked dinner.’

c.# (wannee) juubaN nic-ee-tee-N tee.
 (I -TOP) dinner cook-RES-M-DIR INF

The resultative reading with the Direct evidential *-N* in (32a) is perfectly fine because the speaker can have direct evidence for his/her own completed action. If a subject in (32b) is a third person, either the sentence can be used when the speaker remembers the agent’s action which he/she had forgotten; or, the sentence will express an overtone of surprise, as in (33).

Context: The speaker unexpectedly sees dinner on the table and infers that Kimiko cooked dinner.

(33) Kimiko ga juubaN nic-ee-tee-N!
 Kimiko NM dinner cook-RES-M-DIR
 ‘(Surprisingly), she must have cooked dinner.’

Since the speaker of (33) does not have direct evidence about the event, he/she would have to infer who cooked dinner. The mood marker *-ee-* carries inferential meaning in this context since the process of inference is involved, as some existing studies claim. Then, should the mood marker *-ee-* be classified as evidential as well? To recapitulate, I have argued that one of the word-internal *-ee-* forms is a resultative and that the other is a mood marker, and that in addition word-final *tee* is an Inferential evidential. What I need to clarify next are the reasons why I classify them as I do, in particular the grammatical categories they should belong to. Resultative *-ee-* is fairly simple: I consider that this morpheme belongs to aspect. It can appear both in the non-past and past tense. What about mood marker *-ee-*? Does it belong to evidentiality or some other category? I will provide the two reasons why I consider that modal “*-ee-*” should indeed be classified as a mood marker rather than an evidential.

First, this morpheme does not always carry an inferential meaning. That is, it

does not encode inferentiality. Consider the next example (34).³²

(34) namaa hagimoo jasiga Nkasee kusa nu miit-oo-tee-N.

now-TOP bare field but long-ago grass NM grow-CON-EE-DIR

‘The field is bare now but grass used to grow here a long time ago.’

(The Dictionary of the Okinawan Language 1963:75)

According to Uemura (1963) in the Dictionary of the Okinawan Language (1963), this form is used to recall past events or states as substantial facts (p.75). In fact, Uemura calls this form the *definite past*, used ‘to express a past state/event as something with a certain factual basis’ (2003:145). This definition sounds different from ‘inferential’ meaning. Example (34) does not seem to express an inferential meaning; rather, it seems that the proposition is presented as a certain fact. My consultants say that example (34) means that the speaker definitely knows the fact about the past and it sounds as if the speaker is recalling facts from the past; therefore, it does not convey any inferential meaning. If I slightly modify this example by adding the Inferential evidential *tee* at the end of the sentence, as in example (35), the sentence means that the speaker does not have direct evidence.

Context: Speaker sees withered grass and infers that there used to be grass.

(35) namaa hagimoo jasiga mee ja kusa nu miit-oo-**tee-N tee**

now-TOP bare field but before TOP grass NM grow-CON-EE-DIR **INF**

‘The field is bare now but grass used to grow here before.’

Examples (34) and (35) illustrate that *-ee-* which appears in the slot of mood after tense sometimes seems to convey inferential meaning, but that in fact the evidential meaning is not conveyed by *-ee-* but rather by *tee*.

Tsuhako (1992) mentions in passing that *eeN* indicates *irrealis* (p837). Since she does not provide any examples,³³ I can only assume that she means subjunctive, as in example (36).

³² Example (34) is from the Dictionary of the Okinawan Language (1963). I have added the translation and glosses. Since the gloss of *-ee-* is in question, I simply use capitalized EE here.

³³ Tsuhako does not discuss sentences, but only isolated words, such as *kadeeN*, *kadooteeN*, *kanuteeN*, *kadeeteen* using the verb *kanuN* ‘eat’ in the table of conjugation (p.838).

Context: Speaker's son lives at a distance. She cooked her son's favorite food and imagines that if her son were here, he would have eaten lots of it.

- (36) ʔari ga ʔu-teeree, muru kam-u-tee-N tee
 he NM be-if all eat-IMPF-M-DIR INF
 'If he were here, he would have eaten it all.'

It is difficult to say that the best label for *-ee-* is irrealis because this subjunctive meaning is not always maintained, like in example (34) and (35). However, there seems to be a common point among examples (34), (35) and (36) in terms of irrealis, because *-ee-* is used to describe a speculative scene, which is not observable at the time of utterance. In example (34), the speaker recalls a scene of grass growing in the past; in example (35), the speaker infers that grass must have grown in the past; and in example (36), the speaker imagines that her son would eat or would have eaten his favorite food, though he is not there at the time of utterance. Therefore, I have proposed that we should classify this morpheme as an expression of irrealis mood.

One may wonder if this morpheme might be evidential because, for example, in example (35), the speaker makes an inference based on the evidence at the time of utterance such as withered grass. But as examples (34) and (35) do not indicate any source of information, evidential meaning is not always encoded; it is for this reason that I classify *-ee-* as a marker of modality and not evidentiality.

The term 'irrealis' stands in opposition to 'realis;' this distinction has been focused on in discussions of modality (Lyons 1977, Langacker 1987, Palmer 2001). Mithun (1999:173), cited in Palmer (2001:1), states that 'The realis portrays situations as actualized, as having occurred or actually occurring, knowable through direct perception. The irrealis portrays situations as purely within the realm of thought, knowable only through imagination.' This seems to be very close to the contrast between *-ee-* and the past tense marker *-ta-*. That is, the past tense marker *-ta-* portrays situations as actualized, while *-ee-* portrays situations as purely within the realm of thought, knowable through imagination or deducible from the present evidence. Because of this contrastive meaning, these two morphemes exclude each other, and hence might be considered to be differing instances of the same category. While this issue may be worth pursuing, a detailed study of modality lies outside the

scope of this dissertation. At this point, the main point that I wish to establish is that *-ee-* does not belong to the category of evidentiality because an evidential meaning is not always encoded.

The second reason I consider that mood marker *-ee-* should not be classified as an evidential is the slot it occupies. I have claimed that there is one direct evidential *-N*, and three indirect evidentials *tee*, *hazi*, and *Ndi*. The direct evidential appears in the antepenultimate slot, labeled “EV(evidential) 1” in Table 1 in 2.2.2. The three indirect evidentials appear in the final and penultimate slots, labeled “EV(evidential) 2” and “EV (evidential) 3”. Both EV2 and EV3 belong to the indirect evidential, but those that are not in complementary distribution must be assumed to occupy different slots. To make a grammatically well formed sentence, the “EV(1)” slot needs to be filled with some element; but “EV(2)” and “EV(3)” are optional as far as the morphosyntax is concerned; however, these slots also may require to be filled in certain contexts if the utterance is to be felicitous. .

Although I have indicated “mood” following “tense”, in fact, there is no way to determine the relative order of these two categories as they never co-occur³⁴ — as I have just suggested, they should perhaps be considered to belong to the same category, opposed as realis and irrealis, but I will not pursue this hypothesis further here. In either case, the mood marker *-ee-* appears before the evidential (1) slot. If both *-ee-* in the slot of mood and *tee* in the slot of “EV(2)” were to be inferential evidentials, it would be improbable for one of them to appear before the slot of the Direct evidential *-N* and for the other to appear after *-N*. Perhaps this point alone is not a very strong argument for the claim that modality *-ee-* is not an evidential, since the direct evidential also appears in a different slot from the three indirect evidentials and there are two levels of indirect evidentials being divided into “EV(2)” and “EV(3)”. But at least, all three indirect evidentials have in common that they appear after the slot of the Direct evidential; hence, it is somewhat implausible to claim that mood marker *-ee-* and the Inferential *tee* both belong to the same category of evidentiality.³⁵

³⁴ I follow the crosslinguistic order proposed by Bybee et al. (1994) in that languages tend to adhere to a certain order such that suffixes most relevant to the verb are closer to the stem, whereas elements that are less relevant are further distant from the stem. According to this crosslinguistic pattern, tense proceeds mood; therefore, this is the order which I follow.

³⁵ Aikhenvald (2004) claims that in some languages actual evidential markers may not form one coherent category. She states, “The morphemes then occur in different slots of the verbal word,

Before closing this section, I summarize what I have discussed in 3.3, to review the functions of the Inferential evidential *tee*.

- 1) The primary usage of Inferential evidential *tee* is to mark inference based on sensory evidence. Basically visual evidence is preferred, but auditory and olfactory evidence is also possible. In the absence of such sensory evidence, a less dominant usage of *tee*, marking reasoning based on habit, may occur.
- 2) The indirect evidential *tee* can be used with non-past (basic aspect, continuative aspect, and resultative aspect). But it does not appear with any aspect in the past tense.
- 3) The Inferential evidential *tee* appears with the direct evidential *-N*. In this case, it means that the speaker makes an inference based on direct/best evidence.
- 4) The indirect evidential *tee* can appear with negation: in this case the meaning is that the speaker infers that the proposition expressed is negated. This suggests that inferential meaning is out of the scope of negation. Furthermore, *tee* is not compatible with interrogative sentences.
- 5) The reason why *tee* should be regarded as an inferential evidential is because it always carries inferential meaning whatever aspect it co-occurs with. Also, inferential meaning is maintained in negation as well. The primary meaning of *tee* is inference and we should consider that its meaning is encoded rather than merely a pragmatic implicature.

3.4 Assumed evidential *hazi*

In this section I will clarify the functions of *hazi*. First, though, I present the existing state of study of *hazi*. The Dictionary of the Okinawan Language simply states that *hazi* indicates inference and that it generally appears at the end of a sentence (1963:210); however, it is unclear what kind of inference or assumption is involved, or what types of evidence. In the preceding chapters I have pointed out that there is no study that investigates evidentials in Luchuan as a grammatical category. Therefore, as far as I know there is no study that investigates the function of *hazi*.

enter in different paradigmatic relationships with non-evidentials, and have different restrictions on co-occurrence with other categories” (p.80). Based on her analysis, there may be a possibility for the evidential not to have a unitary category.

Tsuhako's work should be mentioned in that she put this form on the list of the verb forms as a conjectural mood (1992:838); however, regrettably, no explanation of this form was presented, only the Japanese translations.

According to The Dictionary of the Okinawan Language, *hazi* is a noun. Therefore, the attributive form of verbs should be used before *hazi*. The attributive form is marked by *-ru*, in contrast to the indicative which ends with the Direct evidential *-N*. When *-ru* appears in the root clause, either the focus particle *du* is required (to make the *kakari-musubi* construction) or else the Assumed evidential *hazi*.³⁶ This construction is a descendant of the *kakari-musubi* rule in Old Japanese (Tsuhako 1992:839). When the adverbial particle *du* is paired with *-ru* in the attributive form, the former is called *kakari-zosi* 'relation opener' and the latter is called *musubi* 'tying conclusion'³⁷ (Shibatani 1990:334). To understand the feature of *-ru*, let us examine an example of the *kakari-musubi* construction before moving on to the survey of *hazi*.

(37) a. ?ari ga **du** ic-u-**ru**.

he NM AP go-IMPF-ATTR

'It is he who will go'

b.*?ari ga **du** ic-u-**N**.

he NM AP go-IMPF-DIR

Intended meaning: 'It is he who will go.'

This construction is considered to denote emphasis³⁸ and the adverbial particle *du* and the attributive form *-ru* are in a relation of agreement. As example (37b) shows, when the adverbial particle *du* follows the nominative case marker, the Direct evidential *-N* cannot be used in the predicate. Generally, the Direct evidential *-N* appears only in root clauses.³⁹ Although the *kakari-musubi* construction may look

³⁶ This particle is sometimes pronounced *ru* in some districts; but I will use *du* to distinguish it from the other *-ru* which appears in attributive form.

³⁷ Shibatani (1990:334-5) introduces these terms, which were proposed by Yamada (1908), but he states that he simply uses the term 'adverbial particles', following the terms used by Sansom (1908).

³⁸ See the *Dictionary of the Okinawan Language* (1963) and Miyara (2002).

³⁹ When the Reportative evidential appears with verbs such as 'say', the Direct evidential *-N* can be embedded in the subordinate clause; however, other than this restricted usage, the Direct

different from a typical root clause, I consider that (37a) is nevertheless a root clause, since there is no subordinate clause, although the subject is focused and the meaning of the sentence is close to a cleft sentence in English, as the translation shows. Once the subject is focused, the attributive form *ru* has to be used. As existing studies suggest, this construction conveys emphasis. More precisely, the constituent marked by *du* is presented as new information, in focus, while the rest of the information is presented as old. For example, in (37a), *ʔari* ‘he’ is new information and the rest of information is presented by the speaker as old: participants know that ‘somebody will go’ and the information ‘who’ will go is newly given information. This observation implies that *-ru* appears to describe presupposed information, information that is shared with all the participants, while on the other hand, *-N* should be used in the matrix sentences, which directly indicate the speaker’s judgement.

The next example in (37) indicates the difference between *-ru* and *-N* more clearly. They show that the Direct evidential *-N* should not be used in embedded clauses, but *ru* must be used.

(38) a. ʔic-u-**ru** Qcu ja ʔu-raN.

go-IMPF-ATTR person TOP be-NEG

‘There is no one who will go.’

b.* ʔic-u-**N** Qcu ja ʔu-raN

go-IMPF-DIR person TOP be-NEG

Intended meaning: ‘There is no one who will go.’

The attributive form *ru* should be used in the relative clause as in example (38a), whereas the Direct evidential *-N* cannot be, as shown in example (38b). The meaning that evidentials convey is related to the speech act, and speech acts are expressed in matrix sentences.⁴⁰ Therefore, *ru* is in complementary distribution with the Direct evidential, in that it can only appear in subordinate clauses.

The *kakari-musubi* construction that I have just outlined is the only other case

evidential is typically used in matrix sentences.

⁴⁰ Aikhenvald (2003:17) points out that evidentials do not appear in subordinate clauses in many languages. It seems that this generalization can also be applied to evidentials in Luchuan.

(apart from its use with *hazi*) in which *-ru* appears in what seems to be a root clause.

I will now turn to investigate the main characteristic feature of the *hazi* construction, which describes the speaker's assumption objectively based on general knowledge or habit. This aspect is fairly different from the primary usage of *tee* which is based on evidence which the speaker can perceive. In the following subsections I present four criteria which correspond to the analysis of *tee* which was provided in 3.3 above. (The second item, relating to how the assumed evidential interacts with the direct evidential *-N*, is omitted because *hazi* does not co-occur with *-N* as we have seen above.)

- (1) what kind of evidence licenses the use of *hazi*
- (2) how *hazi* interacts with aspect and tense
- (3) whether *hazi* can appear in negative or interrogative sentences
- (4) Assumed evidential *hazi* and Inferential *tee*

3.4.1 What kind of evidence licenses the use of *hazi*

It should be noted that *hazi* cannot be used without some kind of evidence. When the speaker is not sure about the proposition, he/she will use another expression, *ga jaa*.⁴¹ The speaker has to have some objective, rational reason for making the statement in order to use *hazi*. Sometimes the grounds are based on sensory evidence, but they do not have to be. Compared with *tee*, sentences with *hazi* sound more objective in that the basis of the assumption is taken to be shared by other people.⁴²

Regardless of how objective the evidence is, it is clear that the speaker needs evidence for his or her assumption. Let us investigate what kind of evidence is required, applying the method described and used in Izvorski (1997). Izvorski analyzes a phenomenon known as the perfect of evidentiality (PE), which expresses a particular evidential category, one which is present perfect or historically derived from the present perfect. Ivorski analyses this phenomenon in a number of languages from various language families and demonstrates that the morphology of the present perfect could be interpreted as a perfect of evidentiality. Izvorski argues that the

⁴¹ Tshako (1992) presents other forms which expresses uncertainty. Uemura (2002) calls them dubitative moods. I do not analyze them in this dissertation because I consider them to be peripheral from the viewpoint of evidentiality.

⁴² This does not mean that *tee* cannot be used when other people share the same evidence with the speaker, but the speaker tends to use *tee* when the inference is based on his or her own sense.

perfect of evidentiality in these languages and the adverbial *apparently* in English share the feature that their indirect evidential interpretations can have both a report and an inferential reading. Since Izvorski's analysis turns out to be very relevant to the data in Luchuan, let me begin by presenting it in more detail.⁴³

Izvorski argues that the use of *must* in an English sentence like (39a) is justified by the proposition *John likes wine a lot*. On the other hand, *apparently* in English cannot be used just knowing that proposition, as shown by the infelicity of (39b). Thus, in English epistemic *must* does not require evidence, just reasoning, while the use of *apparently* does require evidence and mere reasoning is not sufficient license its use.

(39) Knowing how much John likes wine...

- a. ... he must have drunk all the wine yesterday.
- b.# ...he apparently drank all the wine yesterday.

[Izvorski 1997:6]

Izvorski claims that perfect of evidentiality behaves as *apparently* does. That is, the proposition *John likes wine a lot* does not license the use of perfect of evidentiality, as the Bulgarian example (40) indicates.

(40) Knowing how much Ivan likes wine...

- a. ...toj trjabva da e izpil vsičkoto vino včera.
he must is drunk all-the wine yesterday
'...he must have drunk all the wine yesterday.'

⁴³ Izvorski's goals and my primary goal in this dissertation are different because her goals are providing a semantics for indirect evidentials and present perfect to render uniform accounts of tense, aspect and modality while my focus in this dissertation is mainly to describe the evidential systems of a particular language. Also Izvorski analyses PE as epistemic modality while I claim that the evidentials in Luchuan belongs to a category of evidentiality, though some parts may be overlapped with epistemic modals, as I will discuss in Chapter 5.

- b. #...toj izpil vsičkoto vino včera.
 he drunk-PE all-the wine yesterday
 ‘...he apparently drank all the wine yesterday.’

[Izvorski 1997:6]

Example (40a), in which an epistemic modal is used, is acceptable, whereas example (40b), in which a perfect of evidentiality is used, is not acceptable.⁴⁴ Izvorski claims that for the use of English *apparently* or of the perfect of evidentiality in languages where this exists, it is required that there be “some observable result of John’s drinking all the wine, perhaps many empty bottles or someone’s account of the event of drinking” (1997:6). Now let us consider examples of *tee* and *hazi* in Luchuan in the same context.

(41) Knowing how much Taro likes wine...

- a.# ... cinuu Taruu ga wain muru nud-ee-N tee.
 yesterday Taruu NM wine all drink-RES-DIR INF
 ‘(I infer) Taro drank all the wine yesterday.’

- b.#... cinuu Taruu ga wain muru nud-ee-ru hazi.
 yesterday Taruu NM wine all drink-RES-ATTR ASSM
 ‘(I assume) Taro drank all the wine yesterday.’

The fact that examples (41a) and (41b) are judged to be infelicitous suggests that neither *tee* nor *hazi* in Luchuan are licensed to be used just on the basis of the fact that *John likes wine a lot*.⁴⁵ As stated above, Izvorski (1997) claims that the perfect of evidentiality requires either an observable result or someone’s report as the modal base, rather than some knowledge of some proposition from which the conclusion could be inferred.⁴⁶ The modal base for *hazi* can be more moderated than *tee*

⁴⁴ Izvorski gives *apparently* as the translation of PE (perfect of evidentiality).

⁴⁵ The unacceptability of (41) is not due to the fact that the resultative requires the resulting state to persist at reference time, since another tense or aspect such as a simple past or continuative aspect would still be infelicitous.

⁴⁶ There is another example that Izvorski presents to support the idea that *must* can be used without evidence but *apparently* does not allow its use, shown here as (i) and (ii) below.

(i) A: John must have drunk all the wine.
 A’: But I have no evidence for that.

because general or habitual knowledge could be sufficient as its evidence.

The perfect of evidentiality and the indirect evidentials *hazi* and *tee* in Luchuan share the property that both require evidence, not merely reasoning on the basis of some known proposition. The primary meaning of *tee* is based on visual (sensory) evidence; when this primary meaning is not available, other evidence such as someone's report is required to make an inference. Regarding *hazi*, though it does not require sensory evidence, just to know that *Taruu likes wine a lot* is not sufficient. If the speaker knows that there were empty wine bottles in Taruu's room and knows that it is a habit for Taruu to drink a lot of wine every day, in addition to the proposition presented, (41b) would be acceptable. This implies that the speaker has to acquire objective evidence; for example the speaker him/herself finds empty bottles or someone says he/she finds empty bottles, moreover, the speaker is supposed to know some kind of background about the actor's habits in order to draw a conclusion. For example, if the speaker knows that Taruu does not drink alcohol at all because he is allergic to alcohol, neither (41a) nor (41b) could be used even if the speaker sees the empty bottles.

So far we have seen similarities between the perfect of evidentiality as described by Izvorski and indirect evidential *hazi* in Luchuan. But there are also differences. The requirements for the use of perfect of evidentiality are an observable result or someone's report. In the case of *hazi*, as we have just observed, reasoning from habit is also acceptable. As Faller (2002) concisely summed up Izvorski's study concerning this issue, I will cite her summary.

-
- A': (# But I have no reason for believing that.)
(ii) A: Ivan izpil vsičkoto vino včera.
Ivan drunk-PE all-the wine yesterday
'Ivan apparently drank all the wine yesterday.'
A: # But I have no evidence for that.

[Izvorski 1997:7]

Example (i) suggests that the speaker can continue an epistemic statement without evidence for the proposition, however, *must* still requires that the speaker needs to have some set of propositions as a premise for the epistemic inference. On the other hand, as example (ii) shows, the requirement for the use of *apparently* should be accessibility of evidence.

- (42) i. Modal base/indirect evidence: *There are empty wine bottles in Ivan's office.*
 Ordering source: *If there are empty wine bottles in someone's office, that person drank the wine.*
- ii. Modal base/indirect evidence: *Mary says that Ivan drank all the wine.*
 Ordering source: *Normally, Mary is reliable as a source of information.*

[Faller 2002:103]

There are two possible interpretations of perfect of evidentiality; inference based on indirect evidence, or inference based on report, as in (42). The speaker makes an inference based on indirect evidence such as empty wine bottles, according to the ordering source as in (42i). In the case of (42ii), the indirect evidence is Mary's report and the speaker makes an inference based on the ordering source that Mary is reliable. Let us consider whether or not these two types of interpretations apply to the Indirect evidential *hazi* and *tee* in Luchuan. The first one, inference based on visual evidence, can be applied to example (41). If there is visual evidence, such as empty bottles in Taruu's office, the infelicity we have seen in examples (41a) and (41b) would disappear. However, if the indirect evidence is a report by someone, it is unlikely for the speaker to use the Inferential and the Assumed evidentials because s/he would use the Reportative evidential instead. Recall example (19) which I presented in 3.3.1, to explain a less common usage of *tee*. The speaker of example (19) infers that her mother came because her son said that there was bread, which is his grandmother's specialty. In this case, it is possible to use *tee* when the speaker makes an inference based on somebody's report, but as I pointed out there, that case was different from the reportative because the speaker does not utter what is reported by someone. Instead, the speaker makes inference based on the information conveyed by the other person. The difference between examples (19) and (42ii) is that in example (19), the reported information which the speaker acquires is not that *the speaker's son saw his grandmother come* but that he just said that *there was bread*, and the speaker infers that the bread must have been baked by her mother. There is room for inference for the speaker. On the other hand, in the case of (42ii), the information which the speaker acquires is the report that *Mary says that Ivan drank all the wine*. In this context, a speaker of Luchuan would use the Reportative evidential rather than the Inferential evidential.

As it has been discussed, the second interpretation (42ii) that Izvorski presented as available for the perfect of evidentiality does not apply to the use of *-tee* or *-hazi* in Luchuan. If however reported information is part of the basis for inference, as we have seen in example (19), the Inferential and Assumed evidentials, both *tee* and *hazi*, are licensed to be used here.

It should be noted that interpretations (42i) and (42ii) were the cases of the perfect of evidentiality which Izvorski investigated. My example (41) has resultative aspect, which is the closest match in Luchuan to the examples Izvorski uses. Therefore, the interpretation in (42i) is the primary interpretation of resultative aspect with the Indirect evidential, but the interpretations in (42) are not available to all kinds of aspect and tense. In the next section, I will present how the Indirect evidential *hazi* interacts with other aspect and tense.

3.4.2 How *hazi* interacts with aspect and tense

The function of *hazi* is to indicate that the speaker makes an assumption based on his/her knowledge about habit or general knowledge. The assumption has to be based on such knowledge; the use of *hazi* is not licensed merely by the speaker's belief or conjecture. Taking this as given, let us now investigate whether *hazi* can co-occur with all aspects and tenses, beginning with non-past tense. The generalization to be made here is that *hazi* can appear with all kinds of aspect and tense. Basic aspect in non-past tense is used with *hazi*, as in example (43). Imperfective aspect in non-past tense does not require observable evidence, unlike the case of resultative, as we have seen in the previous section, 3.4.1.

(43) Yoko ga ʔic-u-ru hazi.⁴⁷

Yoko NM go-IMPF-ATTR ASSUM

p = 'She will go.'

EV = Speaker assumes *p*.

Sentence (43) can be used when the speaker knows that Yoko will go, for example,

⁴⁷ In actual discourse, the final particle *doo* frequently appears after *hazi* but I will not include it in the data throughout my dissertation to avoid complexity. Even without it, the meaning which the sentence expresses is not changed.

because it is Yoko's habit, or because Yoko is the only one who can go there by car and so on. The speaker can make an inference based on general knowledge or habit. In the previous section we have seen a similar usage that is marginally available for *tee*, but for *hazi*, making an assumption based on general knowledge or habit is the primary usage. As this suggests, the use of the two indirect evidentials partially overlaps; I will discuss the similarities and differences between them in 3.4.4.

The concept of general knowledge or habit is still rather vague, so I will now attempt to provide more details of what kind of evidence *hazi* requires. If the speaker does not have sufficient grounds for his or her assertion, (43) is not appropriate. For example, if the speaker does not know Yoko's habit so well, the speaker would use other expressions (called dubitative mood (Uemura 2002)), like (44) instead.

(44) Yoko ga ?ic-u-ga jaa.

Yoko NM go-IMPF-Q FP

'I wonder whether Yoko will go.'

Sentence (44) implies that the speaker cannot assume anything because he/she does not have evidence, which triggers an assumption. In the next example (45) the assumed evidential appears again with the non-past, but this time with continuative aspect.

Context: Hearer is worried about whether an important document is filled out or not.

Speaker knows that Miki is filling out the document because Miki told the speaker that she would do that.

(45) Miki ga kac-oo-ru hazi.

Miki NM write-CON-ATTR ASSUM

p = 'Miki is writing (the document)'

EV = Speaker assumes p .

As the given context shows, the speaker has evidence that makes him/her assume that Miki must be writing the document. Example (45) is also possible when the speaker makes an assumption based on Miki's habit or Miki's character; that she is reliable or she has a strong sense of responsibility, for example. If the speaker does

not have this kind of information, example (45) would be inappropriate. Again evidence does not have to be a direct report from the agent. A speaker can use sentence (45) if he/she knows Miki's schedule well, as we have seen above.

Next, let us look at example (46) to examine whether or not resultative aspect can co-occur with the Assumed evidential *hazi*. The context is a little different from example (45) according to the difference of aspect.

Context: Hearer is worried whether an important document has been filled out or not.

Speaker knows that Miki has written it because Miki told the speaker that she would do so.

(46) Miki ga kac-ee-ru hazi.

Miki NM write-RES-ATTR ASSUM

p = 'Miki has written (the document).'

EV = Speaker assumes *p*.

The speaker of example (46) makes an inference based on the agent's report which was made before the time of utterance. Recall the examples of resultative aspect which we examined in 3.4.1. There I presented the example of the Assumed evidential *hazi* with resultative aspect in example (41b) and pointed out that observable evidence is required as a primary usage of the resultative with the Inferential and Assumed evidential according to the interpretation in (42i). Thus, the speaker had to have visual evidence such as empty wine bottles. This condition does not hold in example (46); the speaker does not have visual evidence in the context in example (46). This context roughly corresponds to the interpretation of (42ii), that is, where the speaker acquires indirect evidence through reported information. The content of the reported information in examples (46) and (42ii) is different because in the context of example (46), the agent said she would write the document, while on the other hand, in (42ii), a third party (Mary) said that she saw the event happen. However, the generalization to be made here is that both cases share the condition that the speaker makes an inference based on someone's (possibly the agent's) report. Examples (43), (45), and (46) suggest that *hazi*, unlike *tee*, does not require visual or other sensory evidence, but some evidence sufficient for drawing a conclusion is necessary.

Now we move on to the observation of *hazi* in the past tense. Unlike the situation with *tee*, *hazi* can co-occur with all aspects in past tense.

Context: Hearer is worried whether an important document has been filled out or not.

Speaker knows that Miki wrote it because Miki told the speaker that she would do so.

(47) a. Miki ga kac-a-ru hazi.

Miki NM write-PAST-ATTR ASSUM

p = ‘Miki wrote (it).’

EV = Speaker assumes *p*.

b. ?? Miki ga kac-u-ta-ru hazi.

Miki NM write-IMPF-PAST-ATTR ASSUM

Intended meaning : Speaker assumes that Miki wrote (it).

There is no problem in example (47a) but awkwardness is found in example (47b), even though I have just stated that all forms can be used with *hazi* above. It is particularly notable that the morpheme *-u-*, which indicates imperfective aspect with past marker *-ta-*, behaves differently relative to other forms. The morpheme *-u-* can appear with *hazi* but with a different meaning. Consider the next example (48), which contains this combination of *-u-* with *hazi*. (Note that ‘IRR’ is an abbreviation for irrealis.)

(48) Miki jaree kac-u-ta-ru hazi.

Miki be-IRR write-IMPF-PAST-ATTR ASSUM

‘If it were Miki, she would write.’

In example (48) the sentence has an irrealis interpretation, like a subjunctive. In contrast, (49) has no such irrealis interpretation. On the other hand, the speaker of (49) assumes realis. I suppose that this phenomenon is caused by the presence of the morpheme *-u-* because other aspect forms which contain the past tense marker *-ta-* do not convey such an irrealis meaning, as (49a) and (49b) show.

- (49) a. Miki ga kac-oo-ta-ru hazi.
 Miki NM write-CON-PAST-ATTR ASSUM
p = ‘Miki was writing (it).’
 EV = Speaker infers *p*.
- b. Miki ga kac-ee-ta-ru hazi.
 Miki NM write-RES-PAST-ATTR ASSUM
p = ‘Miki has written (it).’
 EV = Speaker assumes *p*.

As can be seen in (49a) and (49b), the speaker assumes the situation in the real world, unlike what is indicated in (48). In both cases, the feature of *hazi* is the same. It constantly expresses the speaker’s assumption, whatever aspect it is combined with. It can also be seen that *hazi* appears with any aspect, but when it appears with imperfective aspect in the past tense, it expresses irrealis meaning. When the event did not actually take place, the speaker cannot have direct evidence. Evidence, for an event which has not actually occurred, would not be accessible. I suppose that this is the reason why (48) conveys irrealis meaning. But since this issue has never been closely investigated,⁴⁸ it should be pursued further. In 6.3.1, I will mention that there are some remaining issues concerning the relation between evidentiality and aspect, providing examples of resultative aspect.

Sentences which contain resultative aspect, as in example (46) and its past form in example (49b), are of course different, but the differences are not well conveyed in the translation. Consider for example (49b), which is the past form of example (46), which I have translated with the perfect ‘have + past participle’; therefore, some people may think that pluperfect ‘had + past participle’ would be suitable for the translation of example (49b). But the meaning of example (49b) is different from the pluperfect, which has two temporal references in the past. Both (46) and (49b) indicate that the speaker assumes that Miki has written the document before the time of utterance, and evidence for this assumption has to be available before the time of utterance. For example, when Miki said she would write the document by that night on that day, naturally the speaker thinks Miki will have

⁴⁸ Miyara (2002:107) mentions similar examples but they do not include *hazi*.

finished it by then. Thus, one minute after hearing Miki's promise, speaker would not use sentence (46) because it is obvious that she has not written the document. Speaker has to wait to use (46) till night comes. When night comes, (46) can be used but not (49b).

When the evidence of the event (in this case, the completed letter) is not available, perhaps because it has been disposed of or lost, resultative in non-past as in (46) cannot be used any longer. In this case, the past resultative as in (49b) should be used. For the usage of (49b), speaker just has to have a clue for deduction in the past, and whether or not the letter exists at the time of utterance is not important.

3.4.3 Whether *hazi* can appear in negative or interrogative sentences

As we have seen in 2.2.2, there are three negation markers, *-aN*, *-uraN* and *-neeN*. *-aN* is used for the imperfective aspect, as in (50a), *-uraN* for continuative aspect, as in (50b) and *-neeN* for resultative aspect as in (50c).⁴⁹

- (50) a Miki ja juubaN kam-aN hazi.
 Miki TOP dinner eat-NEG ASSUM
p = 'Miki will not eat dinner.
 EV =Speaker assumes *p*.

⁴⁹ See the Dictionary of the Okinawan Language (1963:76). When the negative marker *-uraN* is attached to continuative aspect, morphological alternation occurs and *-oo-* is changed to *-ee-* but *-uraN* maintains continuative meaning.

b. Miki ja juubaN kad-ee-uraN hazi
 Miki TOP dinner eat-(CON)⁵⁰-NEG ASSUM
p = ‘Miki isn’t eating dinner.’
 EV = Speaker assumes *p*.

c. Miki ja juubaN kad-ee-neeN hazi.
 Miki TOP dinner eat-RES-NEG ASSUM
p = ‘Miki hasn’t eaten dinner.’
 EV = Speaker assumes *p*.

As the examples above indicate, co-occurrence of *hazi* with the negation of each aspect is possible. Without exception, the scope of negation is inside of the assumed evidential. To use the assumed evidential, speaker must have appropriate information to negate the proposition.

In the cases of negative sentences in past tense, acceptability is parallel to the ones in non-past.

(51) a. Miki ja juubaN kam-aN-ta-ru hazi.
 Miki TOP dinner eat-NEG-PAST-ATTR ASSUM
p = ‘Miki did not eat dinner.’
 EV = Speaker assumes *p*.

b. Miki ja juubaN kad-ee-uraN-ta-ru hazi
 Miki TOP dinner eat-(CON) -NEG- PAST-ATTR ASSUM
p = ‘Miki wasn’t eating dinner.’
 EV = Speaker assumes *p*.

c. Miki ja juubaN kad-ee-neeN-ta-ru hazi.
 Miki TOP dinner eat-RES-NEG- PAST-ATTR ASSUM
p = ‘Miki hasn’t eaten dinner.’
 EV = Speaker assumes *p*.

⁵⁰ Refer to footnote 49 in this chapter.

Examples (50a)-(50c) and (51a)-(51b) illustrate that *hazi* can be used with all forms of negation both in non-past and past tense. We have seen *-uta-* with *hazi* (which has irrealis meaning) in (48) in 3.4.2, but since this combination does not appear in negative sentences, similar examples cannot be found in the cases of negative sentences.

Next, I will move on to the case of interrogative sentences. The survey of the uses of *hazi* shows that it cannot appear in interrogative sentences. In (52a) below, the question marker *-i* is attached to *hazi*, while in (52b) the question marker *-i* is attached to *-ru*, but either case is unacceptable.

(52) a. *Miki ga kac-oo-ru hazi-i.
 Miki NM write-CON-ATTR ASSUM-Q
 Intended meaning : ‘Should Miki be writing (the document)?’

b. *Miki ga kac-oo-ru-i hazi.
 Miki NM write-CON-ATTR-Q ASSUM
 Intended meaning : ‘Should Miki be writing (the document)?’

The unacceptability of sentences (52a) and (52b) illustrates that *hazi* cannot be used in interrogative sentences. Since not all types of aspects with *hazi* are compatible with the question marker *-i*, I will skip other examples of interrogative sentences.

3.4.4 Assumed evidential *hazi* and Inferential evidential *tee*

As we have seen above, the major usage of *hazi* is to mark the speaker’s assumption based on general knowledge or the speaker’s knowledge about the agent (such as agent’s habits or character). On the other hand, the major usage of *tee* is to indicate the speaker’s inference based on sensory evidence. The issues I want to explore in this section are the extent to which these two evidentials are different and what they have in common. If the usage of *tee* were strictly restricted to sensory evidence, it would be simple to distinguish it from the usage of *hazi*. However, as example (21), repeated here as (53), indicates, the speaker is able to use *tee* when he/she has made

an inference based on his/her knowledge about the agent's habit and without sensory evidence.

Context: On the departmental meeting agenda, there is a report that someone in the department has to attend a linguistics conference. The speaker infers that Professor Brown will go because his specialty is linguistics and he never misses conferences.

(53) ?ari ga ?ic-u-N tee. (=21)

he NM go-IMPF-DIR INF

p = 'He will go there.'

EV = Speaker infers p .

In the same context, *hazi* also can be used, as in example (53). The meanings conveyed in examples (53) and (54) are similar, but example (53) sounds a little stronger than (54).

(54) ?ari ga ?ic-u-ru hazi.

he NM go-IMPF-ATTR ASSUM

p = 'He will go there.'

EV = Speaker assumes p .

The fact that both examples (53) and (54) can be used in the same context indicates that the meanings of these two sentences are fairly close. In both cases an inference or assumption is made. The grounds for reasoning could be sensory evidence or knowledge. What then is the difference between them? I believe that the significant difference is that sentences with *tee* have a modal overtone, which indicates speaker's assertive judgement or spot decision, but those with *hazi* do not. This might be the reason why example (53) sounds stronger than example (54). Let me explain why I consider that sentences with *tee* have such a modal overtone.

As I have demonstrated in section 3.3.2, *tee* always indicates the speaker's inference at the time of utterance, because *tee* never appears with the past tense. This fact may not directly imply that *tee* conveys modal overtones; however, it does indicate that *tee* is strongly related to the time of utterance. On the other hand, *hazi*

can be used with the past tense. When *hazi* appears with the past tense, it indicates that the speaker makes an assumption concerning some past event or state; the assumption can be made either at the time of utterance or before the time of utterance.

Tee can also be used in soliloquy while *hazi* does not tend to be used in soliloquy very often. This implies that *tee*, but not *hazi*, expresses the speaker's subjectivity. By contrast, *hazi* sounds as if the speaker makes an assumption for the hearer. Thus, it sounds more objective. There is another feature that distinguishes *tee* from *hazi*, which concerns the co-occurrence of evidentials. That is, *tee* cannot be used with the Reportative evidential, although Direct and Assumed evidentials can. For example, example (53) cannot be used with the Reportative evidential *Ndi*, as in example (55a) but the Assumed evidential can be used with the Reportative evidential, as in example (55b).

(55) a. *ʔari ga ʔic-u-N tee Ndi. (cf.53)

he NM go-IMPF-DIR INF REP

Intended meaning: 'Speaker hears someone infer that Professor Brown will go to the conference.'

b. ʔari ga ʔic-u-ru hazi Ndi. (cf.54)

he NM go-IMPF-ATTR ASSUM REP

p = 'Someone assumes he (Professor Brown) will go there.'

EV = Speaker hears *p*.

Examples (55a) and (55b) do not directly demonstrate that *tee* contains modal element, but they do show that *tee* and *hazi* are different in some ways in addition to the difference of their meanings.

Although it is difficult to draw the firm conclusion that sentences with *tee* have a modal overtone, however here are some suggestions (I assume that this sense of subjectivity comes from the existence of the Direct evidential *-N* rather than *tee* itself.) As I mentioned in Chapter 2, the Direct evidential *-N* tends to indicate the speaker's certainty toward information. I showed that expressing the speaker's certainty could be compatible with expressing evidence; therefore, these two

concepts do not exclude each other. I assume that this modal property of *-N* is reflected in the sentences with *tee* because *tee* always follows *-N*. Therefore, although *tee* and *hazi* can be often used in the same context and their meanings often sound similar, they are different in that sentences with *tee* contain a modal overtone because of the existence of Direct evidential *-N*. Contrastively, *hazi* sounds objective because it does not co-occur with Direct evidential *-N* as we have seen in 3.4 above.

3.5 Whether Inferential and Assumed evidentials express the speaker's degree of (un)certainly

The main purpose of this section is to clarify whether the Inferential and Assumed evidentials really should be regarded as evidential. The question that needs to be answered will be the clear distinction between evidentiality and epistemic modality, since this issue is one of the crucial arguments in existing studies of evidentiality.⁵¹ To pursue this question, in this section, I will present tests which allow us to observe whether evidentiality conveys speaker's degree of certainty, which I applied to the Direct evidential as well in Chapter 2. Also, the question of how all evidentials behave in negative and interrogative sentences to investigate whether they belong to the same category as evidentiality will be discussed in Chapter 5.

To investigate whether the three indirect evidentials encode the speaker's degree of (un)certainly, I attempt to apply the test called Moore's Paradox. Faller (2002) applies this test to Quechua and checks with each evidential whether the speaker can deny the sentence. According to Vanderverken (1990:118), sentences such as 'it is raining and I do not believe it' are "linguistically odd, because their utterances are analytically unsuccessful". First, I will investigate how sentences with the Inferential evidential behave in this paradox.

- (56) a. ?ami hut-oo-N tee.
 rain rain-CON-DIR INF
 p = 'It is raining.'
 EV = Speaker infers *p*.

⁵¹ See Chapter 1, Section 1.5 for the introduction of existing studies.

- b. # ʔami hut-oo-N tee. jasiga ʔaN ʔumuw-aN⁵²
 rain rain-CON-DIR INF but so think-NEG
 # I infer it is raining but I don't think so."

Example (56b) shows that denying speaker's belief just after making an assertion makes the sentence awkward. The primary usage of the Inferential evidential is based on speaker's sensory evidence. It might be difficult to deny sensory evidence while simultaneously making an assertion. The next example is the case of the Assumed evidential.

- (57) a. ʔami hut-oo-ru hazi.
 rain rain-CON-ATTR ASSUM
 p = 'It is raining.'
 EV = Speaker infers *p*.
- b. # ʔami hut-oo-ru hazi. jasiga ʔaN ʔumuw-aN
 rain rain-CON-ATTR ASSUM but so think-NEG
 # I assume it is raining but I don't think so.

Example (57) shows the same result as in the case of the Inferential evidential *tee* above. As I discussed in section 3.4.1, the Assumed evidential is not mere guess but is based on general knowledge or habitual activities or events. Therefore, the speaker's degree of certainty is accompanied by choice of evidential.

Examples (56) and (57) suggest that the Inferential evidential *tee* and the Assumed evidential *hazi* imply the speaker's degree of certainty. Considering the fact that inference or assumption always implies the speaker's degree of certainty, it may be necessary to consider the possibility that these two evidentials overlap both evidentiality and epistemic modality. (I will return to this issue in Chapter 5.)

⁵² Vanderverken (1990) and Faller (2002) use expressions such as 'but I don't believe it.' But as Luchuan does not have a verb 'believe', I substitute the verb *ʔumujuN* 'think' in place of 'believe'.

3.6 Summary

In this chapter, I have presented two kinds of indirect evidentials; Inferential *tee*, and Assumed *hazi*. The primary usage of *tee* is to mark inference derived from sensory evidence. Also as a less dominant usage, when any sensory evidence is not available, *tee* can also be used based on the speaker's general knowledge or habitual knowledge. Concerning the main usage of Assumed evidential *hazi*, the speaker has to have some grounds on which to base his/her assumption, such as general knowledge or habitual knowledge; however, we have seen that the grounds cannot be mere guessing or belief. In this the Inferential evidential and Assumed evidential are alike. However, although they share this feature, they are fairly different in terms of their co-occurrence with tense: the Inferential *tee* cannot appear in the past tense, whereas the Assumed evidential *hazi* can. Lastly, I demonstrated that the Inferential evidential *tee* and the Assumed evidential *hazi* imply the speaker's degree of certainty.

Chapter 4 The Reportative Evidential

4.1 Introduction

The Reportative evidential is used to mark information acquired from another person. A sentence with the Reportative evidential differs from reported speech because the Reportative evidential does not require a lexical verb such as ‘said’ or ‘tell’. Sentences without the Reportative evidential are grammatical sentences; however, using the Reportative evidential is indispensable for Luchuan speakers to clarify that the speaker acquired the information from someone else. Folktales and news are marked by Reportative evidential as well.

It is difficult to discuss how different direct speech and indirect speech is in Luchuan because there is no syntactic agreement of tense or person as there is in English. However, it is obvious that sentences with the Reportative evidential are different from direct speech because the first person ‘I’ cannot appear in the subject position of the embedded clause. I will discuss this in section 4.2.1. Since there is no overt subject as the lexical verbs such as ‘*John* said ...’ or ‘*They* told ...’, sometimes it is difficult to distinguish who is the source of information of sentences with the Reportative evidential. This will be discussed in section 4.2.2.

The Reportative evidential plays a crucial role in demonstrating the conceptual differences between evidentiality and modality because reportative *Ndi* does not convey the speaker’s degree of certainty; it only conveys evidential meaning. In section 4.3, I will demonstrate this, providing the tests which determine whether or not the three indirect evidentials of Luchuan including *Ndi* encode the speaker’s degree of certainty. The Direct evidential tends to be related to speaker’s certainty since obtaining direct evidence contributes to speaker’s certainty. Nevertheless, I have claimed that evidentiality should be separated from modality because it is not cross-linguistically universal for the Direct evidential to indicate the speaker’s certainty (and in fact many languages distinguish them (Aikhenvald 2004)). Also, indicating the speaker’s degree of certainty does not exclude indicating evidentiality.¹

¹ In Chapter 1, in 1.5, I introduced different points of view about whether evidentiality and

The fact that the Reportative evidential *Ndi* carries purely evidential meaning suggests that the concept of evidentiality should be identified as a separate grammatical category. This issue will be discussed in section 4.3.

In this chapter, I will attempt to clarify the functions of *Ndi*, focusing on the following three points:

- (1) What kind of evidence licenses the use of *Ndi*
- (2) How *Ndi* interacts with aspect/tense and the direct evidential *-N*
- (3) Whether *Ndi* can appear in negative or interrogative sentences

Point (1) will be discussed in section 4.2.1 so that we can understand the spheres which the Reportative evidential covers. Points (2) and (3), which clarify the morphosyntactic functions of *Ndi*, will be discussed in sections 4.2.2 and 4.2.3 respectively.

4.2 Reportative evidential *Ndi*

4.2.1. What kind of evidence licenses the use of *Ndi*

The typical usage of the Reportative evidential is to convey “information acquired through somebody else’s report, without any claim about the exact authorship or the speaker’s commitment to the truth of the statement” (Aikhenvald 2004:176-177). The reportative evidential in Luchuan can indeed mark information acquired from someone else with or without explicitly clarifying the source of information. Basically the speaker needs to have obtained the information from someone else apart from the hearer. The information can have as its source the agent of the sentence reporting him/herself or someone else. Let me introduce an example.

modality should be regarded as distinct categories (Faller 2002, McCready and Ogata 2007, and others).

Context : Speaker is explaining who drew the picture.

(1) a. *kunu ii ja Ryu ga kac-a-N Ndi.*

this picture TOP Ryu NM draw-PAST-DIR REP

p = ‘Ryu draw this picture.’

EV = Speaker heard that *p*.

b. *mata gasoriN dee ?agaj-u-N Ndi.*

again petrol price rise-IMPF-DIR REP

p = ‘Price of petrol is going to rise again.’

EV = Speaker heard *p* (from news program).

Example (1a) indicates that the speaker obtained the information that Ryu had drawn the picture before the time of utterance. This utterance can be understood in two ways. The source of the information may be the agent of the action reported² (Ryu in this case), or it may be a third party. In either case, the reportative evidential indicates that the information was reported by someone else. The speaker may have obtained the information directly from the agent or someone else, or alternatively the speaker may have acquired the information indirectly, which means the speaker may just have overheard someone talking to someone else. Also the information can be indirectly conveyed by TV or radio, as example (1b) shows. The reportative evidential is used when the speaker simply wants to show that the information was conveyed by someone.

Reportative can also be used to indicate that the information was handed down as in a folktale, as in example (2).

² If there is another participant in addition to the agent, he/she also could be the source of information. For example, if there are two participants as in example (i) below, either of them (Ryu or his brother in this case) could be source of information.

(i) *Ryu ga ?uQtu Nkai kunu ii ?agi-ta-N Ndi.*

Ryu NM brother to this picture give-PAST-DIR REP

p = ‘Ryu gave this picture to his brother.’

EV = Speaker hears *p* from Ryu or his brother.

(2) [···] kugani nu ʔiQc-oo-ta-N Ndi.

treasure NM put-CON-PAST-DIR REP

‘It is said that the treasure was there (in the box).’ (Folklore)

(Igei 1991:37)

Willet (1988) states that in using a Reportative ‘the speaker claims to know of the situation described via **verbal means**, but may not specify whether it is hearsay (i.e. second-hand or third-hand), or is conveyed through folklore’ (p96). Since examples (1a), (1b) and (2) are all marked by the Reportative evidential *Ndi*, this suggests that the Reportative evidential in Luchuan does not specify whether it is hearsay or through folklore.

Before carrying forward the investigation of the Reportative, it might be helpful to clarify what second-hand and third-hand information refers to. According to Willet (1988:96), when the speaker obtains information from someone who was a **direct witness**, this information is regarded as second-hand evidence. With third-hand information, the speaker has heard about the situation from someone who is not a direct witness. While the distinctions presented by Willet appear to be clear enough, this generalization does not cover the case of example (1a). More precisely, as I have mentioned, the information source of example (1a) can be the agent himself or someone other than the agent. If the speaker obtains the information from someone other than the agent, who is a direct witness, Willet’s definition can be applied without any problems. However if the information source is the agent himself, it is not clear whether this information should be regarded as second-hand evidence or not. In other words, the issue is whether ‘direct witness’ should include the agent him/herself.

To discuss this issue, let us quickly review what ‘direct evidence’ is. In the literature, when the speaker claims to have perceived the situation described, it means he/she has direct evidence³ (Willet 1988:96). Also Aikhenvald (2004:26) states that ‘the first-hand term typically refers to information acquired through vision (or hearing, or other senses)’. Considering these definitions of first-hand, it will be reasonable to regard direct experience as first-hand or direct information.

³ The speaker may or may not specify that it is sensory evidence of any kind: visual, auditory or sensory evidence (Willet 1988:96).

Considering the agent to have direct evidence as direct perceivers, a slight revision of Willet's definition for second-hand evidence is required. That is, to mark second-hand evidence, a speaker should obtain the information from a person who has **direct evidence**, which refers to "direct experience" or "direct perception/sense" as was defined in Chapter 2. Recall that in Chapter 2, I used the term 'best evidence' as shorthand for "best possible ground" in Faller's terminology. Best evidence contains both direct evidence and the more indirect cases. So, note that what I call direct evidence here is not equivalent to best evidence, since direct evidence is limited to direct experience or direct perception in my definition.

Let us return to example (1a) with this definition for second-hand evidence in mind. In cases where the speaker has second-hand evidence, this means that he/she has obtained information from someone who has direct evidence. The speaker of (1a) must have heard of the situation described from either the agent himself or someone who witnessed the event, namely from Ryu, or the person who saw Ryu drawing the picture. Then, in cases where the speaker has third-hand evidence, he/she is understood to have got the information from someone who does not have direct evidence.

We have now discussed the clear definitions of the terminology and I have explained that the Reportative evidential *Ndi* in Luchuan covers second-hand evidence, third-hand evidence and folktales as well. Now, let me specify that the reportative *Ndi* does not distinguish reported information from quotative information. Some languages have two reported types of evidential, "reported" and "quotative": the former states what someone else has said without specifying the exact authorship, while the latter specifies the exact author of the quoted report (Aikhenvald 2004:177). The Reportative evidential *Ndi* in Luchuan covers these two usages, so there is not a special marker for quotative. For example, in case of example (1), when the speaker means the first-hand evidence is Ryu himself, (1) specifies Ryu as the author of the quoted report; therefore, *Ndi* in this case behaves as a quotative. On the other hand, when the speaker means that Ryu in (1) is the agent of drawing the picture but not the author of the quoted report, *Ndi* in this case serves as a reported because the author of the report is not specified.

As we have seen, the Reportative evidential *Ndi* can be used to mark information acquired orally. Now I will introduce the extended usage of *Ndi*, which

marks information acquired from a source other than a third party's report.

Context: Speaker is reading a newspaper. He has found a controversial article and reports the content to the hearer.

- (3) Ucināa nu sango ja zikoo ʔikiraku nat-oo-N Ndi.
 Okinawa GM coral TOP much reduce be-CON-DIR REP
p = 'Coral reefs in Okinawa are dying away.'
 EV=Speaker reads that *p*.

The examples of the Reportative evidential which we have seen so far have in common that all the information sources are hearsay. However, example (3) is different from these other examples of the Reportative evidential, in that the information source is written sentences⁴ not oral report. The speaker of example (3) cannot omit the Reportative evidential marker. If the sentence ends without the Reportative evidential, the Direct evidential marker *-N* appears at the end of the sentence, and the wrong meaning would be conveyed, namely that the speaker has direct evidence.

As example (3) illustrates, the secondary usage of the Reportative evidential is to mark information acquired through verbal means. This demonstrates that the crucial condition for the use of the Reportative evidential is that the information is conveyed through the use of language; it does not matter whether the medium is speech or writing. Since the source of information does not need to be restricted to information which is obtained orally, example (3) is licensed to be marked with the Reportative *Ndi*. That is, a speaker can use the Reportative evidential to indicate that he/she has acquired the information through the use of language. The following examples further illustrate this property of *Ndi*.

⁴ Newspapers issued in Okinawa are written in standard Japanese not Luchuan, though there is a "newspaper" in Luchuan issued by the organization which takes action to preserve Luchuan. There may be other similar newspapers but the newspapers read by the majority in Okinawa are basically written in Japanese.

- (4) a. kuma maQsugu ja-sa.
 here straight COP-FP
 ‘Go straight here (to get to the station).’
- b. kuma maQsugu (ja-N) Ndi.
 here straight (COP-DIR) REP
p = ‘Go straight here (to get to the station).’
 EV = Speaker heard *p*.

Suppose the speaker is looking at the map to find out how to get to the station. She can use example (4a) to tell this information to her companion when she has found the directions. In such a context, the Reportative *Ndi* cannot be used. Instead, the speaker would choose *-sa*, which marks objective information.⁵ On the other hand, if the speaker gets the information through the use of language, whether from someone else or through written information, the Reportative evidential should be used, as in example (4b). Examples (4a) and (4b) demonstrate that the use of language is an essential factor for the Reportative.⁶

Next, I will introduce an important feature which demands attention when investigating the reportative. The obligatory usage of *Ndi* can be suspended in a particular situation. Consider the next example.

⁵ *Sa* appears in the same slot as *-N*. For morphological analysis, see section 2.2.2. According to the Dictionary of Okinawan Language (1963), this suffix is used to slightly emphasize the statement. Uemura (1961) also states that this suffix is used to objectivize the information. In other words, I believe that *-sa* is used to mark objective information which could anchor both speaker and hearer. Contrastively when information belongs to the speaker, the Direct evidential *-N* tends to be used.

⁶ To be precise, it is possible to use the Reportative as long as the ‘utterance’ is a part of communication. For example, in babies’ pre-speech period, ‘utterance’ such as crying or murmuring can be regarded as a deliberate use of symbol through the use of language. A mother can say that *the baby is hungry* with Reportative if she understands that that is what her baby is trying to tell her. The same thing can be applied to the case of animals such as a dog or cat. If the speaker understands that they are trying to communicate through animal call, it could be regarded as a primitive use of language. Thus the Reportative could be used in such circumstances.

Context: Mother learned that her son, Ken passed the entrance exam. She tells this information to her husband.

- (5) Ken ja gookaku s-a-N.
 Ken TOP pass do-PAST-DIR
p = ‘Ken passed the entrance exam.’
 EV = Speaker has direct evidence of *p*.

Since example (5) is marked by the Direct evidential *-N*, it means that Mother conveys the news as something for which she has direct evidence.⁷ This usage is the normal one that we have already seen illustrated. Let us consider the next example. The context is related to the previous one.

Context: Ken’s father, Tatsuya, receives a phone call from his wife at work and learns that Ken passed the entrance exam. One of his colleagues sees Tatsuya’s happy face and asks what has happened. To answer the question, Tatsuya would say:

- (6) Ken ga⁸ gookaku s-a-N Ndi.
 Ken NM pass do-PAST-DIR REP
p = ‘Ken passed the entrance exam.’
 EV = Speaker heard that *p*.

Reportative *Ndi* is used in example (6) because the speaker acquired the information from a verbal report. This series of actions – receiving the phone call and answering the colleague’s question – should take place in an immediate sequence. If a certain amount of time passes, curiously, reportative *Ndi* should be omitted. Consider (7) for an example of a slightly different situation.

⁷ If Mother obtained this information from someone else, she would use Reportative *Ndi* after *-N*. If she directly finds her son’s pass at school or on a website, she will use the Direct evidential as in (5).

⁸ I have changed the topic marker *ja* in (5) to the nominative case marker *ga* because it sounds more natural in the case of example (6). But the topic marker can also appear in example (6) without changing the grammaticality of the sentence. The reason why the nominative case marker sounds better is probably that the nominative case marker marks new information and the topic marker marks old information, like their counterparts in Japanese. In example (5), *Ken* is known information between Ken’s parents; on the other hand, *Ken* is newly introduced information in example (6). Functions of the nominative case marker and topic marker in Japanese and those in Luchuan seem to share some properties. See Kuno (1973) for analysis of Japanese.

Context: Ken's father, Tatsuya heard that Ken passed the entrance exam. On the next day, Tatsuya's colleague asks if Ken passed the exam. Tatsuya will answer this question as follows.

(7) Ken ja gookaku s-a-N.⁹

Ken TOP pass do-PAST-DIR

p = 'Ken passed the entrance exam.'

EV = Speaker has direct evidence of p .

Although Ken's father Tatsuya uses the Reportative in example (6), on the other hand, he would not use Reportative in example (7) even though he is conveying the same information, only after some time has passed. Why can the speaker use the Direct evidential, despite the fact that he actually obtained the information through other's report? To solve this problem, two concepts need to be introduced: first, the concept of **assimilation** and second, the concept of 'the territory of information'.

Faller (2002) discussed similar examples of Quechua making use of the concept of assimilation developed by Aksu-Koç and Slobin (1986). According to Aksu-Koç and Slobin, there are two past tense forms in Turkish, *-dı* and *-miş*. The verb suffix *-dı* marks direct experience and *-miş* marks indirect experience, which covers inference, hearsay, and surprise. Aksu-Koç and Slobin (1986) explain that a significant property which differentiates between the use of these two past forms is whether the speaker is well prepared or unprepared. Their examples show that even hearsay can be marked as direct experience by *-dı* when the speaker is well prepared for the event. However, when the speaker's mind is unprepared, the indirect experience marker *-miş* should be used to mark the information. Aksu-Koç and Slobin (1986) provide the examples of two resignations: Nixon's resignation, which people were prepared for, and the Turkish premier's resignation, which people were unprepared for. When people learned Nixon's resignation through the news media, it was natural for them to report the event using *-dı*, which indicates direct experience, but when the Turkish premier Bülent Ecevit suddenly resigned, there was no choice to report the event using *-miş* because it was totally unexpected. But as the news of

⁹ In natural discourse, the phrase "Ken ja" is normally omitted because Tatsuya's colleague asks a question using Ken's name. In Luchuan, when both speaker and hearer have clear understanding of what or whom they are talking about, that part is often omitted. But I intentionally left this phrase as it is because this omission is irrelevant to the omission of the Reportative evidential.

the resignation of the Turkish premier was gradually acknowledged as time went by, *-di* came to be used. These examples indicate that hearsay information can be marked by a direct experience marker once the information is assimilated after a certain period, and it takes time for the unprepared mind to assimilate the information.

In Quechua, the direct evidential¹⁰ cannot be used to describe an unassimilated event. Faller (2002:136) states that “claiming authority over a piece of encyclopedic information requires that that piece be assimilated in the sense that it must be connectable to a network of related beliefs”. Therefore, Quechua *-mi* for encyclopedic information¹¹ cannot be used unless the information has been assimilated. Faller also points out that assimilation seems to be relevant to mark personal information. Examples (8) in Quechua are cited from Faller (2002).

(8) a. Tura-y-qa Italia-pi-s llank'a-sha-n kay semana-pi
 brother-1-TOP Italy-LOC-**si** work-PROG-3 this week-LOC
p= ‘My brother is working in Italy this week.’
 EV= speaker was told that *p*

b. 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
p= ‘My brother is working in Italy this week.’
 EV= speaker has best possible grounds for *p*

(Faller 2002:139-140)

The background of these examples is that speaker’s sister tells the speaker on the phone that her brother was sent to Italy on assignment for a week. If the speaker wants to tell this news to someone shortly after finishing the phone conversation, she would have to use example (8a) with the Reportative *-si*; on the other hand, if she wants to convey the same information to someone the next day, example (8b) with direct evidential *-mi* can be used. The evidence for examples (8a) and (8b) is the same, but the difference is whether the information has been assimilated or not.

¹⁰ As we have seen, in Faller’s terminology, the direct evidential in Quechua is called ‘*best possible grounds*’.

¹¹ Encyclopedic information is information “which includes knowledge that is taken for granted within a culture, and knowledge that is typically taught in school or found in encyclopedias” (Faller 2002:133).

Faller provided an alternative explanation for the acceptability of example (8b) using the theory called *territory of information*, proposed by Kamio (1997). Kamio claims that the choice of the Japanese evidential depends on whether the information falls within or outside the speaker's or hearer's territory. For example, the direct evidential (best possible ground) is used for (8b) because the information about the speaker's brother falls into the speaker's territory of information. Moreover Faller states that if the subject of example (8b) is not the speaker's family member or someone very close to the speaker, but instead someone close to the hearer (in this case the hearer's sister), for example, the speaker's sister's academic advisor, *-mi* should not be used because the hearer's adviser falls into the hearer's territory of information.

As illustrated above, Faller provides two possible alternative explanations for the use of the direct evidential for hearsay information: first, whether or not the conveyed information is assimilated, and second, whether or not the conveyed information falls into the speaker's territory of information. Before we return to the problems of Luchuan, let us consider the examples of Japanese presented by Kamio. The speaker of examples (9a) and (9b) is Taroo's father.

(9) a. Taroo wa taiin simasita.
 TM released-from-hospital did-F
 'Taroo has been released from the hospital.'

b. Taroo wa taiin sita-rashii desu.
 TM released-from-hospital did-seem is-F
 'Taroo seems to have been released from the hospital.'

(Kamio 1997:9)¹²

According to Kamio, example (9a) is natural when the speaker is Taroo's father and the hearer is his acquaintance. Since the direct form¹³ is used in example (9), the addressee would normally assume that Taroo's father has direct evidence such as

¹² The glosses for examples (9a) are shown as they are in Kamio (1997); TM =Topic Marker, F= formal form.

¹³ Kamio (1997, 1998) does not use the term evidential in his paper. He uses 'direct form' and 'indirect form'. Thus, I use these terms when I discuss his analysis and related arguments.

direct observation. However, Kamio points out that in some contexts example (8a) is acceptable even though Taroo's father has only hearsay information. For example, suppose that Taroo's father lives separately from his family and Taroo's mother tells him over the phone that Taroo has been released from the hospital. On the next day, when Taroo's father happens to be asked by his colleagues how Taroo is doing, example (9a) sounds natural, despite the fact that Taroo's father does not have direct evidence. If Taroo's father uses the indirect form, it would sound peculiar. It would sound as if Taroo's father was very cold and emotionally distant from his son, or as if he was not interested in his own son's health. Thus, example (9a) is much more appropriate in the given context.

Kamio emphasizes that the fact that the context discussed involves communication 'the next day' is very important (Kamio 1998:109) because Taroo's father may choose the indirect form such as in example (9b) if he is asked right after he acquires the information. However, when the conversation takes place on the next day, after the information has been assimilated, he may use the direct form, as in example (9a). The examples which Kamio presents share the feature which Faller (2002) points out in terms of assimilation. Faller mentions the theory of territory of information as an alternative account to the account of assimilation; however, I claim that these two concepts are both important because assimilation alone does not solve the issue as far as Japanese and Luchuan are concerned. For instance, suppose a speaker hears the news on the radio that the Dalai Lama visited America. The speaker would use one of the indirect forms in Japanese if he/she wants to convey this information even on the next day.¹⁴ If assimilation was essential for the use of the direct evidential, as Faller suggests, the event could be conveyed without the Reportative, but this is not the case; this is probably because the concept of the territory of information plays an important role in both Japanese and Luchuan. Since the Dalai Lama does not fall into the speaker's or the hearer's territory of information, information about the event cannot be assimilated even when a night has passed.

Based on this investigation, now let us consider the examples of Luchuan. As I have stated above, the concept of assimilation and the concept of territory of

¹⁴ There are some indirect forms in Japanese such as *rashii*, *yooda*, and *mitaida*. But I do not pursue these Japanese usages in this thesis. I have mentioned Japanese to adapt this feature to analysis of Luchuan which will be discussed in the following pages. See Kamio (1997) or for evidentials in Japanese, McCready and Ogata (2007).

information are both important because in Luchuan, information which does not fall into either the speaker's or the hearer's territory should be marked by the Reportative even after assimilation.

(10) a.# Dalai Lama ja Amerika Nkai Nz-a-N.

Dalai Lama TOP America to go-PAST-DIR

p = 'Dalai Lama visited America.'

EV = Speaker has direct evidence for p .

b. Dalai Lama ja Amerika Nkai Nz-a-N Ndi.

Dalai Lama TOP America to go-PAST-DIR REP

p = 'Dalai Lama visited America.'

EV = Speaker heard p on the radio or TV.

Example (10a) is marked by the Direct evidential *-N*, while example (10b) is marked by the Reportative evidential *Ndi*. Even after time passes, example (10a) cannot be used. Even a newscaster would not use the direct form in Luchuan unless he/she had direct evidence.¹⁵ The question is what kind of information can be assimilated, and if it can be assimilated, how much time is required; these issues will need to be investigated further. Aksu-Koç and Slobin (1986) state that in Turkish, when a hearer's mind is unprepared, the event cannot be assimilated at once. In the same way, it may be the case that when an event is mentally distant from the speaker it may take time to be assimilated in Luchuan.

The content of example (10) would not be directly related to any speaker or hearer living in Okinawa, Japan. How does an example that is directly related to people in Okinawa, such as example (3), behave? Example (3) is about the coral reefs in Okinawa, repeated as example (11) below.

¹⁵ Interestingly, in the case of Japanese, newscasters can use the direct form without a Reportative marker even if they do not possess direct evidence, while Luchuan requires the Reportative evidential or other expressions which clarify that the newscasters do not have direct evidence. The difference of acceptability between Japanese and Luchuan would probably depend on whether evidentiality is grammaticalized or not.

- (11) Ucinaa nu sango ja zikoo ?ikiraku nat-oo-N Ndi. (=3)
 Okinawa GM coral TOP much reduce be-CON-DIR REP
p = ‘Coral reefs in Okinawa are dying away.’
 EV=Speaker reads that *p*.

Even if the speaker reads or hears about coral reefs, which Okinawan people are quite familiar with, reportative *Ndi* still needs to be attached. Thus, it is not easy to draw the conclusion that mental distance or closeness is the issue. But at least the discussion so far shows that new information can be assimilated when it falls into the speaker’s territory, as illustrated in (7) above. As for the problem of how territory should be defined, further investigation will be required.

In this section, I have examined these three points:

1. Reportative *Ndi* is used to mark the information which the speaker has acquired from an oral source, including second-hand, and third-hand information and folklore.
2. Reportative *Ndi* can be used to mark information which has been acquired through the use of language, including written information.
3. Reportative *Ndi* can be omitted when the information is both assimilated and also falls into the speaker’s territory of information.

4.2.2 How *Ndi* interacts with aspect/tense and the Direct evidential -*N*

The first purpose of this section is to clarify the possible combinations of each tense or aspect with reportative *Ndi*. The second purpose is to investigate how reportative *Ndi* interacts with the Direct evidential -*N*. First, let us consider examples of non-past form. The imperfective aspect that is used to describe events in the present and future can co-occur with reportative *Ndi*.

- (12) Ken ga ʔacjaa ʔic-u-N Ndi.
 Ken NM tomorrow go-IMPF-DIR REP
p = ‘Ken will go tomorrow.’
 EV=Speaker heard that *p*.

The speaker of example (12) should have acquired the information from Ken himself or someone who definitely knows Ken’s plan for tomorrow. The next examples show that reportative *Ndi* can be used with both continuative and resultative aspect in non-past.

- (13) a. Ken ja tigami kac-oo-N Ndi.
 Ken NM letter write-CON-DIR REP
p = ‘Ken is writing a letter.’
 EV = Speaker heard that *p*.

- b. Ken ga tigami kaceeN Ndi.
 Ken NM letter write-RES-DIR REP
p = ‘Ken has written a letter.’
 EV = Speaker heard that *p*.

Continuative aspect is used in example (13a) and resultative aspect is used in example (13b). Example (13a) can be used, for example, as an answer to the question such as “Who is writing a letter?” As for resultative aspect, example (13b) can be used as an answer to the question like “Who has written a letter?” In both cases, the speaker must have acquired the information expressed from Ken himself or from another person who knows that Ken is writing or has written a letter.

Next, let us investigate examples involving the past tense. In example (14), a simple past is used and, as its acceptability indicates, the simple past form can co-occur with the Reportative *Ndi*.

- (14) Ken ga ? Nz-a-N Ndi.
 Ken NM go-PAST-DIR REP
p = ‘Ken went.’
 EV = Speaker heard that *p*.

To utter example (14), the speaker usually must have obtained information from Ken himself or someone who accompanied Ken. If Ken said *waN ga ?NzaN* ‘I went’, or if a third party who accompanied Ken said *Ken ga ?NzaN* ‘Ken went’, example (14a) would be used by a speaker who heard either of these utterances. Therefore, the source of the information of example (14) could either be Ken or a third party.

In the next example, the imperfective aspect in the past tense is used, which is normally used to describe the events done by someone other than the first person.

- (15) Ken ga ?ic-u-ta-N Ndi.
 Ken NM go-IMPF-DIR-N REP
p = ‘Ken went.’
 EV = Speaker heard that *p*.

Unlike the case of the simple past in (14), the source of the information of example (15) must not be Ken himself. If Ken were the source of information, it means that the speaker of example (15) would have heard Ken utter example (16a). However, in fact, example (16) is not acceptable because the first person subject cannot be used with an imperfective aspect in the past tense. This means that Ken cannot say example (16a) to describe his own activity in the past. In this case, the simple past form as in (14) should be chosen.

- (16)* a. waN ga ?ic-u-ta-N.
 I NM go-IMPF-PAST-DIR
 Intended meaning: ‘I went.’

b. Ken ga ʔic-u-ta-N .

Ken NM go-IMPF-PAST-DIR

p = ‘Ken went.’

EV = Speaker has direct evidence of *p*.

Therefore, the source of the information of example (15) should not be Ken but someone else who observed Ken’s action. For example, if a third party said *Ken ga ʔic-u-ta-N* ‘Ken went’, as in example (16b), the one who heard this utterance would use example (15) attaching the Reportative *Ndi*.

The next examples show continuative aspect and resultative aspect in the past tense.

(17) Ken ja tigami kac-oo-ta-N Ndi.

Ken NM letter write-CON-PAST-DIR REP

p = ‘Ken was writing a letter.’

EV = Speaker heard that *p*.

b. Ken ga tigami kac-ee-ta-N Ndi.

Ken NM letter write-RES-PAST-DIR REP

p = ‘Ken has written a letter.’¹⁶

EV = Speaker heard that *p*.

Continuative aspect and resultative aspect, in past forms, as in example (17a) and (17b) respectively, sound fine. The information source could either be Ken or someone else who perceived Ken’s continuative action or completed event. The past morpheme *-ta-* indicates that the source of the reported information heard this information before the time of utterance.

Now that we have shown that continuative aspect and resultative aspect in the past tense sound acceptable with the Reportative evidential, next, I will move to the second purpose of this section, which is to investigate how the Reportative evidential *Ndi* interacts with the Direct evidential *-N*. This interaction between the Direct

¹⁶ As I explained in Section 3.4.2, the past tense of resultative aspect is not the same as the past perfect, therefore, it is difficult to reflect the difference in the translation. This means that the speaker perceives that the event happened before the time of utterance.

evidential and the Reportative evidential shows very interesting behavior. To begin with, it is important to understand that the Direct evidential which appears in sentences with the Reportative evidential always anchors to the information source, while the Reportative evidential carries the speaker's source of information. Consequently when the Direct evidential *-N* appears in the sentence with the Reportative *Ndi*, *-N* does not anchor to the speaker. Rather, the Direct evidential always anchors to the original source of the report.¹⁷ Thus, the speaker cannot use reportative *Ndi* to mark his/her own statement, as shown in (18).

Context: One of the students in the group will go to summer camp. One of the students volunteered, but the teacher could not hear. The teacher asks "Who said that s/he would go?" Speaker answers:

(18) # waN ga ʔic-u-N Ndi.

I NM go-IMPF-DIR REP

Intended meaning: 'I said that I will go.'

The unacceptability of example (18a) is probably caused by the fact that both the Direct evidential *-N* and the Reportative evidential *-Ndi* are anchored to the speaker him/herself. It is understandable for the speaker not to be able to use the Reportative *Ndi* for information for which he/she already possesses direct evidence. Therefore, if the possessor of direct evidence is different from the possessor of reportative evidence, the sentence will be acceptable. It is difficult to think of an appropriate context, but consider the next example.

Context: One of the students in a group will go to summer camp. The teacher has said that the speaker is supposed to go to the camp this year because he didn't attend last year.

(19) waN ga ʔic-u-N Ndi.

I NM go-IMPF-DIR REP

p = 'I will go (to the camp).'

EV = I was told *p* by the teacher.

¹⁷ The original source of the report in this case could be first-hand or second-hand.

The speaker of example (19) was told to go to camp by his teacher.¹⁸ Thus, in the case when the person who reports the information with the Reportative evidential is not identical to the person who possesses the direct evidence, sentences with these two evidentials become grammatical. The Direct evidential anchors to the teacher, and the Reportative evidential anchors to the speaker. There are no conflicts in the co-occurrence of the two evidentials because they belong to the different individuals.

Next, let us consider how the Reportative evidential behaves when the subject is the second person. Reportative *Ndi* cannot be used to mark the hearer's statement. Consider example (20).

Context: The addressee had said she would go to summer camp, but she forgot what she said. The speaker tries to remind what the addressee said.

(20) # ʔjaa ga ʔic-u-N Ndi.
 you NM go-IMPF-DIR REP

Intended meaning: You said that you will go.

Example (20) suggests that possessor of direct evidence, who has directly acquired reported information that *you will go* cannot be the hearer either. In a similar way to the case of example (19), if the possessor of direct evidence is a third party other than the hearer as example (21) indicates, the sentence becomes acceptable.

Context: Similar to the context for example (19). Teacher says that someone (the hearer ʔjaa 'you' in example (21)) is supposed to go to camp this summer. The speaker who hears this information utters example (21).

(21) ʔjaa ga ʔic-u-N Ndi.
 you NM go-IMPF-DIR REP

p = 'You will go (to camp).'

EV = Speaker was told *p* by the teacher.

Example (21) is acceptable because the source of information is not the hearer but the third party, the teacher. This discussion may seem complicated, but the important

¹⁸ Note that this usage of Direct evidence is rather rare. Normally a speaker knows his/her own plan better than anyone else.

point is actually simple. When the possessor of direct evidence is the third person, sentences such as these are acceptable because the source of information is not the speaker or the hearer. In cases where we want to convey information which is uttered by the first speaker or the hearer, a lexical verb such as ‘tell’ or ‘say’ must be explicitly utilized.

(22) a. waN ga ?ic-u-N Ndi ?Nz-a-N.
 I NM go-IMPF-DIR REP say-PAST-DIR
 ‘I said you would go.’

b. ?jaa ga ?ic-u-N Ndi ?Nz-a-N¹⁹.
 you NM go-IMPF-DIR REP say-PAST-DIR
 ‘You said you would go.’

Examples (22a) and (22b) imply that the function of the Reportative evidential is clearly different from that of lexical verbs.²⁰ As we have observed, it is clear that the Direct evidential does not anchor to the possessor of the Reportative evidential. I will return to this issue again in 5.2.

In this section, I have mainly illustrated these two points.

1. The Reportative evidential *Ndi* can co-occur with all types of tense and aspect.
2. The Direct evidential *-N* which appears with the Reportative evidential should anchor to the third person, not the speaker or the hearer.

4.2.3 Whether *Ndi* can appear in negative or interrogative sentences

The purpose of this section is to examine whether *Ndi* can appear in negative sentences or interrogative sentences. First let us consider a negative sentence in

¹⁹ To be precise, it is not common to use the Direct evidential for what the addressee said as in (22a) because what the addressee said falls into the addressee’s territory of information. To report the addressee’s utterance to him/her with speaker’s Direct evidential sounds a little unnatural but example (22a) is still acceptable. Putting the sentence final particle *doo* after *-N* is preferable.

²⁰ Faller (2002) also points out that the Reportative *-si* in Cuzco Quechua cannot be used to mark the addressee’s utterance. Faller explains that there is one restriction for the usage of *-si*, which is that ‘the source cannot be the current addressee’ (p191).

non-past tense with the Reportative evidential. As I have explained, there are three negative markers *-(r)aN*, *-neeN*, *-uraN* in Luchuan: *-(r)aN* is used with imperfective aspect which indicates present and future, *-neeN* is used for resultative aspect, and *uraN* is used for continuative aspect. Examples (23a)-(23c) illustrate how the Reportative evidential interacts with each aspect.

(23) a. Ken ja tigami kak-aN Ndi.

Ken TOP letter write-NEG REP

p = ‘Ken will not write a letter.’

EV = Speaker heard that p .

b. Ken ja tigami kac-ee-neeN Ndi.

Ken TOP letter write-RES-NEG REP

p = ‘Ken has not written a letter.’

EV = Speaker heard that p .

c. Ken ja tigami kac-ee-uraN²¹ Ndi.

Ken TOP letter write-CON-NEG REP

p = ‘Ken isn’t writing a letter.’

EV = Speaker heard that p .

The acceptable examples (23a)-(23c) indicate that the Reportative evidential *Ndi* can appear in negative sentences of all kind of aspects in non-past tense.

Next, let us investigate how the Reportative evidential behaves in negative sentences in the past tense.

(24) a. Ken ja tigami kak-aN-ta-N Ndi.

Ken TOP letter write-NEG-PAST-DIR REP

p = ‘Ken did not write a letter.’

EV = Speaker heard that p .

²¹ See footnote 49 in Chapter 3 for the morphological alternation from *-oo-* to *-ee-* in the continuative aspect in negative sentences.

b. Ken ja tigami kac-ee-neeN-ta-N Ndi.
 Ken TOP letter write-RES- NEG-PAST-DIR REP
p = ‘Ken hasn’t written a letter.’
 EV = Speaker heard that *p*.

c. Ken ja tigami kac-ee-uraN-ta-N Ndi.
 Ken TOP letter write-CON-NEG-PAST-DIR REP
p = ‘Ken was not writing a letter.’
 EV = Speaker heard that *p*.

Examples (24a)-(24c) show that the Reportative *Ndi* can also co-occur with negative markers in the past tense. As for the source of the information, it can be Ken himself or a third party, as we have seen in the affirmative sentences in section 4.2.2. Although examples (23a)-(23c) do not contain the Direct evidential *-N*, examples (24a)-(24c) contain the Direct evidential *-N* after the past tense marker *-ta-*. Since this *-N* does not anchor to the speaker, there are no problems in the co-occurrence of *-N* and the Reportative *Ndi*, as we have already seen in section 4.2.2.

Next, we will move to the investigation of interrogative sentences with the Reportative evidential. The Reportative cannot be generally used in an interrogative sentence as (25) indicates.

Context: Speaker asks the addressee if he/she heard that there was an accident

(25) #jiko nu a-ta-N Ndi-i?
 accident NM be-PAST-DIR REP-Q
p = ‘An accident happened.’
 EV = Speaker heard that *p* from someone.

“Did someone tell you that there was accident?”

The speaker of example (25) cannot to use the Reportative *Ndi* with the question marker *-i*. This example demonstrates that the Reportative in Luchuan cannot be used in interrogative sentences, unlike English lexical verbs ‘hear’.

However, although the Reportative *Ndi* generally cannot appear in interrogative sentences, it is worth noting two exceptional and restricted types of

cases in which the Reportative can occur in an interrogative sentence. First I will present a type of usage in which a speaker repeats what the addressee has just said to confirm if he/she understands the content correctly. The second usage is simply reporting an interrogative sentence that has been uttered by an interlocutor. Let us start with the first.

There are two question markers in Luchuan, *-i* and *-ga*. To make yes-no questions, *-i* is used; *-ga* is used for wh-questions. Example (26) is a yes-no interrogative sentence to which *-i* is attached.

Context: Ken said *waN ga tigami kacuN* ‘I will write the letter.’ Ken’s mother, the speaker of (26) could not hear it properly, so repeated the sentence with a question marker to confirm.

- (26) ʔjaa gaa tigami kac-u-N Ndi i ?
 you NM letter write-IMP-IMP-IMP DIR REP Q
p = ‘You will write a letter.’
 EV = Speaker reported *p*.
 “Did you say you would write a letter?”²²

The speaker of example (26) wants to make sure of what the addressee has just said. Thus in this case, the addressee, Ken, is the source of information for the use of *-Ndi*. In the same way, resultative aspect and continuative aspect with the Reportative can be followed by the question marker *-i* as examples (27) and (28) indicate.

²² This translation is not exactly the same meaning as what example (26) conveys because the main predicate of example (26) is not ‘say’ in Luchuan even though the main predicate of the translation is ‘say’.

Context: Ken said (*waNnee*) *tigami kaceeN* ‘I have written the letter.’ Ken’s mother, the speaker of example (27) could not hear it properly so repeated the sentence with a question marker to confirm.

- (27) (?jaa ja)²³ *tigami kac-ee-N Ndi i ?*
 you TOP letter write-RES-DIR REP Q
p = ‘You have written a letter.’
 EV = Speaker repeated *p*.
 “Did you say you had (have) written a letter?”

Context: Ken said (*waNnee*) *tigami kacooN* ‘I’m writing the letter.’ Ken’s mother, the speaker of example (28) could not hear it properly so repeated the sentence with a question marker to confirm.

- (28) (?jaa ja) *tigami kac-oo-N Ndi i ?*
 you TOP letter write-CON-DIR REP Q
p = ‘You are writing a letter.’
 EV = Speaker reported *p*.
 “Did you say you were (are) writing a letter?”

As examples (26), (27) and (28) illustrate, the Reportative evidential can appear in interrogative sentences when the speaker wants to check on his/her understanding of a previous utterance of the addressee. If there is no such context, these sentences are not acceptable. Thus, usually conversation cannot be initiated using sentences with *Ndi* followed by *-i*, as illustrated in (29).²⁴

²³ It is more natural to omit the subject and topic marker because it is likely for Ken to omit the subject as the parenthesis in the context implies. The same can be said for example (28).

²⁴ If the speaker wants to initiate a conversation asking what somebody said, lexical verbs such as ‘say’ or ‘tell’ are usually chosen. For example, suppose you are reading a newspaper and your friend wants to know the result of the tennis match. She could not use the Reportative *Ndi* to ask you if her favorite tennis player won the tennis match. Only if you said something about tennis match and she couldn’t fully understand it, the Reportative can mark what you possibly said to her. Other than that, another type of expression, *gajaa*, which indicates the speaker’s speculation, should be used.

Context: Ken's mother wants to know if Ken is studying. She asks Ken's father whether Ken said to his father that he is studying.

(29) # Ken ja benkyo s-oo-N Ndi i?

Ken TOP study do-CON-DIR REP Q

Intended meaning: Did you hear that Ken said he is studying?

Now, let us consider the case when the subject of the sentences is a third party—neither the speaker nor the addressee. The following example (30) contains the Reportative evidential and a question marker and has two possible meanings.

(30) Yoko ja benkyo s-oo-N Ndi i?

Yoko TOP study do-CON-DIR REP Q

p = 'Yoko is studying.'

EV = (i) Speaker reports p which was uttered by the addressee.

(ii) Speaker reports p which was uttered by Yoko.

The two readings are indicated in (i) and (ii). In order for reading (i) to be available, the addressee should have direct evidence of Yoko studying. For example, Yoko's mother sees Yoko studying and she tells her husband *Yoko ja benkyo soon* 'Yoko is studying.' But he did not understand what she said, so he repeats her utterance to ask if he understands correctly, by uttering (30). A case in which the reading given in (ii) arises would be if Yoko herself tells her mother that she is studying. In this case, her mother would tell her husband, *Yoko ja benkyoo soon Ndi* 'Yoko is studying' with the Reportative evidential *Ndi*. She needs to attach *Ndi* because she does not have direct evidence such as witness, rather, the evidence she has is Yoko's utterance. The second reading of (30) indicates that the speaker, Yoko's father, could not understand what his wife said, thus he asks whether or not what he possibly heard is correct.

As Yoko's mother has direct evidence under the reading in (i), the Reportative *Ndi* in (i) "belongs to" Yoko's father. On the other hand, under the reading in (ii), *Ndi* could be slightly complicated because it could mean to belong to either Yoko's mother or Yoko's father. When Yoko's father could not listen to the Reportative Yoko's mother used in her utterance, *Ndi* he used in (30) anchors to himself. When he caught *Ndi* Yoko's mother used in her utterance *Ndi* he uses in (30) anchors to

Yoko's mother.

This shows that in very particular circumstances yes-no questions are possible with the Reportative *Ndi*. In addition, it is possible to find wh-interrogatives with *Ndi*.

Context: Yoko told her parents that she would go to the library. Her father did not catch where she was going and asks his wife (Yoko's mother) where Yoko is going.

(31) Yoko ja maa Nkai ?ic-u-N Ndi i/ga ?

Yoko TOP where to go-IMPF-DIR REP Q/Q

p = 'Where will Yoko go?'

EV= Speaker reports *p*.

'Did you hear where Yoko said she would go?'

The speaker of example (31) understands that Yoko is going somewhere but he did not catch where she said she would go. Note that either of the two question markers *-i* and *ga* can appear after *Ndi*. Typically the question marker for wh-questions is *-ga* and the question marker for yes-no question is *-i*. In the case of example (31), either of them can be used, but these two markers cannot appear at the same time.²⁵ Example (31) indicates that two question markers can be used in wh-interrogative sentences with the Reportative *Ndi* in the restricted context.

Also, to answer the question in (31), the addressee is required to use the Reportative evidential. This phenomenon of "interrogative flip", where an evidential is anchored to the addressee in a question, is often discussed in the literature (Aikhenvald 2004, Faller 2002, 2006, Speas and Tenny 2003). This phenomenon applies to example (31), since the speaker of (31) expects the addressee to base her answer on reported evidence.

What has to be noticed here is that all the cases which we have observed in examples (26)-(31) suggest that evidential meaning is never the focus of the question, even when the Reportative evidential can co-occur with a question marker. The other

²⁵ The claim that either choice is equally fine is supported by my data so far. Note that the meaning which example (31) conveys is different from 'Did Yoko say where she would go?' because the addressee cannot answer the example (31) with 'yes' or 'no'. The meaning of example (31) is close to 'Where did Yoko say she would go?' When a speaker wants to ask whether or not Yoko said where she would go, a lexical verb such as 'say' or 'tell' must be used.

indirect evidentials *tee* and *hazi* also refuse to co-occur, with a question marker. They never appear even in interrogative flip or rhetorical questions. I will return to this issue in the next chapter.

The interrogative sentences which I have presented so far contain a question marker outside of the Reportative *Ndi*. Let us now turn to investigate the other type of Reportative in interrogative sentences, in which a question marker appears inside *Ndi*. The meaning conveyed by this type of syntactic order indicates that the speaker simply repeats the addressee's utterance as a mediator.

Context: Ken's mother asks Ken whether he is going to school, by using a question such as *gaQkoo Nkai ?ic-u-m-i?* 'Are you going to school?' Ken did not hear the question, so his sister who has heard what their mother said repeated it again for Ken. Ken's sister told Ken:

- (32) *gaQkoo Nkai ?ic-u-m-i Ndi.*
 school to go-IMPF-DIR-Q REP
p = Are you going to school?
 EV=Speaker hears *p* and repeats *p*.

The speaker of example (32), Ken's sister simply repeated what her mother had said so that Ken can hear the question again. Therefore, the original question uttered by Mother is marked by *Ndi*. The closest English translation would be 'Mother asked if you were going to school', though the subject and main verb 'ask' is not actually uttered. In this case, speaker is simply playing a role as a mediator.²⁶ This usage can be observed in wh-questions, as in (33).

Context: Ken's mother asks Ken where he is going, with an utterance such as *maa Nkai ?ic-u-ga?* 'Where are you going?' Ken did not hear the question, so his sister who has heard what their mother said repeated it again for Ken. Ken's sister told Ken:

²⁶ A similar example can be observed in Cuzco Quechua in Faller's (2002:233) data.

- (33) *maa Nkai ?ic-u-ga Ndi.*
 where to go-IMPF-Q REP
p = Where are you going?
 EV=Speaker hears *p* and repeats *p*.

The closest English translation of example (33) would be ‘Mother asked where you were going.’ Since there is a wh-question *maa* ‘where’, a question marker *ga* is used before *Ndi*. Recall example (31) which allows the appearance of either of two kinds of question markers, either *ga* or *-i*. When the original question is embedded inside of the Reportative *Ndi* as in example (33), there is no option to choose *-i* instead of *ga* in interrogative sentences with a wh-question marker. It implies that the speaker in this case is simply a mediator of the utterance; therefore the speaker should repeat what the original source of the report had said.

In this section, I have demonstrated the following points.

- 1) The Reportative *Ndi* can appear in negative sentences. In this case, evidential meaning is not negated but only the proposition is negated.
- 2) There are two kinds of questions that can co-occur with the Reportative evidential. The usages of these two kinds of questions are restricted in that neither of them can be used to initiate conversation.
 - (i) Cases in which the speaker wants to make sure of what the original source of information had said. (A question marker appears outside of *Ndi*.)
 - (ii) Cases in which the speaker simply repeats the question by the original source of information as a mediator. (A question marker appears inside of *Ndi*.)²⁷

4.3 Whether Reported evidential express the speaker’s degree of (un)certainty

In this section, I will examine whether the Reportative evidential conveys speaker’s degree of (un)certainty. This will allow us to pursue the issue of whether the

²⁷ It is possible to have both question markers; inside and outside, when a speaker wants to make sure whether the addressee had asked a particular question. For example, the question marker *-i* can be attached to the end of the sentence in example (32) if the speaker wants to make sure whether or not the addressee asked *Are you going to school?*. In case of example (33), the question marker can be also attached to the end of the sentence, however, it seems to be very rare and the speaker usually prefers to choose other simpler expressions.

Reportative evidential should indeed be regarded as an evidential rather than as epistemic modality, as has been discussed in the literature. To address this question, I will apply the test of Moore's Paradox, to see how sentences with the Reportative evidential behave. This is the same test as I have already applied to the other evidentials; the direct evidential in 2.4.1 and the Inferential and the Assumed evidentials in 3.5.

While the test applied to the Inferential and Assumed evidentials shows that denying a speaker's belief just after making an assertion makes the sentence awkward, example (34) below is a case where the Reportative behaves differently from the other two evidentials.

(34) a. ?ami hut-oo-N Ndi.

rain rain-CON-DIR REP

p = 'It is raining.'

EV = Speaker hears p .

b. ?ami hut-oo-N Ndi. jasiga ?aN ?umuw-aN

rain rain-CON-DIR REP but so think-NEG

"I heard (Someone says) it is raining but I don't think so."

As can be seen, (34b) is completely acceptable. A speaker of example (34) does not have to believe what he/she heard of. It is true that the reliability could vary depending on who the source of information is. If the source of information is a highly reliable person, it would be difficult to deny what this person said. However, even without a special context like this, example (34b) sounds natural; therefore, the test result of example (34b) suggests that the Reportative *Ndi* does not convey the speaker's degree of (un)certainty. Moreover, the Reportative *Ndi* does not contribute any information about the speaker's commitment to the embedded proposition at all. Therefore, the Reportative can be followed by sentences which indicate that the speaker does not believe that the proposition is true, as example (35a) indicates. Equally, the Reportative can be followed by sentences which indicate that the speaker believes the proposition is true, as in example (35b).

Context: Speaker has talked to Ken over the phone and reports what Ken has said.

(35) a. ?ami hut-oo-N Ndi. jasiga huntoo ?araN joo.

rain rain-CON-DIR REP but true not FP

p = ‘It is raining. But this is not true.’

EV = It is said that it is raining.

b. ?ami hutooN Ndi. jakutu ciQtu hut-oo-sa.

rain rain-CON-DIR REP so definitely rain-CON- FP

p = ‘It is raining. So it is definitely raining.’²⁸

EV = It is said that it is raining.’

The speaker of example (35a) simply reported what Ken has said and just afterwards the speaker expresses that he/she does not believe what Ken said. It is possible that the speaker knows that Ken always tells lies or the speaker has more reliable evidence which proves that it is not actually raining. This means that the Reportative does not convey speaker’s certainty. Contrastively, example (35b) shows that the Reportative does not convey a low degree of speaker’s certainty either. As can be seen, a sentence that indicates the speaker’s degree of certainty toward the proposition can follow a sentence with the Reportative. Consequently, this test demonstrates that the Reportative conveys neither a high nor a low degree of speaker’s certainty. That means that the Reportative does not convey any information about the speaker’s commitment to the proposition.

To sum up, though the Inferential evidential *tee* and the Assumed evidential *hazi* imply the speaker’s degree of certainty/belief, this test demonstrate that the Reportative is a pure evidential because it conveys no information about the speaker’s degree of certainty or the speaker’s commitment to the proposition.

4.4 Summary

In this chapter, I demonstrated that the Reportative evidential has three functions.

²⁸ I attempted to find an expression such as ‘This is true’ to make the examples (34a) and (34b) parallel, but my consultants insist that that kind of utterance does not sound natural. Thus, I have used the phrase ‘It is definitely raining’ instead. It will be worthwhile to pursue why that kind of sentence is not usually used in further study.

First, the Reportative *Ndi* is used to mark information which the speaker has acquired from an oral source, including second-hand information, third-hand information and folklore. Second, the Reportative *Ndi* can be used to mark information which has been acquired through the use of language including written information. Third, the Reportative *Ndi* can be omitted when the information is assimilated and also falls into the speaker's territory of information.

Moreover, I demonstrated that the Reportative evidential *Ndi* can co-occur with all types of tense and aspect. With regard to the interaction between the Reportative evidential and the Direct evidential, it becomes clear that when the Direct evidential *-N* appears with Reportative evidential, it should anchor to the third person, not the speaker or the hearer.

It was also demonstrated in this chapter that although the Reportative *Ndi* can appear in negative sentences, evidential meaning itself is not negated, but only the proposition is negated. As for questions, two kinds of questions can co-occur with the Reportative evidential, but the usages of these two kinds of questions are restricted in that neither of them can be used to initiate conversation.

Finally, I discuss the question of whether or not the Reportative is a true evidential rather than conveying epistemic modality. I showed that when the test of Moore's Paradox is applied, the result does not indicate awkwardness. I argued therefore that the Reportative is a pure evidential because it conveys no information about the speaker's degree of certainty or the speaker's commitment to the proposition.

Chapter 5

Evidentials as a grammatical category

5.1 Introduction

In Chapter 2 through to Chapter 4, I have focused on investigating each evidential in Luchuan. Now I move on to providing more of an overall view of all the evidentials in Luchuan, including interactions between evidentials and theoretical investigations paying attention to the functions of each evidential. In section 5.2, I will demonstrate that the double marking of evidentials does not give rise to any contradiction. In 5.3, I will investigate whether the category of evidential can be distinguished from the category of epistemic modality. To discuss the theoretical issues is challenging, but I attempt to demonstrate what I can clarify from the analysis of Luchuan.

5.2 Double marking of evidentials

Now that we have a clear understanding (on the basis of Chapter 2 to 4) about the direct and indirect evidentials and the relations between these evidentials and each aspect and tense in Luchuan, I will move on to discuss cases in which evidentiality is marked twice. I have already examine the interaction between the Direct evidential with other indirect evidentials (Inferential and Reportative) in 3.3.2 and 4.2.2., but in this section, I will investigate the all the possibilities of double marking of evidentials. The main purpose of this section is to show that double marking of evidentials does not give rise to any contradiction or incoherency. In this context, Aikhenvald (2004) states that “marking evidentiality more than once is different from the multiple expression of any other category: it is never semantically redundant” (p88). Aikhenvald presents four types of multiple marking of evidentials and claims that “having several evidentiality markers in one clause allows speakers to express subtle nuances relating to types of evidence and information source, either interrelated or independent of one another” (p.88). I will illustrate the double

marking of evidentials in Luchuan and I will also show whether they are interrelated with or independent of each other.

The evidential system in Luchuan, as we have seen, consists of one direct evidential *-N* and three indirect evidentials *tee*, *hazi*, and *Ndi*. As was shown in Table 1 in Chapter 1 and 2 (repeated below for convenience), the Direct evidential *-N* should always precede evidential (2) (*tee*, *hazi*) and evidential (3) (*Ndi*), and also, the Reportative evidential *-Ndi* in the final slot should not be followed by any other evidential. Not all combinations of the evidential elements in the three evidential slots are possible. The only three that co-occur are (i) *-N + tee*, (ii) *-N + Ndi*, and (iii) *hazi + Ndi*.

stem	+aspect	+negation	+tense	+mood	+EV (1)	+EV (2)	+EV(3)
	<i>u</i>	<i>aN</i>	<i>(t)a</i>	<i>(t)ee</i>	<i>N</i>	<i>tee</i>	<i>Ndi</i>
	<i>oo</i>	<i>uraN</i>			<i>(ru)</i>	<i>hazi</i>	
	<i>ee</i>	<i>neeN</i>			<i>(sa)</i>		

Table 1. Morphology of finite verbs

Before examining these three combinations, I first start to explain the three elements in the slot of evidential (1). As was illustrated in Chapter 1 and Chapter 2, *-ru* and *-sa* do not encode evidential meaning though they implicate it. (They are included here under the heading of EV(1) only because this is the slot which they occupy when they occur in a sentence.) An example of *-ru* occurring without the Assumed evidential *hazi* is given in (1). The constituent marked by *du* is presented as new information, in focus, while the rest of the information is presented as old. Thus, (1) implies that the speaker has evidence to make an assertion in terms of old information, but *-ru* itself does not clarify the source of information.

- (1) ?ari ga-du ?ic-u-ru.
 he NMAP go-IMPF-ATTR
 ‘It is he who will go.’

The meaning of *-sa* does not clarify the source of information either. For example, the speaker of (2) may have direct evidence or he/she may not have any evidence at

all. According to Uemura (1961), *-sa* is used to objectivize propositional information. It is different from an inferential, since it can be used to describe ongoing events, as shown in (2).

Context: The addressee said she would have to write a document, but the speaker sees Ryu already writing the document now. The speaker lets the addressee know what he can see now.

- (2) ?uri, Ryu ga kac-oo-sa.
 Look, Ryu NM write-CON-FP
 ‘Look, Ryu is writing (the document).’

The function of *-sa* appears to be that it describes an event as if it is well-shared by all participants of the conversation; thus, (3a) sounds as though the information is shared between the speaker and the hearer and the speaker expects that the hearer would agree or sympathize with the speaker. It may be useful to consider an example of *-sa* in the past tense. The sentence with *-sa* in past tense sounds odd in (3b). Probably the use of *-sa* is deictic in that the sentence with *-sa* fits well only at the time of utterance, though the further investigation will be required.

- (3) a. ?ari ga ?ic-u-sa.
 he NM go-IMPF-FP
 ‘He will go’
- b.?? ?ari ga Nz-a-sa.
 he NM go-PAST-FP
 Intended meaning: ‘He went.’

Before returning to the argument concerning the double marking of evidentials, let me clarify whether *-ru* and *-sa* can appear with any evidential markers. The combination of *-ru* and *hazi* is obviously possible, as we already saw in 3.4. *Hazi* cannot be used with either *-N* or *-sa*. Interestingly, as Table 2 shows, *tee* cannot co-occur with either *-ru* or *-sa*, but *Ndi* in the final slot seems to be able to co-occur with all three elements *-N*, *-ru*, and *-sa* in the slot of evidential (1). However, when

-ru and *-sa* appear with *Ndi*, the sentence sounds like a direct quote in which the lexical verb such as ‘tell’ or ‘say’ is omitted. Considering this, we should probably conclude the following: *-N* can be used with *tee* and *Ndi*; *-ru* can basically appear only with *hazi*; and *-sa* does not co-occur with any evidentials. Since I do not consider *-ru* or *-sa* to be an evidential (for the reason stated above), the possible combinations of evidentials in Table 2 are two: *-N+tee* and *-N+Ndi*.

		EV(2) <i>tee</i>	EV(2) <i>hazi</i>	EV(3) <i>Ndi</i>
EV(1)	<i>-N</i>	<i>-N+tee</i> ✓	<i>-N+hazi</i> ✗	<i>-N+Ndi</i> ✓
	<i>-ru</i>	<i>-ru+tee</i> ✗	<i>-ru+hazi</i> ✓	<i>-ru+Ndi</i> (✓)
	<i>-sa</i>	<i>-sa+tee</i> ✗	<i>-sa+hazi</i> ✗	<i>-sa+Ndi</i> (✓)

Table 2. Possible combinations of *-N*, *-ru*, *-sa* and indirect evidentials

Next, let us start investigating the co-occurrence possibilities among all three indirect evidentials.

		EV(3) <i>Ndi</i>
EV(2)	<i>tee</i>	<i>tee+Ndi</i> ✗
	<i>hazi</i>	<i>hazi+Ndi</i> ✓

Table 3. Possible combinations of indirect evidentials

The two elements in evidential (2), *tee* and *hazi*, are mutually exclusive; thus let us examine whether these two elements can co-occur with *Ndi* which appears in the final slot. As Table 3 shows, *tee* does not co-occur with *Ndi*, but *hazi* does. Table 2 and Table 3 show that three combinations in total are actually possible; (i) *-N + tee*, (ii) *-N + Ndi*, (iii) *hazi + Ndi* as illustrated in (4)-(6) below. Example (4) illustrates the combination of *-N* and *tee*, example (5) the combination of *-N* and *Ndi*, and example (6) contains the combination of *hazi* and *Ndi*.

Context: Speaker sees the wet ground and infers that it rained.

(4) *ami hut-ee-N tee.* [(i)-*N* + *tee*]

rain rain-M-DIR INF

p='It must have rained.'

EV1=Speaker has direct evidence (wet ground).

EV2=Speaker infers *p* based on EV1.

Context: Someone told the speaker that Yoko had bought a hat.

(5) *Yoko ja boosi koo-ta-N Ndi.* [(ii)-*N* + *Ndi*]

Yoko TOP hat buy-PAST-DIR REP

p='Yoko bought a hat.'

EV1= Source of information has direct evidence of *p*.

EV2=Speaker acquires *p* from someone.

Context: Someone told the speaker that Lisa may be coming.

(6) *Lisa ga cu-u-ru hazi Ndi.* [(iii) *hazi* + *Ndi*]

Lisa NM come-IMPF-ATTR ASSUM REP

p='Lisa is coming'

EV1:The source of information infers *p*.

EV2:The speaker heard *p* which contains EV1.

Now let me mention two combinations which do not actually occur, namely *-N+hazi* or *tee+hazi*. Taking *-N+hazi* first, recall that in Chapter 3, in 3.4, I explained that *hazi* is attached to the adnominal form marked by *-ru*, not the conclusive form marked by *-N*. Thus the impossibility of the combination of *-ru* and *hazi* seems to derive from syntactic reasons. As for *tee+hazi*, I have not yet reached a conclusion on why *tee* and *Ndi* can co-occur but *tee* and *hazi* does not; I assume that these two concepts, inference and assumption, are too close to co-occur. This issue needs further investigation.

Next, let us consider the meanings which these combinations (4)-(6) convey. At first glance, they may appear to be semantically redundant or incoherent because of the meanings of each evidential concerned. But I will demonstrate that this is not the case. Let us investigate examples of each usage in (4),(5), and (6). The first point

we need to pay attention to is who the evidential is anchored to or “belongs to”; Who gained the information (from whatever kind of source) is indicated by the evidential. It is possible that both evidentials could anchor to the speaker him/herself, or that one of the evidentials could anchor to someone other than the speaker. That is, the two evidentials are independent in terms of who each one anchors to. Example (4) actually demonstrates the most complex type of double marking, and so I will leave it for now and return to it after discussing the other two combinations.

Example (5) contains the Direct evidential *-N* and the Reportative *Ndi* and each evidential is anchored to a different speaker. For instance, the Direct evidential *-N* is anchored to either the subject (Yoko) herself or the (unspecified) person who told the speaker about Yoko’s purchase, and the Reportative *Ndi* is anchored to the speaker who utters the sentence. To be precise, *-N* indicates that the person whose speech is being reported by the utterer of (5) had direct evidence that Yoko bought a hat; *Ndi* indicates that the speaker then heard this information. Moreover, (5) could be interpreted as secondhand (from the agent or a witness of the agent’s action) information. In this case, the Direct evidential *-N* should be regarded as anchoring to the unspecified person other than the source of information and the speaker. In either case, the two evidentials in (5) should be interpreted as belonging to two different people.

In (6), the Assumed evidential *hazi* could perhaps reflect the assumption of an unspecified person who then reported their assumption to the speaker; the Reportative *Ndi* is then anchored to the speaker who utters the example (6). However the most natural interpretation is that *hazi* indicates that the person whose speech is being reported by the utterer of (6) assumed the proposition; *Ndi* indicates that the speaker then heard this information. In addition to this typical reading, this combination could be ambiguous, that *hazi* might also be anchored to the current speaker. For example, the speaker was told *p*, which does not include the assumption by the reported speaker, but the current speaker assumes that *p* is true based on the report.¹ In this case, *hazi* is anchored to the current speaker.

As these examples (5) and (6) show, both the Direct and Assumed evidential can be combined with the Reportative without any semantic incoherence or inconsistency.

¹ I am grateful to my examiner, Martina Faller, for pointing this out.

Similar cases have been observed in other languages. Aikhenvald (2004) describes a similar usage in Tsafiki, which has a four-term evidential system. Aikhenvald states that in Tsafiki, “Reported evidential can combine with any of the other three, indicating ‘the type of information the original informant had for the assertion’” (p90). The Reportative *Ndi* in Luchuan cannot combine with all the other three, but only the two, Direct and Assumed. The type of information the original informant had for the assertion always comes first in Luchuan and the speaker’s own evidential, *Ndi*, comes later. According to Aikhenvald (2004), “the position of individual evidential markers is language specific. In Tsafiki, the final evidential in a string refers to the source of information for the speaker who produces the actual utterance. In Bora, the evidential with the same type of reference comes first in the string” (p.91). In the case of Luchuan, if a Luchuan sentence contains any evidentials, at least the final one must anchor to the speaker. If there is more than one evidential, only the pre-final ones may anchor to some other person, although they may also anchor to the speaker - such as the Direct evidential *-N* in the combination of [(i) *-N* + *tee*] and the Assumed evidential *hazi* in the combination of [(ii) *hazi* + *Ndi*], which I introduced as an ambiguous usage addition to the typical usage.

Now let us return to example (4). Unlike the other two cases (5) and (6), in (4) both *-N* and *tee* anchor to the speaker; they are interrelated. According to Aikhenvald (2004), four types of double markings of information source occur in language; one of the ones that she lists seems to be what we find with the combination of *-N* and *tee*. She defines it as follows (7).

(7) Information acquired by the author of the statement comes from two sources, one marked by E(vidential) 1 and the other by the E2. E1 and E2 either confirm or complement each other. (Aikhenvald 2004:88)

Valenzuela (2003:44-6), cited in Aikhenvald (2004:89), states that “the direct evidential in Shipibo-Konibo can combine with an inferred evidential, to indicate that the reasoning or speculation is based upon evidence coming from the speaker”. The speakers of Shipibo-Konibo use the inferred evidential “as a way of interpreting the evidence acquired visually” (Aikhenvald 2004:89). The case of Luchuan is not exactly the same, but they are similar in that the speaker makes an inference based on

some type of evidence they have acquired: in Shipibo-Konibo the evidence must have been acquired visually, but as I discussed in Chapter 2, in Luchuan the meaning of the Direct evidential is wider. As I showed in Chapter 3, section 3.3.2, the primary meaning conveyed by this combination ($-N + tee$) is that the speaker acquired evidence for inference based on direct evidence (perception, typically visual, but possibly also auditory or olfactory). More precisely, this combination indicates that the speaker draws an assumption based on direct evidence or best evidence (best possible ground) as I discussed in Chapter 3. For example, the utterance in (4) above could be used in a number of different contexts, but in this context the natural interpretation is that the evidence was perceptual. And further, as we have seen, when perceptual evidence is unavailable, best evidence, such as a report from a person who witnesses the wet ground, licenses the use of the combination of $-N$ and tee .

These facts show that the combination of the Direct evidential $-N$ and the Inferential evidential tee encodes that the speaker makes an inference based on what I have called “best evidence” – overwhelmingly the most common case of which is perceptual evidence.² Therefore, in this case, the direct evidential and the indirect evidential can be considered to complement each other, as described in Aikhenvald’s type (ii) double evidentials, cited above.

Double evidential marking in Luchuan can be summarized as follows.

- (1) There are three kinds of combinations of two evidentials; (i) $-N + tee$, (ii) $-N + Ndi$, (iii) $hazi + Ndi$. At least the evidential which appears in final position in the string must anchor to the speaker.
- (2) When $-N$ and tee occur together they are interrelated in that both of them are anchored to the speaker. This combination means that the speaker makes an inference based on direct/best evidence, generally perceptual evidence.
- (3) With the other two combinations ($-N + Ndi$ and $hazi + Ndi$), each evidential is anchored to a different person. The first one in the string (i.e. either $-N$ or $hazi$ respectively) anchors to the person who reported what the speaker of the

² A possible example of best evidence other than report from a participant in the event would be the speaker’s habitual knowledge, as in (i) below. Context: The window frame is broken. The speaker knows that Chris, her brother, is good at fixing and that he always helps her.

(i) Chris ga noosj-u-N tee.

Chris NM fix-IMPF-DIR INF

p = ‘Chris will fix (it).’

EV=Speaker infers p .

In this case, the speaker can draw an inference based on the knowledge she already has.

utterance then relays, with the Reportative thus anchoring to this speaker. (Note that *hazi* in the combination of *hazi* + *Ndi* could be anchored to the current speaker as a less dominant usage when the speaker makes an assumption on the basis of someone's report.)

5.3 Epistemic modality and Evidentials in Luchuan

In this section, I will review what I examined for each evidentials, focusing on speaker's degree of certainty in direct and indirect evidentials, and how each evidential behaves in negative and interrogative sentences. Through these investigations, I attempt to construct my own proposal on the question of whether or not evidentiality should be distinguished from epistemic modality.

5.3.1 Speaker's degree of certainty in Direct and Indirect evidentials

In Chapter 2, Section 2.4.1, using Moore's Paradox, I discussed whether the Direct evidential *-N* conveys the speaker's degree of certainty. I also discussed the cases of the Inferred and Assumed evidentials in Chapter 3, Section 3.5, and then discussed the cases of the Reportative evidential in Chapter 4, Section 4.3. In this chapter, I attempt to compile these discussions in order to distill what I can conclude from these investigations.

The test result shows that the speaker cannot immediately deny the truth of a proposition that s/he has just expressed in a sentence that makes use of the Direct evidential. This implies that sentences with the Direct evidential communicate the degree of certainty on the part of the speaker.

With regards to the Inferred and Assumed evidentials, the test results show that the speaker cannot immediately deny the truth of a proposition when the sentences contain either of the Inferred or Assumed evidentials. On the other hand, I demonstrated that the Reportative evidential does not convey the speaker's degree of certainty nor uncertainty, since the speaker can deny or agree to the proposition.

This results indicate that the Direct evidential *-N*, the Inferential evidential *tee*, and the Assumed evidential *hazi* can convey the speaker's degree of certainty, but the

Reportative evidential *Ndi* conveys no information about the speaker's degree of certainty or the speaker's commitment to the proposition. What we need to consider next is that this test result can conclude that evidentiality in Luchuan should be considered as epistemic modality because three of the four appear to convey speaker's degree of certainty. This discussion will continue in the next section.

5.3.2 Direct and Indirect evidentials in negative and interrogative sentences

In 2.4.2, I examined whether or not the Direct evidential can be the focus of negation or questioning, in order to see whether or not the evidential takes wider scope than other grammatical categories including epistemic modality (for example, see de Haan 1999). I explained that the Direct evidential does not appear in negative sentences in non-past tense; but the sentences imply that the speaker has direct evidence, as the positive sentence does. Then, I argued that the Direct evidential *-N* possibly does exist, but it appears to be omitted because it is phonetically identical to the final consonant immediately after the negative morphemes *-aN*. Thus the lack of overt realization of the Direct evidential may be simply for this phonological reason. In fact, the Direct evidential *-N* appears in the past tense, where the phonological environment is different from the one in non-past tense. That is to say, since the same phonemes, double *-N*, do not appear in past tense, the Direct evidential maintains its overt realization. We saw from the existence of the Direct evidential in negative sentence that the direct evidential does not scope below negation since the evidential meaning itself is not negated.

Regarding the behavior of the Direct evidential in interrogative sentences, I explained that the Direct evidential appears in non-past tense but not in past tense. I demonstrated that when it appears in interrogative sentences, again, the evidential meaning is not questioned. Evidential meaning is maintained as an interrogative flip, which means that the speaker expects the addressee to base his/her answer on the Direct evidential. Even the fact that the Direct evidential does not appear in the interrogative in the past tense is congruent with my proposal that evidential meaning cannot be the focus of a question. To recap, the survey in 2.4.2 shows that the meaning of the Direct evidential is not negated in negation, and in questions, the

meaning of the direct evidential is not questioned.

Now, let us move on to investigate indirect evidentials. I will summarize the properties of the three indirect evidentials concerning negation and questions, which I mentioned in Chapter 3, Section 3.3.3, Section 3.4.3, and Chapter 4, Section 4.2.3. First, Table 1 summarizes the behaviour of the three indirect evidentials which I have analyzed in this chapter in terms of their occurrence in negative sentences.

	non-past	past
<i>tee</i>	√	X
<i>hazi</i>	√	√
<i>Ndi</i>	√	√

Table 1 Acceptability of three indirect evidentials in negative sentences.

Table 1 shows whether or not each evidential can appear in negative sentences. Table 1 shows that all three evidentials can appear in non-past tense. Although the inferential evidential *tee* does not appear in past negative sentences,³ the Assumed evidential and the Reportative evidential can appear in past negative sentences.

Next, let us consider which part of the sentence is negated; the proposition or evidential meaning.

	Proposition	Evidentiality
<i>tee</i>	√	n/a
<i>hazi</i>	√	X
<i>Ndi</i>	√	X

Table 2 The scope of negation.

Table 2 shows that there is no case in which the evidential meaning is negated; the part that is negated is always the proposition only. This result indicates that all indirect evidentials can appear together with negative morphology (except for the Inferential in past tense), yet evidential meanings are never negated. In other words, indirect evidentials cannot scope under negation. In many languages, grammaticalized evidentials cannot co-occur within the scope of a negation (Willet

³ The Inferential evidential does not appear in the past even in affirmative sentences.

1998, de Haan 1999:3, Faller 2002). So now we have seen that this generalization also extends to Luchuan.⁴

Now, let us move to a summary of how the three indirect evidentials behave in interrogative sentences. Table 3 shows that the only evidential that can appear in interrogative sentences is the Reportative; therefore, there is no way for the Inferential and the Assumed to be the focus of the question. As I have explained above, even rhetorical questions are not possible with the other two evidentials. However, recall that the Reportative is used in interrogative sentences only in very restricted and exceptional ways, as I explained in Chapter 4, Section 4.2.3. That is, there are two kinds of questions that can co-occur with the Reportative evidential, but neither of the usages of these two kinds of questions can be used to initiate conversation. Note that the interrogative flip is allowed when the reportative appears in a Wh-question, but evidential meaning, is not the focus of question even in the case of interrogative flip. It simply means that the speaker expects that the addressees' answer would be based on reported evidence.

	non-past	past
<i>tee</i>	n/a	n/a
<i>hazi</i>	n/a	n/a
<i>Ndi</i>	X	X

Table 3 The focus of questions

Even the reportative cannot be the focus of the question; thus, no evidentials can be questioned, as Table 3 indicates. In section 4.2.3, I provided examples to help analyze how the Reportative *Ndi* behaves in interrogative sentences. Some of the examples were to clarify what the original source of information has said, as in examples (26)-(31), and the rest of them are simply to repeat what the source of information has said for the current addressee, as in examples (32) and (33).

Table 2 and Table 3 indicate that none of the indirect evidentials can appear in the scope of negation or in the focus of a question. Also, as I briefly reviewed in the beginning of this section, the Direct evidential does not appear in the scope of

⁴ This is not universal but just a generalization because in some languages evidentials can be within the scope of negation (Aikhenvald 2004:96).

negation or the focus of a question. This common point is a strong argument for my conclusion that they belong to the same grammatical category.

5.3.3 *-N* is an evidential not an epistemic modality marker

In Section 5.3.1 above, the Direct evidential *-N*, the Inferential evidential *tee*, and the Assumed evidential *hazi* can convey speaker's degree of certainty, but the Reportative evidential *Ndi* conveys no information about the speaker's degree of certainty or the speaker's commitment to the proposition. Then in Section 5.3.2, I have demonstrated that the direct and indirect evidentials in Luchuan cannot be negated or questioned. Now, I move on to examining whether or not these evidentials should be classified as markers of epistemic modality. First, let us consider the case of the Direct evidential.

In seeking to substantiate the claim that *-N* is an evidential, not a marker of epistemic modality, first let me introduce how *-N* has been analyzed in the literature, although unfortunately there are not many studies specifically about this morpheme. In the Dictionary of Okinawan Language, Uemura (1963:63) states that the morpheme *-N* which appears in the end of verb forms seems to originally come from **m*, which used to express a speaker's subjective judgment in Old Japanese.⁵ Uemura (2003:84) also calls *-N* the *m*-ending and states that "the *m*-ending conclusive expresses a judgement or decision made at the time".⁶ He classifies this *m*-ending as indicative mood. Miyara (2002:84) presents a similar account, according to which the morpheme *-N* indicates the speaker's mental attitude. He states that *-N* is a marker of indicative mood expressing the event as a fact.⁷ It seems that Uemura and Miyara basically agree on two points: first, *-N* indicates the speaker's judgement, and second, it is a mood marker. However, as I have proposed, the *-N* ending is a direct evidential rather than a mood marker. *-N* does indicate the speaker's judgement as the test result in Section 2.4.1 shows, but this does not mean

⁵ In diachronic studies, the mark *** indicates not ungrammaticality but the reconstructed form.

⁶ Uemura compares the *m*-ending and another form, the *ri*-ending, which he considers 'expresses a fact which is already known to the speaker or already decided' (2003:84). I will not discuss the *ri*-ending because this form is not used in Shuri dialect, which is the main subject of this dissertation.

⁷ To be precise, Miyara uses the term *jyojyutuhoo* in Japanese and I interpret it as equivalent to indicative mood.

that we have to conclude that this is the primary meaning that *-N* encodes. But it is true that the concept of speaker's judgement is normally treated in the category of modality. Should *-N* therefore be considered to belong the category of modality? If not, could the concepts of evidentiality and modality be indicated at the same time? In existing studies, this problem has been discussed by many researchers.

Let us review the arguments concerning the boundary between evidentiality and modality that were overviewed in Chapter 1. Although the details of the viewpoints are different among scholars, most researchers agree that the term "evidentiality" can be used in two ways; in a narrow sense or in a broad sense. The narrow sense is restricted in its meaning to conveying the source of information; the broad sense also expresses the speaker's attitude toward knowledge as well (Chafe 1986:262). The narrow sense appears to indicate purely evidential meaning, but the broad seems to straddle the categories of evidentiality and modality, and it has therefore been discussed whether these two concepts are in the relation of disjunction (completely different), inclusion (one of the categories includes the other), or overlap (partial crossover) (Dendale 2001). Some researchers consider that evidentiality is a subcategory of modality (Bybee 1985, Palmer 1986) and some regard the categories as partially overlapping (Izvorski 1997, Garrett 2001, Faller 2002, McCready and Ogata 2007).

On the other hand, de Haan (1999) claims that the two concepts should be distinguished from each other because they are semantically different, in that evidentiality indicates the source of information and modality indicates the speaker's commitment to the statement. He also claims that even though evidentiality and modality overlap in some languages, this property is not universal. Similarly Aikhenvald insists that evidentiality is an independent grammatical category (2003, 2004).⁸ Aikhenvald claims that evidentiality is an independent category, but she does not exclude the possibility that evidentials may express the speaker's attitude or commitment. She claims that 'evidentials may acquire secondary meanings—of reliability, probability, and possibility (known as epistemic extensions), but they do not have to' (2004:6).⁹

⁸ However this does not mean that Aikhenvald (2004) and de Haan (1999) share all the essential grounds of the definition of evidentiality since Aikhenvald criticizes some parts of de Haan's analysis.

⁹ To determine what are the primary meaning and the secondary meaning may be difficult

The main purpose of this dissertation is not to attempt to clarify the universal boundaries of these grammatical categories; however, as far as the specific case of Luchuan is concerned, I claim that while evidentiality in Luchuan can express the speaker's attitude toward the proposition expressed, it does not necessarily do so. To be more precise, the direct and indirect evidentials in Luchuan appear to carry information about the speaker's attitude or commitment (as I reviewed in 5.3.1), but the reportative evidential does not. Thus, encoding the speaker's attitude does not seem to be a necessary feature of evidentials.

There is one more reason why I consider that evidentials in Luchuan should be distinguished from epistemic modality. Although the direct evidential *-N* conveys the speaker's certainty, it does not seem appropriate to regard it as an epistemic modality marker. This is because in the literature, it has been suggested that modal assertions are weaker than non-modal assertions (Papafragou 1998, Radden and Dirven 2007). However, *-N* does not seem to convey a weaker assertion compared with other assertion, as I demonstrated in Chapter 2, Section 2.4.1.

Let us apply the same strategy to investigate whether or not the other two indirect evidentials; the Inferential and the Assumed evidential, convey weaker assertions than non-modal assertions. The Inferential evidential is used in (8a), and the Assumed evidential is used in (8b). The non-evidential elements *-sa* and *-ru* are used in (8c) and (8d) respectively.¹⁰

- (8) a. wain ja Ken ga kooj-u-N tee
 wine TOP Ken NM buy-IMPR-DIR INF
p='Ken will buy wine.'
 EV= Speaker infers that *p*.

depending on the individual language system. However the fact that the reportative evidential does not convey epistemic meaning implies that this element is not primary.

¹⁰ One might think that (8c) and (8d) are not pure non-modal assertions because (8b) contains a final particle *-sa* and *-ru*, which has a different sentence structure, the *kakari-musubi* construction as I explained in Chapter 2. However, since there are no other pure non-modal assertions which do not contain either of them, I chose them as markers which are evidentially neutral.

b. wain ja Ken ga kooj-u-ru hazi.
 wine TOP Ken NM buy-IMPR-ATTR ASSUM
p='Ken will buy wine.'
 EV= Speaker assumes that *p*.

c. wain ja Ken ga kooj-u-sa.
 wine TOP Ken NM buy-IMPR-FP
 'Ken will buy wine.'

d. wain ja Ken ga ru kooj-u-ru.
 wine TOP Ken NM AP buy-IMPR-ATTR
 'It is Ken who will buy wine.'

The sentences (8a) and (8b) sound weaker than (8c) and (8d), unlike the case of the Direct evidential. Therefore, the Inferential evidential and the Assumed evidential might be an overlapped category between evidentiality and epistemic modality.

Here I propose that evidentiality and epistemic modality in Luchuan should belong to different categories, though as I have just mentioned, the Inferential and the Assumed evidential might be overlapped between evidentiality and epistemic modality. I present three reasons why I consider that these two categories should be differentiated.

- 1) Evidentials in Luchuan always clarify the information source but they only optionally express the speaker's commitment. Although they can express the speaker's attitude toward the statement, they do not always do so: the reportative evidential does not convey modal meaning such as speaker's (un)certainty.
- 2) Direct evidential *-N* carries certainty but sentences with *-N* are not weaker than other assertions. Therefore, *-N* is not an epistemic modality marker. The reportative evidential does not convey modal meaning, but the inferential and the assumed evidential conveys the speaker's uncertainty. Even if inferential evidentials convey uncertainty, this does not require that they do not convey evidential meanings.
- 3) The meaning of evidentials is not negated or questioned.

Concerning the second of these points: McCready and Ogata (2007) quote de Haan's (1999) definition that evidentiality and modality should be different, but they then state that 'there is nothing that says a single form cannot encode both types of meaning' (2007:151). Then they argue that Japanese inferential evidentials indicate both meanings. In this dissertation, as I have explained above, I argue that the direct and indirect (inferential) evidential in Luchuan can indicate both meanings, but that the reportative conveys only evidential meaning. Therefore there is no inconsistency in claiming that the direct evidential *-N* can express both the source of information and the speaker's judgement.

As for the third point, it might be strong enough to claim that evidentiality should be differentiated from epistemic modality, because some modals also cannot be negated nor questioned. Therefore, I do not lay too much emphasis on this point, but I include it just as one more clue for further investigation.

5.4 Summary

In this chapter, I have examined instances of the double marking of evidentials and I have concluded that double marking of evidentials does not give rise to any contradiction or incoherency. I also demonstrated that two evidentials could be collaborated or that either of the evidentials could take wide scope over any other evidential.

I have investigated whether the category of evidential can be separated from the category of epistemic modality. The Direct evidential *-N* conveys the speaker's degree of certainty, so it may look as if it belonged to the category of modality; however, I rejected this idea because the meaning which a sentence with *-N* conveys is not weaker compared with the meaning of a sentence without *-N*, unlike epistemic modality. I conclude that *-N* is indeed an evidential rather than an expression of modality. Moreover, I showed that the meaning of the direct evidential is not challenged; it cannot be questioned, agreed, or negated (as in 2.4.2. and 2.4.3). Although this is not enough to prove that this pattern is an evidential rather than an epistemic modality marker, this investigation indicates that the Direct evidential in Luchuan does not contribute to the proposition-level meaning. Further investigation of this point will be undertaken in the future.

Similarly, I argued that the Reportative evidential *-Ndi* is a pure evidential which encodes only the source of information, since it does not convey any epistemic meaning, and also the evidential meaning which it conveys is not challenged. With respect to the Inferential and Assumed evidentials, they may constitute a category where modality and evidentiality overlap. They convey the speaker's certainty, and unlike the case of the Direct evidential *-N*, a sentence with *tee* or *hazi* sounds weaker than a sentence without them. Thus, though the test shows that the Inferential *tee* and the Assumed *hazi* do not contribute to the proposition, since they possess modal features and convey the speaker's degree of certainty, I propose that the Inferential evidential and the Assumed evidential may belong to both categories of modality and evidentiality.

Chapter 6 Conclusion

6.1 Introduction

In this dissertation I have examined evidentiality in Luchuan from a perspective different from all existing studies, treating evidentiality as a grammatical category. In Chapter 1, I provided previous arguments concerning evidentiality focusing on the definition and typological classification and also I introduced an overview of discussions regarding Luchuan studies. In Chapter 2, I described and analysed the detailed functions of the Direct evidential *-N*, and similarly I provided my analysis concerning the other indirect evidentials: the Inferential, Assumed, and Reportative evidentials.

In this chapter, I will outline the main contribution of this study of evidentiality in Luchuan in Section 6.2. Then, in 6.3, I will mention some of the remaining issues and make suggestions as to how they could be approached.

6.2 Summary of the arguments

6.2.1 Main contributions to the study of evidentiality in Luchuan

The main contribution of this study is the detailed description of the evidential verbal affixes and sentence final particles, which is discussed in Chapter 2 to Chapter 4. In establishing the category of evidentiality in Luchuan grammar, I have discussed four major points as follow:

1. Clarification of the definition of evidentiality
2. Syntactic, morphological, and semantic analysis of each evidential: the Direct evidential, Inferential evidential, Assumed evidential, and Reportative evidential.
3. Morphological reanalysis of the verbal template
4. Analysis of possible combinations of tense and aspect with each evidential

As for the definition of evidentiality, I first provided Anderson's definitions (1986: 274-275) and examined its validity, presenting what has been discussed in literature. I concluded I basically agreed with Anderson's criteria (a) to (c); (a) Evidentials show the kind of justification for a factual claim which is available to the person making that claim, (b) Evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim about something else, (c) Evidentials have the indication of evidence as in (a) as their primary meaning, not only as a pragmatic inference. But I proposed that point (c) should be revised adopting Faller's (2002:9) definition that "a true evidential *encodes* a type of source of information, as opposed to (conversationally) *implicating* it". One of the important conditions Anderson presented is that the indication of evidence should be the 'primary meaning' of a proposed evidential, not only a pragmatic inference (Anderson 1986:274). Aikhenvald (2004:3) also states that the 'primary meaning' of evidentiality is source of information. However, Faller attempts to make the concept of evidentiality more specific by using the concept of "encoding".¹⁴⁹ I take encoded meaning to be meaning that is not cancellable; in contrast, implicated meaning can be cancelled. I adopted this distinction to analyze evidentiality in Luchuan rather than whether or not evidential meaning is primary.

After clarifying the definition of evidentiality, I moved on to the second point, syntactic, morphological, and semantic analysis of each evidential. The major claim that should be highlighted most concerns the detailed analysis of the Direct evidential *-N*. In the previous literature, the concept of grammatical evidential has not been discussed, and even though the term evidentiality has been mentioned, there is no discussion of what the direct evidential (or indirect evidentials) should be. In consequence, there is no agreement on related concepts such as what the direct evidence, direct experience, and witness are. Therefore, I clarified "direct evidence" to mean "direct experience" or "direct perception", and I decided to use "the best possible ground" (or, best possible source of information) to include both "direct evidence" and the more indirect cases, following the analysis of *-mi* in Cuzco Quechua presented by Faller (2002). Then, I proposed that *-N* is licensed to be used

¹⁴⁹ What is conversationally implicated is not *encoded*, but *implicated*, based on the Cooperative Principle and the other more specific maxims that derive from it; therefore an implicature can be cancelled (Grice 1989). I take this concept of cancellability to be more specific than that of primary meaning.

if and only if the speaker has best possible source of information. The similarities and differences between *-N* in Luchuan and *-mi* in Cuzco Quechua are also closely examined.

In addition to the Direct evidential *-N*, in Chapter 3, I described how the Inferential and Assumed evidential behave from various points of view, presenting specific examples in particular contexts. I claimed that the basic usage of the Inferential evidential is based on sensory evidence and the usage of the Assumed evidential is, in principle, based on information other than sensory evidence such as general knowledge or habitual information.¹⁵⁰ Concerning the Reportative evidential, in Chapter 4, I demonstrated that the Reportative *Ndi* is used to mark the information the speaker acquired from oral source, but can also be used to mark information acquired through the use of language including written information. It should be noted that the Reportative *Ndi* can be omitted when the information is assimilated and also falls into the speaker's territory of information.

The third contribution of this dissertation to the study of evidentiality in Luchuan is the morphological reanalysis of the verbal template in Luchuan. In the previous literature, there is no agreement on the precise morphological constitution of the string of verbal affixes nor their semantic functions. Some researchers do not analyze the function or meaning of the constituent morphemes and as a result, this deficiency has made it difficult and complicated to analyse tense, aspect, mood study as well as evidential study in Luchuan. I attempted to assign a consistent one-to-one correspondence of affix and meaning.

Clarification of the third point above then enabled the fourth contribution of this study, which is the analysis of possible combinations between tense, aspect and each evidential. It became clear that all evidentials except the Inferential evidential can co-occur with all aspects and tenses. As far as the Inferential evidential is concerned, it can appear in non-past tense, but not in the past tense. I hypothesize this is because required information for the use of the Inferential evidential *tee* is sensory evidence which is available *at the time of utterance*, but further detailed investigation will be required.

This study constituted the first substantial investigation of evidential sentence

¹⁵⁰ These basic usages of the Inferential and the Assumed evidentials are not strictly restricted. That is, sensory evidence is sometimes used for the Assumed evidential and vice versa.

final particles in Luchuan, which includes these original discoveries and descriptions above. In addition to these points, the data in this study will also be beneficial to the documentation of Luchuan as an endangered language, since it contains original data based on my own fieldwork.

6.2.1 Contributions to the typological and theoretical study

I also discussed typological and theoretical aspects through the overall investigation of evidentials in Luchuan. The first point of the typological argument is classifying the evidential system in Luchuan into one of the typological classes. I used the model presented by Aikhenvald (2004) and proposed that the evidential system in Luchuan belongs to type C2: Direct (or Visual), Inferred, Assumed, Reported. Luchuan is considered as the only sister language of Japanese; therefore, this proposal will derive further linguistic questions; what type Japanese evidentials belong to, or how different these two languages may have become.

Second, in Chapter 5, in Section 5.2, I discussed the double marking of evidentials. I showed that double marking of evidentials does not give rise to any contradiction or incoherency and provided some similar examples which can be found in other languages that were compiled in Aikhenvald (2004).

Third, I explored whether or not evidentials convey speaker's (un)certainly, to argue whether or not evidential can be distinguished from epistemic modality. The discussions indicate that the Direct evidential *-N*, the Inferential evidential *tee*, and the Assumed evidential *hazi* can convey speaker's degree of certainty, but the Reportative evidential *Ndi* conveys no information about the speaker's degree of certainty or the speaker's commitment to the proposition. Moreover, I claimed that sentences with the Direct evidential *-N* do not convey a weaker assertion compared with other assertions, but the sentences with Inferential and Assumed evidentials do, so I proposed that these evidentials show an overlap between evidentiality and epistemic modality. Also, I claimed that the fact that the Inferential and Assumed evidential could belong to both evidentiality and epistemic modality does not mean that evidentiality should be regarded as a subtype of epistemic modality because all four evidentials in Luchuan encode the source of information.

6.3 Remaining issues and possible solutions

6.3.1 Evidentiality and aspect

The sentence that contains an aspect marker appears to be semantically related to evidential to some extent. That is, when the Direct evidential appears in simple past without any aspect, the sentence simply indicates that the speaker has best evidence for the event in the past. However, for example, resultative aspect seems to indicate more than just combination of aspect and a direct evidential, requiring the causing event besides the resulting event. In this section, I point out the necessity of further investigation of semantic relations between aspect and the Direct evidential *-N*, providing the data concerning resultative as examples.

Resultatives are described in the literature as indicating that ‘a state exists as a result of a past action’ (Bybee 1994:54). In English, for example, there are two types of resultatives: the ‘be’-perfect and the ‘have’-perfect (Dahl 1999:290). Bybee (p.63) calls the former resultative (or precisely ‘stative passive’) as in (1a) and the latter anterior, as in (1b). Both sentences indicate a sustained state caused by a past action.

- (1) a. The door is closed. ‘be’-perfect (resultative)
 b. The door has closed. ‘have’-perfect (anterior)

Moreover, resultative constructions (‘be’-perfect) like (1a) have a close relation to passive constructions like (2). With the agent made explicit by the *by*-phrase, a passive reading arises:

- (2) The door is closed by the guard. (passive)

Turning to the syntax: resultatives can be used with intransitive verbs with no alternation in the grammatical relation of the subject as in (3a); in contrast, in passive constructions, as in (4a), the subject of the resultative form corresponds to the object of the transitive form.

- (3) a They are gone. (resultative: intransitive)
 b. They have gone.
- (4) a. The door is closed (by the guard). (resultative/passive : transitive)
 b. The guard closes the door.

There is thus a difference concerning the choice of subject with intransitive and transitive verbs; nevertheless, it is true that resultative and passive constructions are often very similar when the agent is not expressed. We have seen that resultative, passive, and anterior share the property of signaling the state at the reference time caused by a past action. As for the difference between them, Bybee (1994:63) states that ‘only resultative consistently signals that a state persists at reference time’. Therefore, sentence (5a) is acceptable, whereas (5b) is not acceptable in the resultative sense; only the passive reading is acceptable (Bybee 1994:63).

- (5) a. The door has opened and closed several times.
 b.# The door is closed and opened several times.

The examples above imply that the resultative anchors the state to the reference time more firmly than the other two, anterior and passive. Bybee supports this view by presenting a study by Nedyalkov and Jaxontov (1988), which points out that the anterior (‘have’-perfect) is not compatible with the adverb ‘still’ but that the resultative (‘be’-perfect) does allow the appearance of ‘still’.

- (6) a. The door is still closed.
 b. The door has still closed.

When *still* is used in a resultative construction as in (6a), this *still* indicates a ‘state of persistence’. In contrast, when *still* is used with the anterior as in (6b), *still* can only have the sense of ‘nevertheless’. The fact that *still* is used in the sense of ‘state of persistence’ only with the resultative, not with the anterior, suggests that the resultative emphasizes the state resulting from the action, while the anterior attaches

importance to the action itself rather than the state.¹⁵¹

Comrie (1976:56-60) classifies perfect into the following four uses: (1) perfect of result, (2) experiential perfect, (3) perfect of persistent situation, and (4) perfect of recent past. What I call resultative in this dissertation approximately corresponds to (1), the perfect of result. Comrie defines the perfect of result as follows: ‘a present state is referred to as being the result of some past situation’ (1976:56).¹⁵²

In Luchuan, there are not distinct constructions for anteriors or resultatives. Therefore, it is not necessary to make a clear distinction between them. Nevertheless, the distinction between these concepts is important because the function of *ee + N* seems to be closer to the anterior than to the resultative (‘be’-perfect). As (7b) shows, *eeN* avoids co-occurrence with the adverb *naada* ‘still’.

(7) a. *hasiru micit-ee-N*.

door close-RES-DIR

‘The door is closed.’ (I/somebody have/has closed the door.)

b. #*hasiru naada miciteeN*.

door still close-RES-DIR

‘The door is still closed.’

In this respect, *ee + N* behaves in a similar way to the anterior in English as shown in example (6). However, I call *-ee-* resultative rather than perfect or anterior because this form covers only one function, ‘perfect of result’, but does not cover the other three functions in Comrie’s classification. Also since there is no need to distinguish the ‘have’-perfect from the ‘be’-perfect like there is in English, calling the *-ee-* form resultative is simple and sufficiently precise.

As for the similarity between resultative and passive, no problem arises in Luchuan because these two constructions are different enough that the distinction can

¹⁵¹ Dahl (1985:134) also suggests that anterior is different from a resultative construction because the former focuses more on the event than on the state but the latter focuses more on the state than on the event, based on the analysis of Swedish presented by Nedjalkov et al. (1983).

¹⁵² Dahl (1985) points out that this definition of Comrie’s is not precise enough. One of the reasons he gives is that this formulation does not distinguish typical resultative sentences like (6a) with the copula from a perfect used in a resultative sense like (6b). See footnote 3 above as well.

be made easily. To make a passive sentence, the suffix *-rijuN* (which becomes *-raQt-* when it appears with continuative aspect) is attached to the stem, as (8b) shows. Moreover, *juubaN* ‘dinner’ in (8a) cannot be marked by the nominative case marker, while it can in (8b), (although as is usual in Luchuan, this case marker can be omitted¹⁵³). As just described, examples (8a,b) illustrate that there is no similarity between the resultative and passive in Luchuan, in contrast to English.

(8) a. *juubaN nic-ee-N.*

dinner cook-RES-DIR

p = ‘(I) have cooked dinner.’

EV= Speaker has direct evidence of *p*.

b. *juubaN nu ni-raQt-oo-N.*

dinner NM cook-PAS-CON-DIR

p = ‘Dinner is cooked.’

EV= Speaker has direct evidence of *p*.

To sum up, the term resultative is used to describe a present state caused by events or actions in the past. Comrie claims that this is one of the significant features of the perfect of result. This characteristic demonstrates a crucial difference between simple past and perfect of result, as (9) illustrates.

(9) a. John has arrived.

b. John arrived.

(Comrie 1976:56)

According to Comrie, while (9a) indicates persistence of the result of John’s arrival,

¹⁵³ For example, if *juubaN* ‘dinner’ is marked by the nominative case marker *nu*, the sentence would be ungrammatical, as in (8’a). In the case of the passive, the nominative case marker can appear but also can be omitted, as in (8’b).

(8’) a. **juubaN nu nic-ee-N.*

dinner NM cook-RES-DIR

‘(I) have cooked dinner.’

b. *juubaN ni-raQt-oo-N.*

dinner cook-PAS-CON-DIR

‘Dinner is cooked.’

which means John is still here at the time of utterance, (9b) does not convey such a meaning.

Resultative in Luchuan also indicates persistence of the result. Therefore at the time when sentence (10) is uttered, the result of the event, i.e. the bread Ryu bought, must exist. The facts that the event took place in the past, i.e. that Ryu bought some bread, and the present situation of the persistence of the result, are both important for the use of the resultative in Luchuan, just like the English perfect of result.

- (10) Ryu ga paN koot-ee-N.
 Ryu NM bread buy-RES-DIR
 p = ‘Ryu has bought bread.’
 EV = Speaker has direct evidence of p .

In addition to the two criteria I presented above, there is one more important factor that can affect the acceptability of the *ee + N* form. Let us examine example (11a) and (11b).

Context: The speaker got to the store but the door is closed.

- (11) a. # (pro) hasiru micit-ee-N.
 door close-RES-DIR
 ‘Someone has closed the door.’
- b. hasiru micjat-oo-N.
 door close-CON-DIR
 p = ‘The door is closed.’ (resultative not passive)
 EV = Speaker has direct evidence of p .

Sentence (11a) seems to fulfill the conditions for using resultative, in that there was a past event (someone closed the door before the time of utterance), and the result persists (the door is closed at the time of utterance). What then makes this sentence unacceptable? If the speaker knows who closed the door – for example, if one of the family members *Keiko* closed the door at home – then the similar sentence in (12) is acceptable.

- (12) *hasiroo Keiko ga micit-ee-N.*
 door-TOP Keiko NM close-RES-DIR
p = ‘Keiko has closed the door.’
 EV = Speaker has direct evidence of *p*.

On the other hand, in the context of (11), the store is located outside the speaker’s house and the speaker does not know who closed the door. This suggests that *eeN* might have a closer relationship with the agent or the causing event in addition to the persistence of the result. If the speaker does not have evidence about the person who closed the door, continuative aspect should be used, as in (11b).

The discussion above implies that an additional factor—a clear relationship between the result and the agent, the causing event,—is required for the use of *eeN* on the top of the conditions which determine the use of the resultative in English, namely persistence of the result. More precisely, it can be proposed that as a third condition for the usage of *ee+N*, the speaker needs to have a concrete understanding that the present situation is produced by a certain agent when the *ee+N* is used. The next examples also illustrate that the speaker cannot use *ee+N* just on the basis of having visual evidence of result.

Context: Passing the vegetable field, someone asks the farmer who is working in the field what is planted in the field. The farmer answers.

- (13) *tamanaa ?wiit-ee-N.*
 cabbages plant-RES-DIR
p = ‘(I) have planted cabbages.’¹⁵⁴
 EV = Speaker has direct evidence of *p*.

The translation of (13) focuses on the result (planted cabbages) but it is different from the passive in that the agent is also implied. The farmer can use *ee+N* because he planted the cabbages himself. The relation between the causing event and the result is clear. But if someone asks about the field next to this farmer’s, he cannot use

¹⁵⁴ The case of *tamanaa* ‘cabbages’ is objective case. As we have seen in Chapter 1, Section 1.3, the objective case is a zero-marked form.

(13) to answer the question. Even if the farmer can see the cabbages, he cannot use *eeN* but instead he would use passive form as in (14) because the passive sentence does not necessarily refer to an agent.

- (14) tamanaa nu wii-raQt-oo-N.
 cabbages NM plant-PAS-CON-DIR
p = ‘Cabbages are planted.’
 EV = Speaker has direct evidence of *p*.

Since *ee+N* requires that the speaker has to be sure of the causing event, in other words, *ee+N* cannot be used based on visual evidence only, the speaker needs to use a passive sentence which does not require a clear understanding of the connection between the result and the causing event. Passive constructions can be used as far as the speaker can recognize the present situation.

This third factor, specification of the causing event, may remind us of discussions of the null pronoun (*pro*). The phenomenon I have presented above may look similar to pronoun deletion. Shibatani (1990) discusses the omission of a pronoun and states that ‘even if a subject is overtly missing, the sentence can be complete if it is understood to contain a *pro* in subject position (1990:325)’.¹⁵⁵ This means that a subject can be dropped if a speaker and a hearer can identify the dropped subject. However, recall that the farmer cannot talk about other farmer’s action in the next field using sentence (13). Even if the farmer can identify who has planted the seeds of cabbages because he knows whose field it is, it is still awkward to describe another’s action using sentence (13). The fact that the speaker cannot describe another’s action with *eeN* form even if he/she can identify the subject suggests that some kind of factor other than pronoun deletion is involved. In the case of example (11a), the speaker cannot identify who closes the door. Thus, it may look as if sentence (11) is unacceptable because speaker cannot identify the dropped subject. But in the example of the farmers, (13) is not acceptable even if the speaker knows who has planted the seeds. In the case of other aspects, such as continuative *-oo-*, *-oo-* can appear with *-N* if the speaker knows who planted the cabbages. Let us

¹⁵⁵ Luchuan frequently allows zero pronouns, as does Japanese. When the participants of a conversation understand the reference, it is much more natural to omit the subject rather than expressing an overt subject.

examine one more related example.

Context : Someone asks to the farmer what is planted in the next field. He answers:

(15) tamanaa ʔwiit-oo-N.

cabbages plant-CON-DIR

p = ‘(pro) is planting cabbages.’

EV= The speaker has direct evidence of *p*.

Sentence (15) is acceptable if the speaker knows for sure that the farmer who owns the next field is planting the cabbages. Since ongoing action can be easily observed, usages of continuative aspect are less restricted than the uses of resultative aspect.

As we have seen so far, the use of the resultative is rather complicated and this complexity comes from the meaning of resultative *-ee-* and the direct evidential *-N*. Even if the verbs contain a change of state, speakers must know the causing event and must also see the result of the action. Thus visual evidence caused by past action should be something tangibly apparent, preferably some physical object. Overt evidence is required to use *ee+N* so that a speaker can make a statement as a fact with direct evidence. This kind of relation between aspectual meaning and the Direct evidential *-N* needs to be clarified in future study, including whether or not the other aspect such as imperfective or continuative has this kind of feature.

6.3.2 Mirativity

I was not able in this dissertation to investigate the category of mirativity, which often appears in arguments concerning evidentiality, especially inferentiality. However, mirativity does appear to be a less common interpretation of *-ee-*. The concept of mirativity is described by DeLancey (1997).¹⁵⁶ The major function of this category is ‘to mark sentences which report information which is new or surprising to the speaker, regardless of whether the information source is first- or second- hand’ (DeLancey 1997: 33). Sentence (19) is acceptable although *-ee-* is used if it expresses the speaker’s surprise. Note that the morpheme *-ee-* in this case, in the use

¹⁵⁶ But DeLancey (1997:48) mentions that Akatsuka (1985) presents a description of the semantic category which mostly corresponds to what he calls mirativity.

of mirativity, indicates mood that is different from resultative aspect. Recall that *-ee-* as resultative and *-ee-* as a mood marker can be distinguished because a mood marker cannot appear in past tense but resultative can.¹⁵⁷

Context: Speaker is looking for her glasses and unexpectedly finds them in her own glasses case where she thought she had taken a look at first.

- (16) kuma Nkai ʔat-ee-N!
 here LOC be-M-DIR
 ‘Here they are!’

The speaker is surprised by finding her glasses there because she thought she had already checked the case before. When a simple past form of *ʔaN*, *ʔataN* ‘was/were’ is used, the sentence with it does not convey such mirative meaning. In other words, (16) conveys a sense of surprise, and in fact can only be used felicitously if an expression of surprise or novelty is appropriate in the context. Let me provide another example which allows the occurrence of *-ee-* in slightly different sense.

Context: Speaker stopped by at her husband’s office but he wasn’t there. But unexpectedly she found his bike outside a pub. She thinks he is drinking while on duty.

- (17) kuma Nkai ʔut-ee-N!
 here LOC be-M-DIR
 ‘Here he is.’

However, even though she has not actually found her husband in person, she can use the Direct evidential *-N* after *-ee-* based on visual evidence, his bike. The context I presented above makes the sentence sound like inference which *eeN* usually cannot be used for without the Inferential evidential *tee*. I suppose that the reason the Direct evidential can be used in such context if the speaker wants to convey surprise. Other

¹⁵⁷ I discussed the reasons why these two morphemes can be distinguished in Chapter 3, Section 3.2. As I have stated, since the mood marker *-ee-* cannot co-occur with past tense marker *-ta-*, example (16)’ below sounds unacceptable.

(16)’ * kuma Nkai ʔat-ee-ta-N!
 here LOC be-M-PAST-DIR
 Intended meaning : ‘Here they were!’

than that, sentence (17) is also acceptable if it is right after the speaker has actually seen him. In this case, *eeN* is not inference anymore in that people do not make an inference when they find confirming evidence. In this way, *ee+N* can be used to convey mirativity when contexts allow a mirative interpretation. But when *ee+N* is used in this sense, the speaker has to be certain that the bike in (17) is her husband's own. Although this usage is interesting, it is not typical, because not all sentences containing *-ee-* with the Direct evidential *-N* have such a mirative meaning. It highly depends on contexts in which *ee+N* is used. What kind of conditions license this mirativity reading still remains unclear; thus, further study will be required.¹⁵⁸

6.3.3 Other various remaining issues

Lastly, let me mention briefly some other remaining issues. In the literature, it is claimed that evidentiality cross-linguistically takes higher scope than the propositional operators such as negation. This study also points out that evidentials in Luchuan are not negated, which means that evidentiality does not contribute to a propositional *-level* meaning. Hence, this investigation could be developed to consider how the data in Luchuan can be analysed in a pragmatic theory, as was done in Faller (2002). In this study, though I have shown that evidentials in Luchuan could be analysed as illocutionary modifiers, since they never occur in the scope of propositional operator, I have not resolved the issue of whether or not they modify the sincerity conditions of the speech act, or whether or not a new illocutionally act should be configured. Moreover, it will be necessary to seek the possibilities of analyzing the evidentials in Luchuan within the other theoretical frameworks. More detailed descriptive study as well as theoretical investigations will develop the study of evidentiality in Luchuan.

Comparative study within the Luchuan language group is another important direction for future research. There are some interesting studies concerning evidentiality in other dialects of Luchuan. For example, Izuyama (2005, 2006) reported there are grammatical evidentials in Miyara dialect, Ishigaki, Hirara dialect, Miyako, and Yonaguni dialect, which have three kinds of evidentials: Visual (Direct),

¹⁵⁸ To investigate this usage may revile the clue about the identical form between resultative *-ee-* and a mood marker *-ee-*, as resemblance of the two forms has been mentioned in literature (Comrie 1976, 2000, Bybee 1994).

Inferred, and Reported. In future work I intend to investigate further comparative studies within the Luchuan language group and comparative study with possible evidential systems in proto-Japanese and modern Japanese as well.

In addition to the issues above, the origins of evidentials would be a very interesting topic. Some evidentials have evolved from grammaticalized verbs, others from deictic, or locative markers, or from tense or aspect (Aikhenvald 2004). Since evidentials in Luchuan appear in different slots, it is possible that they may have evolved from different grammatical categories. Also, how children acquire evidentials or how evidentials are maintained in language contact is an interesting issue, since children seem to acquire evidentials at a fairly early stage, and also young generations who do not speak Luchuan also seem to take over certain evidentials in different ways, especially the Assumed and the Reportative evidentials.

Lastly, Luchuan is rapidly vanishing. Younger generations who cannot speak Luchuan speak a variant of fused Japanese and Luchuan forms, which as I have just stated, does not have the same evidential system as the heritage language. Evidentiality is a category which is easily influenced by language contact (Aikhenvald 2004), and this is true in the case of Luchuan as it has been influenced by Japanese. Further description and investigation of evidentials in Luchuan is necessary, but I hope this dissertation, as a first substantial study of evidentiality in Luchuan.

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