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Clause-typing and evidentiality in Ecuadorian Siona

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Citation

Bruil, M. (2014, February 20). *Clause-typing and evidentiality in Ecuadorian Siona*. LOT dissertation series. Retrieved from <https://hdl.handle.net/1887/23938>

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Issue Date: 2014-02-20

Chapter 1: Introduction

1.1 Introduction

Many languages of the world have strategies for expressing whether the information conveyed by the sentence is vouched for by the speaker or not. Speakers can consider information as their own, either because they have had direct access to the information that they are expressing or because they are certain for any other reason that the information is true. When speakers do not consider information to be their own, they often use specific devices in order to distance themselves from the veracity the information and refrain from taking (full) responsibility for it.

The languages of the world use different strategies to communicate whether the expressed information is part of the speaker's knowledge or not. Some languages use epistemic modals while others have recourse to evidential morphology. Epistemic modality is a category that conveys the degree of belief that the expressed information is true. Speakers can believe that the information is true, that it is false or that it is necessarily or possibly true or false. When the information is true or false, regular declarative sentences without an epistemic modal are used. When the information is possibly or necessarily true or false an epistemic modal is used. The use of an epistemic modal mitigates the responsibility of the speaker with respect to the information. Therefore, epistemic modality is used as a device to express that the information is not (fully) integrated in the speaker's knowledge (cf. Givón, 1982).

Evidentiality is another device that is used for the same purposes. It indicates the speaker's mode of access to the information that she / he is conveying. The speaker can either have direct or indirect access to the information. On the other hand, a speaker has direct access to information when she / he has witnessed an event or state. A speaker has indirect access to information when she / he has heard the information from someone else or when she / he has indications that the information is true. Speakers often make use of indirect evidentials in order to show that the information is not part of their own knowledge.

Although evidentials have already been discussed and defined by scholars such as Boas (1911a, 1911b, 1938), Sapir (1921, pp. 114-

115) and Jakobson (1971),¹ there is still no consensus about the exact boundaries of the notion of evidentiality. Since the notions of epistemic modality and evidentiality are closely related, many languages possess morphemes that can convey both. It has been claimed that the expression of evidentiality and epistemic modality is part of the semantics of these morphemes (Matthewson, Rullmann, & Davis, 2007; Peterson, 2010). Others have argued that an evidential interpretation² can be a pragmatic extension of the epistemic modal semantics of a form or the other way around (see for instance Aikhenvald, 2003b; Aikhenvald, 2004). It is not unthinkable that both options occur in the languages of the world. Other languages have evidentials that interact with tense and aspectual systems (see for instance Faller, 2004 on Cuzco Quechua; see Friedman, 1986; 2003 on the languages of the Balkan). A third group of languages seems to have evidentials that interact with clause types. Clause-typing is understood here as the grammatical marking of the function of a sentence, including the declarative, an interrogative and imperative functions of a sentence, following Lyons (1977, p. 745) and Portner (2009, pp. 262-263).³ An example of a language where clause types interact with evidentials is Shipibo-Konibo (a Panoan language of Peru). In this language, the reportative and the direct evidential clitics are mutually exclusive with the interrogative clitic (Valenzuela, 2003). They seem to function as a single morphological system.⁴

The heterogeneity of the concept of evidentiality makes it a difficult topic in the description of a language. The nature of evidentiality is a much discussed topic in various sub-disciplines of linguistics, especially in the last two decades (see among others Aikhenvald, 2004; De Haan, 1999, 2001b; Faller, 2002; Matthewson et al., 2007; Rooryck, 2001a, 2001b). In various studies (Aikhenvald, 2004; Aikhenvald & Dixon, 2003; Epps, 2005; Faller, 2002; Fleck, 2007; Stenzel,

¹ For detailed description of the history of the study of evidentiality see Jacobsen (1986, pp. 3-7) and Aikhenvald (2004, pp. 11-17).

² Aikhenvald (2004) uses the term 'evidentiality strategy' for the evidential interpretations of a non-evidential construction.

³ Clause types should not be confused with speech acts. The term 'clause type' refers to the grammatical function of a sentence and the term 'speech act' to the pragmatic function of a sentence. This issue will be further discussed in chapter 2, in subsection 2.3.2.

⁴ There are many other languages in which the reportative and the interrogative do not co-occur, including the Eastern Tukanoan language Tukano (Ramirez, 1997, p. 120) and other languages of the same linguistic affiliation (Aikhenvald pers. comm.).

2008a among many others), the correlation between clause typing and evidentiality has been discussed. However, the possibility that some evidentials are part of a clause-typing system, and that their evidential semantics emerges from a clause-typing semantics, has not been discussed in the literature. This dissertation aims to address this issue. I discuss how a morphological form can function as both an evidential and as a clause-typing element.

1.2 Evidentiality and clause typing in Ecuadorian Siona

Ecuadorian Siona is no exception to the observation that languages have devices to express the integration of information in the speaker's knowledge. The language contains evidential devices that are used for the expression of this function. It has reportative and conjectural morphology in order to convey that the information expressed is not that of the speaker. These categories interact with clause types: assertions, questions, reports, and conjectures are mutually exclusive in the language. This is illustrated in example (1):

- (1) a. Ocoji. (Assertive).
 Ohko-hi.
 rain-3S.M.PRS.ASS
 'It is raining.' (I vouch for it). (20110325elicr001.205).
 b. Ocoquë? (Interrogative).
 Ohko-kî?
 rain-2/3S.M.PRS.N.ASS
 'Is it raining?' (I am asking). (20110325elicr001.204).
 c. Ocoquëña. (Reportative).
 Ohko-kî-jã.
 rain-2/3S.M.PRS.N.ASS-REP
 'It is raining.' (I am told). (20110402elicr001.001).
 d. Ocoa ba'i. (Conjectural).
 Ohko-a ba'i-i.
 rain-NEG be-2/3S.M.PRS.N.ASS
 'It is raining.' (I am conjecturing).
 (20110402elicr001.002).

The sentences in example (1) show that assertions, questions, reports and conjectures are separate and mutually exclusive categories in the language. These four categories are marked by means of a combination of subject agreement morphology and additional morphology.

Assertions are marked with assertive subject agreement morphology as illustrated in example (1a). Questions are marked by means of the non-assertive subject agreement morphology, as shown in (1b). Additionally, questions can also be distinguished by a specific intonation. Reports are marked by means of a combination of non-assertive subject agreement morphology and the reportative suffix *-jã* (as in (1c)). Conjectures are marked by a periphrastic construction *-a ba'i* and non-assertive subject agreement morphology (as in (1d)). It will be shown in this thesis that the conjectural is, in fact, not an independent category like assertions, questions and reports, but that it is a subcategory of questions. In other words, the conjectural is not a clause type of its own.

The reportative, however, is an independent clause type in Ecuadorian Siona. It is not only mutually exclusive with the other clause types, but it forms a semantic system with the other clause types in the language: assertions express the speaker's knowledge, questions inquire about the addressee's knowledge and reports express the knowledge that was provided by a non-speech act participant. This analysis of the Ecuadorian Siona clause typing system sheds new light on the heterogeneous nature of evidentiality. It shows yet another way in which evidentiality is coded and organized in one of the languages of the world and it illustrates how the concept of speaker's knowledge is crucial in the understanding of the use of evidentials.

1.3 Ecuadorian Siona

Before addressing the aim and methodology of this study on the expression of evidentiality in Ecuadorian Siona, it is useful to provide some (socio)linguistic background on the language. First I introduce the sociolinguistic context in which the language is spoken (subsection 1.3.1), then I describe the genetic affiliation of the language in subsection 1.3.2 and finally, I explain the genetic relations within the Western Tukanoan branch in subsection 1.3.3.

1.3.1 The sociolinguistic situation

Ecuadorian Siona is spoken by the Ecuadorian Siona people who live in the province Sucumbíos in the Eastern jungle region of Ecuador. The Siona people refer to themselves as *ba'i* 'people' and they refer to their language as *ba'icoca* 'the language of the people.' Most of the Ecuadorian Siona people live in the six small Siona villages. The villages Puerto

Bolívar and Tarabëaya are situated on the Cuyabeno river in the Cuyabeno Wildlife Reserve and the villages Sototsiaya, Orahueaya, Aboquëhuira and Bi'aña are located on the Aguarico river. Another group of the Ecuadorian Siona people lives in the provincial capital Lago Agrio. The location of Puerto Bolívar and Sototsiaya, the two villages where the fieldwork for this dissertation was conducted, is indicated on the map in figure 1.1.

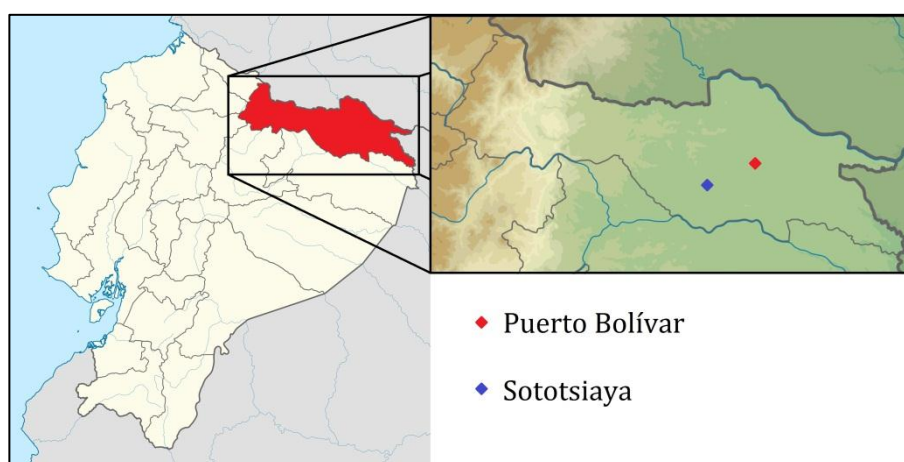


Figure 1.1: Map of Ecuadorian Siona fieldwork sites

Ecuadorian Siona is a severely endangered language spoken by less than 250 people (Mejeant, 2001). The language is not only endangered because of the small number of people that speak it, but also because the chain of transmission has been interrupted in many families. Many children are no longer acquiring the language. They grow up speaking Spanish, the national language of Ecuador.

In some villages, the language is being transmitted more than in others. For instance, in Sototsiaya almost all the children acquire Siona as their first language, and they acquire Spanish when they go to school. In Puerto Bolívar, on the other hand, most children acquire Spanish at home, and only a few children are raised in Siona. However, because their peers speak Spanish, they only speak Siona with their parents, and Spanish outside their homes. The situation in Tarabëaya is even more critical. The younger generations do not speak Siona. Only people above 50 still speak the language.

The heavy impact of Spanish on Ecuadorian Siona has slowly increased since the first contact with Spanish speakers and has now reached a climax. The Siona people descend from an ethnic group that

the Spanish called the *Encabellados* during Spanish colonial times, referring to their habit to take very good care of their long hair (Chantre y Herrera, 1901, p. 63). There is documentary evidence that Catholic missionaries visited the *Encabellados* very early on during colonial times. As early as 1599 a Jesuit mission went to visit them (Steward, 1948, p. 739), and various missions followed after that (Vickers, 1976, pp. 38-41). From the middle of the 17th century until the 18th century, contact with Spanish speakers increased when Jesuit missionaries tried to unite the many *Encabellado* communities in *reducciones*, villages that were founded in order to convert the local people to Catholicism. The *reducciones* were unsuccessful for various reasons (Vickers, 1976, pp. 38-44), and they all eventually ceased to exist with the expulsion of the Jesuits from the Americas (Vickers, 2003, p. 51).

During the 19th century, contact between the Siona people and the Spanish-speaking world was reduced to limited trade relations. This started to change during the last decades of the 19th century. As a result of the rubber boom contact increased during this period. After the rubber boom contact increased even more because of the arrival of the Summer Institute of Linguistics missionaries Orville and Maria Johnson in 1955, and the arrival of oil companies in 1967 (Vickers, 1976, pp. 44-53; 2003, pp. 53-55). Contact has now reached a critical level. External factors, such as the presence of oil companies in the area, international tourism, and missionary activity by an apostolic church have increased the pressure from the Spanish-speaking world on the Siona communities.

Internal factors, such as migration and intermarriage with other indigenous groups and *mestizos* also play a role. The Siona people used to marry members of the Sekoya people, who speak a closely related language, and of the Cofán, who speak an unrelated language isolate. There is considerable cultural unity between these groups as a result of this long history of intermarriage. Nowadays, probably since all three groups are small, the Ecuadorian Siona also marry people from other indigenous groups such as the Amazonian Kichwa and the Shuar people. There are also various marriages between Ecuadorian Siona and *mestizos*, the non-indigenous people in Ecuador. The children of these intercultural marriages are often monolingual speakers of Spanish. These marriages have increased the presence of Spanish in the Siona villages (Bruil, 2011). All of these reasons have contributed to the current critical state of the language. On the positive side, people have realized the seriousness of the situation, and they now are developing revitalization policies in the various communities.

1.3.2 The genetic affiliation

Ecuadorian Siona belongs to the Tukanoan language family. The languages of this family are spoken in 4 countries of South America: Colombia, Brazil, Ecuador and Peru. There are various classifications of the Tukanoan languages. In an early classification, scholars proposed a three-way split in the language family, dividing it into an eastern, central (or middle) and western branch (Barnes, 1999, 2006; N. E. Waltz & Wheeler, 1972). The classification proposed by Barnes (1999) is shown in figure 1.2 below. In this classification, the eastern branch is the largest, consisting of twelve languages spoken in the Vaupés area in Colombia or Brazil. The central branch only consists of two languages: Kubeo and Retuarã, also spoken in the Vaupés area. The western branch consists of four languages that are geographically further apart. Koreguaje is spoken in southern Colombia, Sekoya and Siona form a cluster on the Colombian, Ecuadorian and Peruvian border, and Orejón / Máíhǎkì is spoken more towards the east in Peru not far from the border with Colombia (Barnes, 1999).

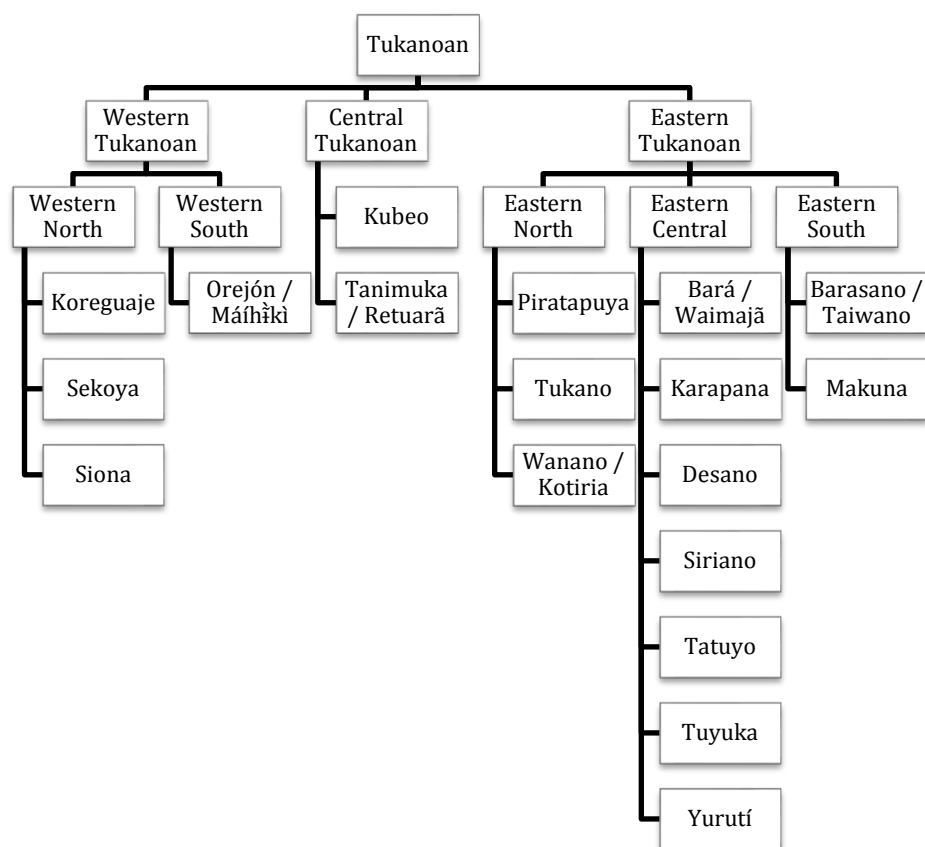


Figure 1.2: The Tukanoan family classification according to Barnes (1999, p. 209).

In more recent classifications, Chacón (to appear), Gómez-Imbert (2011) and Stenzel (2013, pp. 3-6) consider there to be only two Tukanoan

branches: an eastern and a western branch.⁵ Kubeo and Retuarã are not considered to be a separate branch from the Eastern Tukanoan languages. The differences between these two languages and the other Eastern Tukanoan languages can be explained because of their intense contact with Arawak languages (Gomez-Imbert, 2011, p. 1448). Figure 1.3 below presents a simplified version of the classification as proposed by Chacón (to appear):

⁵ See for the first criticism on the existence of a Central/Middle branch Franchetto and Gomez-Imbert (2003).

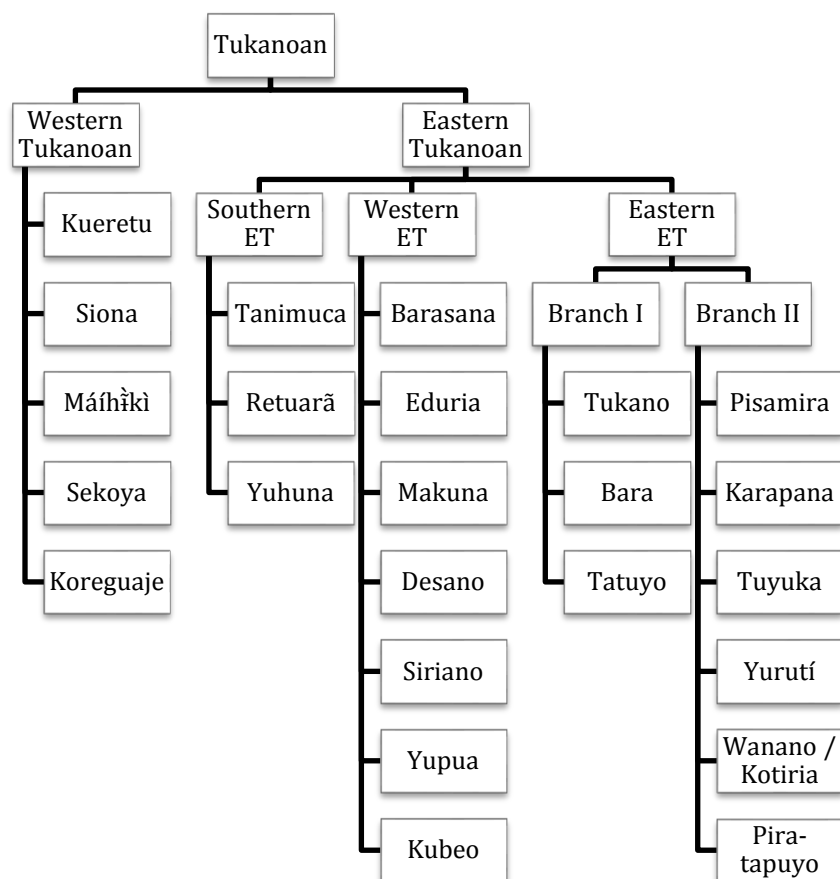


Figure 1.3: The Tukanoan family classification according to Chacón (to appear).⁶

The main division of the classification proposed by Chacón (to appear) is adopted in this dissertation. The Tukanoan languages are considered to belong either to the Eastern or to the Western Tukanoan branch.

1.3.3 The Western Tukanoan branch

The Western Tukanoan languages that are still spoken are Koreguaje, Colombian Siona, Ecuadorian Siona, Sekoya and Máíhǝ̀kǝ̀ / Orejón. Some of these languages are more closely related than others. For instance,

⁶ Further (extinct) Tukanoan languages including Tama and Teteté are not discussed in this classification.

Siona and Sekoya are much more similar to each other than to the other Western Tukanoan languages according to Chacón's (to appear) classification.

One additional distinction that I make in this dissertation is between Ecuadorian Siona and Colombian Siona. The reason for this is that the linguistic variety of Siona spoken in Ecuador that was studied for this dissertation differs from the Colombian Siona variety that was studied by Wheeler (1967, 1970, 1987a, 1987b, 2000) and Wheeler & Wheeler (1975) with respect to some lexical, phonological and morphosyntactic properties. Phonologically, Ecuadorian Siona has lost the word internal velar voiced stops that Colombian Siona has preserved. In the morphosyntactic domain, both varieties of Siona have distinct conjectural constructions.

Ecuadorian Siona is in some features closer to Sekoya, which is spoken in the same area. There are less lexical distinctions, and Sekoya has lost the word internal velar voiced stops as well. Therefore, Ecuadorian Siona and Sekoya are often considered to be two dialects of the same language (Mejeant, 2001, p. 25; Vickers, 1976). However, there are also some phonological and morphosyntactic distinctions between Ecuadorian Siona and Sekoya. An example of a phonological difference is that where Ecuadorian Siona has a word internal bilabial fricative /β/, Sekoya has a voiceless stop /p/ (Schwarz, 2011; pers. comm.). Morphosyntactically, Sekoya lacks the conjectural construction that is present in Ecuadorian Siona. Therefore, I include the three varieties Colombian Siona, Ecuadorian Siona and Sekoya as part of a single dialect continuum.

Ecuadorian Siona can generally be viewed as an intermediate variety between the other two languages. Colombian Siona and Sekoya share a few features. For instance, in Ecuadorian Siona the past tense form *-hV'i* shows vowel assimilation of the first vowel of the suffix. This assimilation is not found in Colombian Siona and Sekoya, which both have the past tense form *-hi'i*. All three varieties show a considerable degree of mutual intelligibility and can therefore be considered to be three distinct varieties within a dialect continuum,⁷ as illustrated in figure 1.4:

⁷ It is possible that another distinction should be made between Ecuadorian Sekoya and Peruvian Sekoya. However, there are not enough data available on both varieties in order to include this distinction in this dissertation.

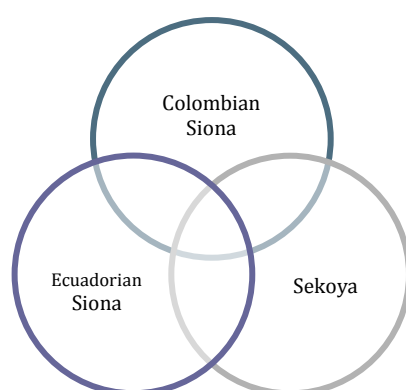


Figure 1.4: The Siona-Sekoya dialect continuum

1.4 *The aim of this dissertation*

The broad aim of this dissertation is to provide insight into the nature of evidentiality from both a synchronic and a diachronic perspective. Many authors (Aikhenvald, 2004; Aikhenvald & Dixon, 2003; Blain & Déchaine, 2007; Chafe & Nichols, 1986; Faller, 2002; Matthewson et al., 2007, among others) have shown that evidentiality is a complex linguistic phenomenon and that it is difficult to provide a unified analysis for it. In order to gain insight into this complex phenomenon, this dissertation provides an analysis of the expression of evidentiality in a previously undocumented and undescribed language.

This brings me to the narrower aim of this dissertation. I aim to provide a synchronic and diachronic analysis of the system that expresses evidential meanings in Ecuadorian Siona. Although there are previous basic descriptions (of grammatical aspects) of the closely related varieties Colombian Siona (Wheeler, 1967, 1970, 1987a, 1987b; Wheeler & Wheeler, 1975) and Ecuadorian Sekoya (Johnson & Levinsohn, 1990; Johnson & Peeke, 1975; Piaguaje, Piaguaje, Johnson, & Johnson, 1992; Schwarz, 2011, 2012) these do not provide enough information for a fine-grained analysis. Especially in order to conduct a diachronic analysis of an undescribed language, the ideal scenario is to

have a descriptive grammar of the language at our disposal. However, writing a full descriptive grammar falls outside the scope of this dissertation. In the interest of providing the reader with the necessary background information, I have included a sketch of the grammatical features that are relevant for the synchronic and diachronic analysis of the expression of evidentiality in Ecuadorian Siona.

With an eye to achieving the narrow aim of this dissertation, I have formulated three research questions that I will address here. These questions are the following:

1. How is evidentiality expressed in Ecuadorian Siona?
2. How did the expression of evidentiality develop in the language?
3. How is Ecuadorian Siona different from Eastern Tukanoan languages with respect to the expression of evidentiality and its historical development?

Question 1 relates to the synchronic analysis of the expression of evidentiality in Ecuadorian Siona. Question 2 applies to the diachronic analysis of this phenomenon in the language. Question 3 brings the synchronic and diachronic analyses together. The aim of this question is to discover how a distinct development process can help us to determine differences in the semantics of the evidentials.

In order to answer these questions I will examine the following three hypotheses:

Hypothesis 1: The expression of evidentiality is part of the clause typing system in Ecuadorian Siona.

Hypothesis 2: Questions and reports developed as different clause types in Ecuadorian Siona as a result of the grammaticalization of complex biclausal constructions.

Hypothesis 3: Distinct historical processes have led to the development of different types of evidentials in Ecuadorian Siona and in Eastern Tukanoan languages.

Hypothesis 1 relates again to the synchronic analysis of the expression of evidentiality in Ecuadorian Siona. I will examine both structural and semantic features that show that evidentiality is expressed within the domain of clause-typing in the language. Hypothesis 2 derives from the diachronic aims of this dissertation. I will explore both language internal and comparative Tukanoan materials in order to scrutinize this hypothesis. Hypothesis 3 provides an opportunity to closely examine the diachronic factors that lead to distinctions in the expression of

evidentiality in languages of one family. This hypothesis will allow us to test whether differences in the morphosyntactic structure can be better understood when taking into account differences in the process of diachronic development.

1.5 Methodology

The synchronic and diachronic analyses of the expression of evidentiality in Ecuadorian Siona require two distinct methodological approaches. The synchronic analysis is mainly based on materials that I gathered during a documentation project carried out in the period from June 2010 to September 2011 and during a fieldtrip in September 2012. I address the methodology with respect to the documentation project in subsection 1.5.1. For the diachronic analysis, I made use of the synchronic data and I applied the method of internal reconstruction. I also took into account materials from other Tukanoan languages in order to determine how the verbal system that expresses evidentiality in Ecuadorian Siona came into being. I briefly discuss the methods that I used for the historical reconstruction in subsection 1.5.2.

1.5.1 The documentation of Ecuadorian Siona

The data collection for this dissertation project was part of a larger documentation project on Ecuadorian Siona that was sponsored by the Foundation for Endangered Languages, the NWO project ‘The Nature of Evidentiality’ (360-70-320) and the Hans Rausing Endangered Languages Project (SG0067). Two of the goals of this documentation project were crucial for the dissertation project as well:

1. The collection of a linguistic corpus consisting of audio recordings from different genres (as discussed in 1.5.1.1).
2. The gathering of insights on the grammar of the language (as discussed in 1.5.1.2).

1.5.1.1 The linguistic corpus

The corpus of audio recordings was collected during my fieldwork period from June 2010 to September 2011 and in September 2012. The main field site for this project was the Cuyabeno Siona village of Puerto Bolívar and most speakers recorded are from this village. Additionally, I visited the Aguarico Siona village of Sototsiaya, and I made some recordings with speakers from that area (for the location of the two

villages, see Figure 1.1). There are some small differences between the Siona spoken in the Cuyabeno area and in the Aguarico area. The speakers of these villages are not in daily contact. The Aguarico Siona people have more contact with the Sekoya people who live in close proximity on the same river. Therefore, some of the lexical and grammatical features are considered to be Sekoya features by the Puerto Bolívar speakers. Where necessary, I address these differences in the dissertation.

The corpus that was created during the documentation project consists of 124 minutes of audio recordings in total. These recordings were transcribed in ELAN and translated into Spanish and English.⁸ The corpus contains various genres including traditional stories, life stories, narrations of daily activities and conversations. The recording of different genres is imperative for the analysis of the expression of evidentiality. If a language has grammatical strategies for expressing evidentiality, it can be expected that the strategies that are applied in life stories and daily activities are different from those used in traditional stories. Conversations add an extra dimension to the analysis of the expression of evidentiality, because the addressee plays a more important role than in monologues.⁹

The recordings were all supplemented with metadata and archived in the digital archive of ELAR. All the recordings are coded in one way. The coding system was based on the system used by McGill (2009, p. 51) with some modifications. The recording bundle names¹⁰ contain the date of the recording, the type of session that was recorded, an abbreviation of the main speaker's name and an additional identification number. The date was annotated beginning with the year, followed by the month and the day: YYYYMMDD. Three types of sessions

⁸ The audio recordings and their transcriptions and translations are available in the ELAR archive under the link: <http://elar.soas.ac.uk/deposit/siona-140954>. Nine of the recorded traditional stories were edited, translated and printed in the form of a storybook for the Sionas called *Aibë coca* 'the stories of the ancestors' (Criollo, 2011). A text is provided at the end of this dissertation as a sample text.

⁹ Some additional recordings were used in this dissertation. These recordings were not added to the archive due to sensitivity issues or to the fact that they were not fully transcribed. When examples are used from the privacy sensitive recordings some details are changed and the reference of the example will be (conversation). The reason that this type of recordings is used is that they often provided interesting insights in the use of the Ecuadorian Siona evidentials.

¹⁰ The 'bundle' refers to the bundle of files that belong to a recording. The bundle always contains an audio file in .WAV format and an ELAN file.

are distinguished in this dissertation: elicitation sessions (e), staged sessions, such as the recording of traditional stories (s), and observed events (o). The abbreviations of the speaker's names consist of the first two letters of the first name and the first two letters of the first family name of the speaker, so the abbreviation of the name Ligia Criollo is licr. The additional identification number consists of three digits as in 001. An example of a bundle name is 20100629slicr001. An overview of the main recordings that are part of the corpus used in this dissertation is provided in the table below:

Table 1.1: List of recordings that are part of the Ecuadorian Siona corpus

Recording bundle name	Title (English)	Title (Siona)	Genre	Minutes
20100629slicr001	Today	Iye mo'se	Daily life	0:42
20100629slicr002	My husband	Yë'ë ëjë	Daily life	0:29
20100630srocr001	Cuyabeno	Sëoquë'iya	Historical narrative	14:08
20100701swicr001	The kapok tree	Yëiñë	Traditional knowledge	2:50
20100907slicr001	The one from the forest	Airo aquë	Historical narrative	2:42
20100907slicr002	The two brothers	Maja'yë yo'jeibi	Traditional story	5:24
20100913slicr001	The hammock	Jaë'rë	Traditional story	4:15
20100913slicr002	The one who couldn't hunt	Hua'i nema'quë	Traditional story	5:24
20100913slicr003	Anaconda	Huañumi	Traditional story	4:31
20100925slicr001	Young 1	Bötsëhua'i 1	Historical narrative	1:23
20100925slicr002	Young 2	Bötsëhua'i 2	Historical narrative	2:27
20100925slicr003	Twining leaves 1	Ja'o tëoñe 1	Daily life	1:41
20100925slicr004	Twining leaves 2	Ja'o tëoñe 2	Daily life	1:30
20101119oispa001			Conversation	6:12
20101123slicr001	The batman	Oyo bai	Traditional story	8:36

Table 1.1 (continuation): List of recordings that are part of the Ecuadorian Siona corpus

Recording bundle name	Title (English)	Title (Siona)	Genre	Minutes
20101202slicr001	Zangudococha	So'kora	Traditional story	3:43
20110227oevme001			Conversation	3:00
20110227salsu001 ¹¹			Traditional stories	37:02
20110328slicr001	The orphan 1	Yëhuio 1	Traditional story	3:01
20110328slicr002	The orphan 2	Yëhuio 2	Traditional story	2:04
20110807salsu001	The peach palm frog	Ėnejoa	Traditional story	13:08

The Ecuadorian Siona examples used in this dissertation are all referenced for the recording that they belong to.¹² They are additionally coded for the utterance in which the example occurred by a three digit number. An example of an utterance coding is 20100629slicr001.001. This code refers to the first utterance of the recording 20100629slicr001.

1.5.1.2 The analytical methods

Various methods were used in order to obtain a good understanding of the Ecuadorian Siona grammatical system. The first method was the analysis of the gathered speech corpus, described in the subsection above. During this analysis first ideas were developed about the phonology, lexicon and morphosyntax of the language. This analysis was very important in order to understand the use and the functions of morphosyntactic elements. Sociolinguistic factors, such as the relations between speakers and their place of residence, were also taken into account in order to analyse the use of the morphosyntactic elements.

The analysis of the speech corpus was complemented with elicitation. One goal of the elicitation sessions was to gain detailed insight in the semantic structure of the evidentials in Ecuadorian Siona. The methodology used in this dissertation was based on the methodology proposed by Matthewson (2004) for semantic fieldwork.

¹¹ A fully revised version of this recording is not yet available, but will be made available shortly.

¹² Except for when it was not possible due to privacy issues.

The elicitation sessions consisted of asking for translations and subsequently grammaticality and felicity judgements. The consultants were asked to provide translations of Spanish sentences into Siona, often within a context. These Siona translations were then used in order to obtain grammaticality and felicity judgements. The translations were modified on the basis of the knowledge obtained in the analysis of the audio corpus. The modifications were always checked for grammaticality with the consultants. The contexts were often manipulated in order to obtain felicity judgements. That is, a sentence that is grammatical is not felicitous in every context. The judgement tests that were conducted for this dissertation were based on the tests that are found in the formal semantic literature on evidentiality and modality (see for instance Faller, 2002; Matthewson et al., 2007; Murray, 2010; Peterson, 2010; Waldie, Peterson, Rullmann, & Mackie, 2009). The tests will be explained at their first use in this dissertation.

A second goal of the elicitation sessions was to obtain a better understanding of Ecuadorian Siona phonology. This understanding is crucial for the historical reconstruction of the development of verbal morphology. The analysis of the audio corpus of Ecuadorian Siona provided basic insights into the phonological system of the language. In order to answer some specific questions, recordings were made of grammatical forms in elicited sentences during my fieldtrip in September 2012.¹³ The target forms were always recorded in the same frame of words. This is illustrated in example (2):

- (2) a. Si'ahua'i jëorena daë'ë.
 Si'a-wa'i hio-de-na da-i'i.
 all-PL clean-PL.PST-DS came-OTH.PST.ASS
 'I came after everyone had cleaned.'
 (20120917elicr004.001).
 b. Si'ahua'i satena daë'ë.
 Si'a-wa'i sah-te-na da-i'i.
 all-PL go-PL.PST-DS came-OTH.PST.ASS
 'I came after everyone had left.' (20120917elicr004.002).

The two sentences in (2) both contain a subject *si'awa'i* in both sentences, a dependent verb (*hiodena* in (2a) and *sahtena* in (2b)), and a main verb *da-i'i* in both sentences. The only difference between

¹³ These elicited recordings are also available in the ELAR archive under the same link as the other audio recordings: <http://elar.soas.ac.uk/deposit/siona-140954>.

examples (2a) and (2b) is the dependent verb, which is *hiodena* in (2a) and *sahtena* in (2b). The advantage of having this type of elicited recordings is that one can compare the production of the words in acoustic analysis software, such as PRAAT. These elicited audio files were analyzed in PRAAT and the results were used in the phonological sketch that is provided for Ecuadorian Siona in this dissertation.

When elicited sentences of the type described above are presented in this dissertation, they can be recognized by the letter e that is used in the reference. For instance, if we take the reference 20120917elicr004.002, which was provided for example (2b), the letter e, which stands for elicitation in elicr, refers to the fieldwork session type.

1.5.2 Historical reconstruction

The diachronic analysis in this dissertation requires additional research methods. The two major traditional research methods from historical linguistics are used in this dissertation: internal reconstruction, discussed in 1.5.2.1, and the comparative method, discussed in 1.5.2.2.

1.5.2.1 Internal reconstruction

Language internal reconstruction is a useful method for the reconstruction of grammatical material (A. Fox, 1995, pp. 213-214; Givón, 2000). Languages contain traces of older stages and when such traces are found, it is possible to reconstruct these earlier stages of the language. Before reconstructing an earlier stage of a grammatical system within the language, it is important to establish the synchronic patterns of the grammatical system. The alternations in the system are often indicative of earlier processes of grammatical change.

When the system with its form alternations is described one can start to look for related forms in the language. These can be found at different levels of the grammar. For instance, when verbal morphology is being reconstructed, it is possible that cognate forms are found in another part of the verbal system, in the nominal morphology or in the lexicon. Once the cognates are determined, it is possible to reconstruct a proto-form and function for the morpheme. A final step is to reconstruct the process of development of derived morphemes and their functions (see Campbell, 2004; Givón, 2000 for further applications of the method and for examples).

1.5.2.2 The comparative method

The comparative method is a second method for historical reconstruction that is used in this dissertation. This is often considered to be the most important traditional technique in diachronic linguistics (see for instance Campbell, 2004, p. 122; Trask, 2007, p. 259). In this method, cognates are compared in order to find regular sound correspondences. Once the sound correspondences are identified, it is possible to reconstruct a proto-sound and the sound changes that may have taken place.

The comparative method is used in this dissertation in order to complement internal reconstruction. Sometimes it is difficult to find cognate morphology within the language itself. Therefore, it is useful to study the other languages of the family to which it belongs. For instance, sometimes a grammatical form does not have any cognates in the studied language itself, but related languages have maintained a cognate of this form in other functions. Therefore, the lexical and grammatical similarities that are found throughout the Tukanoan family will be taken into account in this dissertation.

1.6 *The organization of this dissertation*

The remainder of this dissertation is organized in the following way. First I will provide a theoretical background for this dissertation in chapter 2. This overview includes four main topics. First of all, I will provide definitions of evidentiality, clause typing and other important terminology for this dissertation. Secondly, I will describe the relation between evidentiality and clause-typing as it has been addressed in the literature. Thirdly, I will discuss different origins that have been proposed for evidentials in various languages. I will finish this chapter with a case study of the expression of evidentiality in Eastern Tukanoan languages. Both synchronic and diachronic aspects will be addressed.¹⁴

The following three chapters provide a grammatical sketch of Ecuadorian Siona, focusing on relevant aspects with respect to the synchronic and diachronic analysis of the expression of evidentiality. Chapter 3 contains a phonological sketch of the language and it provides

¹⁴ In this chapter, I will use examples from various languages in order to illustrate the explained concepts. When borrowing example sentences from other scholars, I will adapt the glosses to mine in order to have a single unified set of terms and abbreviations. Furthermore, I will use English as a meta-language, so French, Portuguese and Spanish glosses and translations will be translated into English in this dissertation.

an explanation of the two orthographies that will be used throughout the dissertation. A proper analysis of Siona phonology is crucial for the understanding of some of the historical developments in the clause typing system of the language. In chapter 4, I will provide a first description of the main nominal morphology in Ecuadorian Siona. Although this morphology is synchronically not directly relevant to clause-typing and evidentiality in the language, an insight into its use is vital for the diachronic analysis in this dissertation. Some nominal morphology has been reinterpreted as verbal morphology that is relevant for the expression of evidentiality and clause-typing in the language. In chapter 5, I describe the verbal morphology of Ecuadorian Siona. The main focus of this chapter is on the portmanteau morphemes that express subject agreement, tense and clause typing. This description is necessary for understanding the use and semantics of the evidentials in Ecuadorian Siona and their historical reconstruction.

In chapter 6, I analyze the semantics of the different clause types and evidentials in Ecuadorian Siona. I demonstrate which functions are part of the core semantics of the categories and which functions are usage effects of the core semantics. In this chapter, I show why I analyze the conjectural as a subtype of questions and the reportative as a third main clause type.

In chapter 7, I propose a reconstruction for the portmanteau verb morphology that conveys subject agreement, tense and clause-typing. I show that these morphemes have probably not always been portmanteau morphemes. The regularities and irregularities in the morphology seem to argue for this approach. In my reconstruction, the core function of the portmanteau morphemes is subject agreement from a diachronic perspective. A phonological reconstruction of the morphemes seems to indicate that tense was expressed by a morphophonological process that was applied to the subject agreement suffix at an earlier stage of the language. The difference in clause types can be explained by the development of non-assertive and dependent subject agreement paradigms as a result of the reanalysis of nominalizations. In the final section of this chapter I compare the development of the Ecuadorian Siona verbal system to the development of verbal systems in Eastern Tukanoan systems. In this section, I propose that the difference between the Ecuadorian Siona system, on the one hand, and the Eastern Tukanoan systems, on the other, is due to differences in the processes by which these systems emerged.

In chapter 8, I formulate the conclusions of this dissertation. I summarize the main findings about clause typing and evidentiality in

Ecuadorian Siona and I place them in a broader linguistic perspective. I finish this chapter by listing some of the remaining open ends, and I show how they are important topics for future research.