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Clause-typing and evidentiality in Ecuadorian Siona

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Chapter 6: Evidentiality and clause types in Ecuadorian Siona

At first sight, the verb morphology system of Ecuadorian Siona, as presented in the examples below, may look like a simplified version of the Eastern Tukanoan evidentiality systems. Many languages of that branch of the family have four or five evidential markers: four in Desano (Miller, 1999, pp. 64-68), four in Tukano (Ramirez, 1997, pp. 119-143), five in Tuyuka (Barnes, 1984), five in Yurutí (Kinch & Kinch, 2000, p. 479). Instead, Ecuadorian Siona seems to have only three: assertive (1a), reportative (1b), and conjectural (1c).

- (1) a. Yë' ja'quëbi cueje'ì soquëñë. (Assertive).
 Jí' ha'-ki-bi kwë-hë'i
 1S parent-CLS:M-SBJ take.down-3S.M.PST.ASS
 sōki-jĩ.
 tree-CLS:ROOTS
 'My dad took down the tree.' (I vouch for it).
 (20110710eevpi1001.007).
- b. Yë' ja'quëbi cuequëña soquëñë. (Reportative).
 Jí' ha'-ki-bi
 1S parent-CLS:M-SBJ
 kwëh-ki-jã sōki-jĩ.
 take.down-2/3S.M.PST.N.ASS-REP tree-CLS:ROOTS
 'My dad took down the tree.' (Someone told me).
 (20110710eevpi001.008).
- c. Yë' ja'quëbi cuea baquë soquëñë. (Conjectural).
 Jí' ha'-ki-bi kwë-a
 1S parent-CLS:M-SBJ take.down-NEG
 bah-ki sōki-jĩ
 be-2/3S.M.PST.N.ASS tree-CLS:ROOTS
 'My dad took down the tree.' (I conjecture, because I see
 the tree stump). (20110710eevpi001.009).

Although Ecuadorian Siona does not express as many evidential options as some other Tukanoan languages, there are some remarkable similarities. For instance, Ecuadorian Siona expresses some types of evidentiality (reportativity and conjecture) by means of subject agreement morphology in combination with additional morphology. This fusion between subject agreement and evidentiality is very common in Eastern Tukanoan languages. Another similarity between

Ecuadorian Siona and Eastern Tukanoan subject agreement morphology is that it is not only fused with evidentiality, but also with tense.

Nevertheless, there are also some major differences: a) Ecuadorian Siona does not express direct evidentiality, b) the reportative and the conjectural construction share their subject agreement system with the interrogative, and c) conjecture is expressed by means of a negative polar question. These peculiarities of the Ecuadorian Siona system will be discussed in this chapter. First I will describe the semantics and pragmatics of the two main verb subject agreement systems, the assertive system, and the non-assertive system that were presented in the previous chapter. In section 6.1, I will address the semantics and the pragmatics of the assertive subject agreement paradigm; and in section 6.2, the semantics and the pragmatics of the non-assertive paradigms. Finally, in section 6.3, I will address the question whether the Ecuadorian Siona system can be analyzed as an evidential system, as similar systems have been in Eastern Tukanoan languages, or whether an alternative analysis for the Ecuadorian Siona system is more appropriate.

6.1 Assertive subject agreement morphology

The first subject agreement category in Ecuadorian Siona that I will discuss in this chapter is the assertive category. This category is the closest thing the language has to a direct evidential. It is often used when a speaker has either visual or other sensory evidence for the event.

However, I do not analyze this verb form as a direct evidential. As discussed in chapter 2, subsection 2.2.1, a direct evidential, in my analysis, is a form that is used if and only if the speaker has direct access to the information conveyed by the utterance. This direct access includes the observation of an event or the participation in it. When a morpheme or construction can be used when a speaker does not have direct access, I do not consider it to be a direct evidential form.¹³⁷ The assertive verb form in Ecuadorian Siona can be used when a speaker

¹³⁷ I am aware that various linguists do not adapt such a strict definition of direct evidentiality. They analyze the use of direct or visual evidentials in contexts where the speaker is certain about her / his claim but does not have direct access to the information as an epistemic extension of the visual or direct evidential interpretation (See for instance Aikhenvald, 2004; Floyd, 1999; Valenzuela, 2003). However, since the visual or direct evidential interpretation is cancelable, I consider this interpretation to be an implicature of these forms (see below).

lacks direct access as I will show in this section. Therefore, I do not consider the assertive to be a direct evidential; I analyze this form as an assertive clause type that is used when the speaker asserts the information conveyed by the proposition, as discussed in chapter 2 in subsection 2.2.4. I will first discuss the connection between the Ecuadorian Siona assertive and direct evidentiality in subsection 6.1.1. However, I will argue in subsection 6.1.2 that the direct evidential interpretation of the assertive is only an implicature that can be cancelled.

6.1.1 The assertive and direct access

Many Tukanoan languages are described as having one or two direct evidentials. For instance, Kubeo has a general direct evidential (Morse & Maxwell, 1999). Makuna (Smothermon et al., 1995) and Tuyuka (Barnes, 1984) have two direct evidentials: a visual and non-visual evidential. So it would not be surprising if Ecuadorian Siona had a direct evidential as well. To some extent, the assertive category does seem to behave this way. This subject agreement paradigm is mostly used when the speaker has direct access to the information. For instance, it is used in this way in all the recordings of personal stories throughout the recording, as illustrated in example (2):

- (2) *ñaëna yě'ëje ìte ñahuë.*
 jã-i-na jì'i-hě ì-ih-te
 see-S.M.PST-DS 1S-too DEM.PRX-CLS:ANIM.M-OBJ
 jã-wi.
 see-OTH.PST.ASS
 'He saw me and then I saw him too.' (20100925slicr001.011).

In example (2), the speaker uses an assertive form *jãwí* 'I saw' in this story about how she met her husband. The entire story is told using the assertive subject agreement paradigms.

In traditional stories, however, the speakers predominantly use the reportative, which is typologically common (Aikhenvald, 2004, pp. 310-315). They only switch to an assertive form when they want to provide some background information that they know from personal experience, or when they give a direct speech report. Both of these switches are shown in the fragment of a traditional story below. The sentence examples form a continuous story. In (3a) the speaker uses a

reportative form, switching to the assertive in (3b), and back to the reportative in (3c) and (3d):

- (3) a. Huejani ba'iquëbi baëña mamaquëre.
 Weha-ni ba-'i-ki-bi ba-i-jã
 marry-SS be-IMPF-NLZ.M-SBJ have-2/3S.M.PST.N.ASS-REP
 mama-ki-de.
 child-CLS:ANIM.M-OBJ
 'After he got married, he lived and he had a son.'
 (20101123slicr001.004).
- b. Baëna baj ihua'i ucuye bayë ja duri.
 Ba-i-na bãĩ ĩ-wa'i ũhku-je
 have-S.M-DS people DEM.PRX-PL drink-INF
 ba-jĩ ha dũri.
 have-OTH.PRS.ASS DEM.DST 'dũri'¹³⁸
 'After having it, the people, they have 'duri' to drink.'
 (20101123slicr001.005).
- c. Duri neni oqüajëna goeëña.
 Dũdi ne-ni õhku-a-hi-na
 'dũri' make-SS drink-TRS-PL.PRS-DS
 goe-i-jã.
 refuse-2/3S.M.PST.N.ASS-REP
 They made 'duri' and they gave it to him to drink, but he refused it. (20101123slicr001.006).
- d. Yë'ë cato ucuye bañë je yë' mamaquëni caëña.
 Jĩ'i ka-to ũhku-je
 1S say-CLS:PLACE drink-INF
 bã-jĩ he jĩ'
 NEG.COP-OTH.PRS.ASS DEM.DST 1S
 mama-ki-ni ka-i-jã.
 child-CLS:ANIM.M-OBJ say-2/3S.M.PST.N.ASS-REP
 "I am not going to drink because of my son," he said.'
 (20101123slicr001.007).

Three of the five main verbs in example (3) above are reportative forms carrying the reportative suffix *-jã*: *bajjã* 'he had' in (3a), *goeijã* 'he refused' in (3c), and *kajjã* 'he said' in (3d). The speaker uses an assertive form in two cases. In example (3b), the speaker uses the assertive form:

¹³⁸ *Dũri* or *chonduri* is a traditional plant that is used in a medicinal drink that helps against anemia. It is given to the parents of a newborn or to a girl who has her first menstruation.

baji ‘they have’, implying that she has personal experience with this medicine ‘*dūri*’ that the Siona people have. These types of switches between assertive and reportative forms are not very common in traditional stories, but they are in conversations.

In example (3d), another assertive form is used: *ũhkuje bāji* ‘I am not drinking’. This time the speaker switches to an assertive form because of the speech report. When speakers introduce a speech or thought report, they switch to the perspective of the reported speaker. The speaker reports that the reported speaker in (3d) is asserting that he is not drinking, and therefore, the speaker uses an assertive verb form. This is a result of the use of a direct speech report.

The assertive is the form that speakers will typically use, whenever they have direct evidence for a claim. Other verb forms are not felicitous, as is shown in the examples below:

- (4) Context: I see that it is raining out of the window
- a. Ocoji. (Assertive).
Ohko-hi.
rain-3S.M.PRS.ASS
‘It is raining.’ (I vouch for it). (20110402elicr001.003).
- b. #Ocoquēña. (Reportative).
#Ohko-ki-jã.
rain-2/3S.M.PRS.N.ASS-REP
‘It is raining.’ (Someone told me).
(20010402elicr001.001).
- c. #Ocoa ba’i (Conjectural).
#Ohko-a ba-’i-i.
rain-NEG be-IMPF-2/3S.M.PRS.N.ASS
‘It is raining.’ (I conjecture, because I hear wind and thunder). (20110402elicr001.002).

When speakers have direct access to an event, they have to use an assertive form, as in example (4a). Both the reportative form in (4b) and the conjectural construction in (4c) are not felicitous in this context.

6.1.2 Direct access as a cancellable implicature

The examples in the section above show that there is a connection between direct access and the assertive form. However, the question, remains as to whether ‘direct access’ is part of the semantics of this verb form or whether it is just an implicature of the assertive nature of this

form. This implicature is based on the fact that when someone has direct access to an event, it is part of that person's knowledge. Therefore, she/he can easily claim epistemic authority over the information and vouch for its truth. In the case of the Ecuadorian Siona assertive, I am going to argue that this is the case, and that the direct evidential interpretation of the assertive is an implicature of its assertive semantics.

A first indication that the direct evidential interpretation of the assertive is an implicature of the assertive is that speakers do not always have direct evidence for the information in the sentence when they use an assertive verb form. For instance, in order to express generally known facts, speakers often use assertive verb morphology, as shown in example (5) below that emerged during elicitation.

- (5) Presidente Quitore ba'iji.
 Presidente Quito-de ba-'i-hi.
 President Quito-OBJ live-IMPF-3S.M.PRS.ASS
 'The president lives in Quito.' (20110328elicr001.021).

The speaker had never even seen the president's house in Quito on television, let alone in real life. However, because the place of residence of the president is a well-known fact and it is part of the speaker's knowledge, she uses an assertive form: she asserts that the president lives in Quito because she knows he does.

The assertive form can also be used in contexts where the speaker has not observed the event itself, but only its results.¹³⁹ The example below is from a traditional story about a woman who is lured to the forest by her husband under false pretences. He has told her that their children got lost in the forest when they were going to get her, while in fact he has eaten them and is planning to eat her as well. When they arrive at the forest, she finds the place where the children had been playing before he killed them and she says:

¹³⁹ In languages with inferential evidentials, such contexts would require the use of this type of evidential.

- (6) (...) ja'o sehua ja'o tětose'e ba'ina ñoja'a tēcadojahuë cani (...)
 Ha'o sewa ha'o tihto-se'e ba-'i-i-na
 leaf palm leaf cut-NLZ.PST be-IMPF-S.M.PRS-DS
 jō-hã'ã tihka-doha-wi ka-ni (...)
 DEM.PRX-around cut-go.around-OTH.PST.ASS say-SS
 '(...) "There is cutting of leaves, of palm leaves, they have been
 going around cutting leaves," she said (...).'
 (20101123slicr001.037).

In the example above, the speaker uses the assertive form *tihkadohawi* 'have been going around cutting' despite the fact that she did not witness the cutting. She only sees the result of the cutting: the cut up palm leaves. However, because of seeing the result, which does not leave any doubt, she asserts that someone has been cutting palm leaves.

A third example in which speakers use assertive morphology without having direct evidence of an event is whenever it is used in combination with the deontic modal construction: *-je* 'infinitive' + *ba'ih* 'it is', like in example (7):

- (7) jare ñamina'a coca caye ba'iji.
 hã-de jãmina'a kohka ka-je ba-'i-hi.
 DEM.DST-OBJ tomorrow word speak-INF be-IMPF-3S.M.PRS.ASS
 'We have to talk about that tomorrow.'
 (conversation).

Whenever a speaker uses a deontic modal construction, as in example (7), there is no concrete event to which the speaker can have direct access. The example above is an utterance from a conversation in which the participants talk about the village meeting the next day. The speaker introduced some topics before this utterance, and then utters example (7): 'we have to talk about that tomorrow.' There is, however, no concrete direct evidence for the utterance that they should talk about those topics. In this case the speaker is just asserting her opinion about the topics for the next day.

A final example in which assertive subject agreement suffixes can be used when speakers do not have direct access to the information expressed in the sentence is its use in future statements. The example below is from a traditional story in which a man punishes his wife by turning her into a frog, because she betrayed him. Right before the punishment the wife asks him what she will eat. Example (8) is a direct speech report of what he answers her.

- (8) mi'a macue mē'ē aija'cua'ē.
 Mi'a mahk^we mi'i ā-i-hā'-ko-a-i.
 type.of.fly type.of.fly 2S eat-IMPf-PRP-NOM.S.F-COP-OTH.ASS
 'You are going to eat different types of flies.'
 (20110807salsu001.090).

In the example above, the speaker does not have direct evidence that his wife will eat flies, since the event has not yet taken place. However, because he will turn his wife into a frog and he knows that frogs eat flies, he can assert that she will do so as well.¹⁴⁰

A second indication that the direct evidence interpretation of the assertive form is only an implicature is that that interpretation can be cancelled. Although assertive morphology is mostly used in contexts where speakers have direct access, they can also explicitly deny having direct access when they use this type of verb morphology, as shown in the example below:

- (9) Yē'ē beocona Jairo toto nejëyobi.
 Ji'i beo-ko-na, Jairo tohto ne-hijo-bi.
 1S NEG.EXIS-S.F.PRS-DS Jairo board do-break-3S.M.PST.ASS
 'While I wasn't there, Jairo broke the board.'
 (201108elicr001.057).

Example (9) is felicitous because the direct evidential interpretation of the assertive paradigm is only an implicature. Although the speaker was not present when Jairo broke the board, she can still use assertive verb morphology. The function of this verb morphology is to assert a proposition: the speaker vouches for what she is saying.

The interpretation that the speaker is vouching for her utterance is not cancellable. It is infelicitous to assert a proposition and to deny believing it at the same time, as illustrated in example (10):

¹⁴⁰ Authors have observed similar uses of direct evidentials in other languages (Floyd, 1999; Valenzuela, 2003). Floyd (1999, pp. 61-85) proposes for the Wanka Quechua evidential clitic *-mi*, that the direct evidential meaning represents the prototypical meaning of the clitic, although it is not always present. Valenzuela (2003, pp. 35-37) argues that the direct evidential clitic *-ra* in Shipibo-Konibo has an extended meaning: whenever it is used in a future context, the speaker is quite certain that something will happen.

- (10) # Yě' ja'kě-bi cūejē'i sōkěñě, sehuoye bañě.
 # Jǐ' ha'-ki-bi k^wē-hěĩ sōki-jǐ,
 1S parent-NCL:M-SBJ fell-3S.M.PST.ASS tree-CLS:ROOTS
 sewo-je bǎ-jǐ.
 accept-INF NEG.COP-OTH.PRS.ASS
 Intended: 'My father cut down the tree, but I don't believe it.'
 (20110710eevpi001.010).

According to the consultant, example (10) is not just infelicitous; it is, in fact, a contradiction. The only way in which she could interpret example (10) is when the speaker knows that her / his father has cut down the tree, but she / he cannot believe it. So in that case *sewoje bǎjǐ* 'I don't believe it' does not deny that the tree was taken down; it only states the difficulty for the speaker to believe that it really happened. This shows that the speaker cannot deny vouching for the proposition when she / he uses assertive verb morphology. It is an argument in favor of the proposal that the assertive meaning is a core meaning of this verb morphology, while its direct evidence interpretation is just an implicature.

6.2 Non-assertive subject agreement morphology

The subject agreement morphology that I will discuss in this section is the non-assertive type. This subject agreement morphology is used in questions, in reports, and in conjectures. Both the use and semantics of these subcategories will be discussed in this section: the interrogative in 6.2.1, the reportative in 6.2.2 and the conjectural construction in 6.2.3.

6.2.1 Interrogatives

Subject agreement morphology in questions is different from that of assertions in Ecuadorian Siona. Whenever non-assertive subject agreement morphology is used instead of assertive subject agreement morphology in combination with a question intonation, the utterance is interpreted as a question:

- (11) a. Aibi nēcaji.
 Ai-i-bi nǐhka-hi.
 big-CLS:ANIM.M-SBJ stand-3S.M.PRS.ASS
 'The old man is standing.' (20110301elicr001.012).

- b. Aibi nēcaquē?
 Ai-i-bi nīhka-ki?
 big-CLS:ANIM.M-SBJ stand-2/3S.M.PRS.N.ASS
 ‘Is the old man standing?’ (20110301elicr001.014).

When non-assertive subject morphology is used without other morphology such as the reportative suffix *-jã* or the negation construction *-a ba’i*, as in example (11b), consultants interpret these utterances as questions.¹⁴¹ Speakers are not asserting the proposition in these utterances, but they are asking a polar question.

The same subject agreement morphology is used in content questions, as shown in example (12):

- (12) Queini saiquē?
 Ke-i-ni sãĩ-ki?
 who-CLS:ANIM.M-OBJ pay-2/3S.M.PRS.N.ASS
 ‘Whom did you pay?’ (20101119oispa001.051).

The use of non-assertive subject agreement morphology is not the only way to mark questions. The verb suffix *-’ne* is often used in content questions:

- (13) Mēsaru me date’ne?
 Mīhsaru me dah-te-’ne?
 2PL how come-OTH.PST.N.ASS-Q
 ‘How did you come here?’ (20110913slicr003.021).

The use of the suffix *-’ne* is optional; not all verbs in content question take this suffix, as shown in example (13). It does also not appear in polar questions.¹⁴²

¹⁴¹ Because of overlapping subject agreement morphology, third person singular feminine assertions cannot be distinguished from their polar interrogative counterpart. In these cases, the context and the intonation pattern can help to disambiguate the two interpretations.

¹⁴² The exact semantic contribution of the suffix *-’ne* to content questions is unclear. Consultants suggest that the speaker is more uncertain about the possible answer. Wheeler (1987b, p. 161) analyzes the cognate suffix in Colombian Siona as a ‘doubt’ marker. Schwarz (2012), in contrast, analyzes the cognate suffix *-’ni* in Ecuadorian Sekoya as a probability marker. The addition of the suffix results in an interpretation in which “the probability of the proposition is desideratively enhanced: the speaker does not empirically support her still limited confidence by evidence of any sort but asserts her wish

The split between assertions and questions is quite clear in Ecuadorian Siona. Not only do sentences with a non-assertive subject agreement suffix obtain a question intonation, but an assertive subject agreement suffix is not grammatical in regular questions. When an assertive verb form is used in a polar question, it receives an assertive interpretation instead of an interrogative one. The use of assertive morphology in regular content questions is ungrammatical for my consultants, as illustrated in (14a):

- (14) a. *Queibi daiji?
 *Ke-i-bi da-i-hi?
 who-CLS:ANIM.M-SBJ come-IMPF-3S.M.PRS.ASS
 (20110402elicr001.007).
- b. Queibi daiquë?
 Ke-i-bi da-i-ki?
 who-CLS:ANIM.M-SBJ come-IMPF-2/3S.M.PRS.N.ASS
 ‘Who is coming?’ (20110402elicr001.007).

The consultant corrected the assertive verb form in the ungrammatical sentence in (14a) to a non-assertive verb form, as illustrated in (14b).

It is however not the case that the use of assertive morphology is ungrammatical in all utterances with question morphology. In conjectural questions, the use of assertive is required for a sentence to be grammatical. Speakers use a conjectural question when they do not know the answer, but also do not expect an answer from the addressee (Littell, Matthewson, & Peterson, 2010; Peterson, 2010). Some languages, such as Cuzco Quechua (Faller, 2002, pp. 238-239), St’át’imcets (Littell et al., 2010), and Gitksan (Peterson, 2010), express conjectural questions, by adding an evidential to a question, as illustrated in the Cuzco Quechua example below:

- (15) Pi-ta-chá Inés-qa watuku-rqa-n?
 Who-ACC-CNJ Inés-TOP visit-PST-3
 ‘Who could Inés have visited?’ (Faller, 2002, p. 238 example
 (201)).

or belief in the potential truth of the proposition” (Schwarz, 2012, p. 52). It seems that the ‘doubt’ analysis by Wheeler (1987b, p. 161) is more in line with the facts of Ecuadorian Siona -*ne* than the ‘probability’ analysis by Schwarz (2012). However, the precise semantic value of the suffix will remain for future research.

In example (15), the Cuzco Quechua conjectural evidential *clitic* *-chá* is attached to the question word *pita*, which results in a conjectural question interpretation. The speaker in example (15) is just wondering who Inés visited and is not expecting an answer to this question.

Ecuadorian Siona has a different strategy for expressing conjectural questions. Conjectural questions can be formulated only on the basis of a content question.¹⁴³ Conjectural questions in Siona are formed by adding a conjecture suffix *-sa'* to the question word and the use of an assertive verb form. The conjectural question is illustrated in the example below:

- (16) Context: The speaker is thinking about her son who is far away from her and she doesn't know what her son is doing.

Qesa're yo'ji.
 Ke-sa'-de jo'-hi.
 What-CNJ-OBJ do-3S.M.PRS.ASS
 'I wonder what he is doing.' (20110913elicr001.015).

In example (16), the speaker asks what her son is doing without expecting an answer from the addressee. Although this sentence resembles a question because of the use of a question word, assertive subject agreement morphology is used. This is possibly due to the fact that conjectural questions are not proper questions on every level.

Littell et al. (2010) analyze conjectural questions in the languages they studied as syntactic and semantic questions. Syntactically, these utterances are questions because they have a question structure. Semantically, they are questions because they denote a set of propositions. Pragmatically, however, these authors do not consider conjectural questions to be questions because the speaker does not request any information from the addressee. A similar analysis is possible for the conjectural questions in Ecuadorian Siona. Because these questions are not questions, from a pragmatic point of view, the use of assertive subject agreement morphology is required. This accounts for the hybrid nature of Ecuadorian Siona conjectural questions when it comes to their morphosyntax: they contain a question word as well as assertive subject agreement morphology. Therefore, the use of assertive verb forms in conjectural questions is not a

¹⁴³ Only content questions can be used in this conjectural sense. It is not clear whether this restriction is just a structural restriction, because the suffix *-sa'* needs to be attached to a question word, or if it has a semantic reason as well.

counterexample to the ungrammaticality of assertive morphology in questions in general.

In summary, interrogatives require non-assertive subject agreement morphology. Assertive morphology is ungrammatical in bona fide information questions, thus excluding conjectural questions. However, from a pragmatic perspective, conjectural questions are not questions. So since in many cases subject agreement morphology is the clearest difference between assertions and questions, this subject agreement morphology can serve to demarcate these two different clause types.

6.2.2 Reportative

The second context in which non-assertive subject agreement morphology is used in Ecuadorian Siona is the reportative. This subcategory frequently occurs in the corpus. Especially traditional stories are full of reportative forms. Except for the main verbs in direct speech or thought reports and in the perspective changes that were shown in the section 6.1 about the use of the assertive, almost all main verbs in this type of recordings are reportative verb forms. An example of a reportative used in a traditional story is presented below:

- (17) a. Kuëasi'i aibë soçora yo'jë ba'ise'e.
 Kìa-si-'i ai-bi sōhko-da
 tell-FUT-OTH.ASS big-CLS:COL Zancudo-CLS:LAKE
 jo'-hi ba-'i-se'e.
 make-PL be-IMPF-NLZ.PST
 'I am going to tell the story of what the ancestors did at
 'Zancudo Cocha.'¹⁴⁴ (I assert). (20111202slicr001.001).
- b. Bateña aibë soçora cacore.
 Bah-te-jã ai-bi sōhko-da
 be-OTH.PST.N.ASS-REP big-CLS:COL Zancudo-CLS:LAKE
 ka-ko-de.
 say-NLZ.F-OBJ
 'The ancestors lived in a place called 'Zancudo Cocha.'' (I
 am told). (20111202slicr001.002).

¹⁴⁴ Zancudo Cocha is a lake in the province of Sucumbios, Ecuador. It is close to the Cuyabeno river towards the mouth of the Cuyabeno where it flows into the Aguarico river.

Both sentences in example (17) form the beginning of a traditional story about a lake close to the speaker's town. In sentence (17a), she introduces the topic of the story and in sentence (17b) she starts the story itself, introducing the main characters: the ancestors. In this sentence, she starts using a reportative verb form consisting of a non-assertive subject agreement suffix and the reportative suffix *-jã*. She uses those until the end of the story.

These traditional stories, as the one from example (17), typically only contain reportative verb as main verbs, with the exceptions mentioned above. These stories are passed on from generation to generation, so they are typical reported contexts. The use and the semantics of the reportative verb morphology are the topics in this subsection. First, I will describe the use of the reportative in 6.2.2.1, then I will discuss the meaning of this verb form in 6.2.2.2, and finally, I will summarize this subsection in 6.2.2.3.

6.2.2.1 The use of the reportative

The reportative in Ecuadorian Siona, as the label suggests, is used when speakers only have reported access to the uttered information. This reported access type can be of different kinds. For instance, following Willet (1988, p. 57), reported evidence can be subdivided in three report types: secondhand information, thirdhand information and folklore. Secondhand information is reported evidence that is given to the speaker by a person who observed the event himself. Thirdhand information is reported evidence that has been provided to the speaker by a person who has not observed the event her/himself. Folklore consists of oral literature as evidence type. The reportative in Ecuadorian Siona can be used in all these cases.

The first type of reported evidence, secondhand information, is not very common in the recordings. However, there are some examples of secondhand information and the below presented example (18) is one of them. It is from a story about the niece of the speaker, who disappeared for a few days. Before disappearing, she behaved very strangely. According to the speaker, her niece was taken by a forest spirit and was sent back to the Siona village thanks to the intervention of a shaman. Some parts of the story were witnessed by the speaker herself, and she uses an assertive verb form in those cases. Other parts she has heard from the mother of the girl or other people involved in the story. It is in these parts that the speaker uses reportative verb forms.

- b. cacua'i yure maija'quëni goachajë podaye ba'iji cahüë
yë'ë.
Ka-ko-wa'i jude mai-ha'-ki-ni
say-NOM.S.F-PL now 1PL.INCL-parent-CLS:ANIM.M-OBJ
g^wahcha-hi poda-je ba-'i-hi
think-PL.PRS trim-INF be-IMPF-3S.M.PRS.ASS
ka-wi jï'i.
say-OTH.PST.ASS 1S
'Because they say this, I think we should trim (the cocoa
trees) thinking about God.' (20101119oispa001.032).

In example (22a), the speaker uses the reportative form *de'ohaikoajã* 'used to heal, they say' in order to represent information from past times: the ancestors used to pray and God would heal their crops. She does not believe this information to be unreliable, in fact, she believes that they should do the same as in the old days, illustrated by what she says in (22b). The speaker uses a reportative in this case, because she does not have the epistemic authority with respect to the information. She does not use it because she does not believe that people used to live this way.

Therefore, the reportative does not entail that the speaker believes that the proposition is false or that the source of information is unreliable. A context can provide information about whether the speaker believes the source to be trustworthy or not. The reportative itself seems to be neutral toward reliability of the source, and a reportative can both be used when a speaker believes the proposition to be true, but cannot vouch for it, and when a speaker believes that the information is not very reliable.

Another interesting occurrence of the reportative is its use in reported requests or orders. Speakers can use a second person future form in combination with a reportative in order to give an order on behalf of someone else, as illustrated in example (23):

- (23) Më'ë tsoaja'coaña.
Mï'i zoa-hã'-ko-a-jã.
2S wash-PRP-NLZ.F-COP-REP
'You will / have to wash.' (I am told). (20110328elicr001.085).

This use of the reportative is quite similar to use of the secondhand imperatives in Tukanoan languages and Tariana (Aikhenvald, 2004, p. 250) and Shipibo-Konibo (Valenzuela, 2003, p. 42). By contrast, the

Ecuadorian Siona reported order is not an imperative form; it is a regular second person future form that is used to express an order on behalf of someone else.

Similarly, the present tense can also be used to repeat some else's order or request. An example of this use of the present reportative is shown below. This example came up while I was singing with some monolingual Siona children in Sototsiaya. I asked one of the girls to sing and because she did not start to sing, her aunt repeated my request:

- (24) MB: Cantajë'ë!
 Kanta-hí'í!
 sing-IMP
 'Sing!'
 EP: Cantacoña.
 Kanta-ko-jã
 sing-2/3S.F.PRS.N.ASS-REP
 'You (should) sing.' (It is said). (20110809oevpi001.001).

The difference between the use of the future construction in example (23) and the present tense in example (24) is the urgency of the order or request. When a future construction is used the request can be carried out later, but when a non-past form is used, it is a request to carry out the action right away.

Whenever speakers use one of these strategies to report a request or an order, they are not claiming authority over the request / order. The speaker is passing on this order or request on behalf of some else. This use of the reportative is similar to its use in other contexts. In other contexts the reportative is used to give information that was provided to the speaker by another person. In the case of the reported requests or orders, the speaker also introduces information that was first uttered by another person. The fact that the speaker only reports what someone else said and does not claim authority over the information, is what ties these different types of uses together.

6.2.2.2 The semantics of the reportative

The different uses of the reportative suggest that the Ecuadorian Siona reportative has two central features: 1. the speaker has reported access to the uttered information and 2. the speaker does not claim authority over the information. This hypothesis was confirmed by various tests during elicitation. First of all, there are various diagnostics that confirm

the observation that the reportative can only be used when the speaker has reported access. The main diagnostics is that the use of the reportative is infelicitous when the speaker does not have reported evidence. As was already mentioned above in (4), when a speaker has direct evidence it is infelicitous to use a reportative, as illustrated in the example below, repeated from (4) above:

(25) Context: I see that it is raining out of the window

- a. Ocoji. (Assertive).
Ohko-hi.
rain-3S.M.PRS.ASS
'It is raining.' (I vouch for it). (20110402elicr001.003).
- b. #Ocoquëña. (Reportative).
#Ohko-ki-jã.
rain-2/3S.M.PRS.N.ASS-REP
'It is raining.' (I am told). (20110402elicr001.001).

It is only possible to use the assertive form when the speaker sees that it is raining, as shown in (25a). Because the speaker observes the event, she is certain that it is happening and can therefore vouch for the information. It is not felicitous to use a reportative verb form, as in (25b), in this context.

The reportative can also not be used when the speaker only deduces that a certain event has taken place or is taking place, as illustrated in the example below:

(26) Context: A child comes up from the river and he looks very pale and scared.

- a. Tsiwa'ë huañumi ña baquë.
Ziwa'ï wājūmi-de jā-a bah-ki.
boy anaconda-OBJ see-NEG be-2/3S.M.PST.N.ASS
'The child saw the anaconda.' (I conjecture).
(20101124elicr001.003).
- b. #Tsiwa'ë huañumi ñaëña.
#Ziwa'ï wājūmi-de jā-i-jã.
boy anaconda-OBJ see-2/3S.M.PST-REP
'The child saw the anaconda.' (I was told).
(20101124elicr001.002).

Example (26b) shows that the use of a reportative in a deductive context is not felicitous. By contrast, the use of a conjectural construction, as in (26a), is felicitous in this context.

The two examples above show that the reportative marks information that the speaker has acquired via a report from someone else in Ecuadorian Siona. As was shown in subsection 6.2.2.1 above, the reportative has a broad use when it comes to reported evidence in Ecuadorian Siona: secondhand information, thirdhand information, and folklore can all trigger the use of an reportative verb form in the language. Other types of evidence are however not accepted. That is why its use is infelicitous in context where the speaker has direct or deductive evidence for her / his utterance. The Ecuadorian Siona reportative is best understood as a general reportative.

Secondly, there is a semantic test that provides insight into the idea that speakers do not claim authority over the information when they use a reportative. This semantic test was dubbed ‘the known falsity test’ by Waldie et al. (2009). This test checks whether an evidential can be used when the speaker knows that the information is false. Faller (2002) shows that the reportative in Cuzco Quechua *-shi* passes this test:¹⁴⁵

¹⁴⁵ There are reportatives that do not pass this test. For instance, the reportative particle *ku7* in St’át’imcets (Matthewson et al., 2007, p. 214) and the reportative clitic *=kat* in Gitksan (Peterson, 2010, p. 130) cannot be used when the speaker knows that the proposition is false. The authors analyze these evidentials differently, than the Cuzco Quechua reportative *-shi*. According to them, this type of reportative is an epistemic modal. When a speaker uses this type of reportative, she/ he claims that the proposition is possibly or necessarily true on the basis of reported evidence. In formal semantics this ‘known falsity test’ is one of the tests that helps to distinguish epistemic modal evidentials, as the St’át’imcets evidentials and two of the Gitksan evidentials, from non-modal evidentials, as the Cuzco Quechua reportative (Faller, 2002; Matthewson et al., 2007; McCreedy & Ogata, 2007; Murray, 2010; Peterson, 2010; Waldie et al., 2009).

- (27) Pay-kuna-s ñoqa-man-qa qulqi-ta muntu-ntin-pi
 (s)he-PL-REP 1s-AL-TOP money-ACC lot-INCL-LOC
 saqiy-wa-n, mana-má riki riku-sqa-yki ni
 leave-10-3 NEG-SURP right see-PP-2 NEG
 un sol-ta centavo-ta-pis saqi-sha-wa-n-chu.
 one Sol-ACC cent-ACC-ADD leave-PRG-10-3-NEG
 ‘They left me a lot of money, but, as you have seen, they didn’t
 leave me one *sol*, not one cent.’
 EV: It is said/They said that they left me a lot of money. (Faller,
 2002, p. 191 example (152))

According to Faller (2002), it is possible to use the Cuzco Quechua reportative when the speaker knows that the information is false, because the reportative is not an assertion of the information, it is “a *presentation* of another speaker’s assertion” (Faller, 2002, p. 199).

The same holds for the Ecuadorian Siona reportative. It can be used when the speaker knows that the information she/ he is introducing is false. In examples (28) and (29) below, the speaker can explicitly deny the truthfulness of what people are saying, just like in the case of the Cuzco Quechua reportative:

- (28) Yë’ güëdohuë yë’re curi so’coro isireña, yë’re jare itsiye bahuë.
 Jí’ gwĩ-dowi jí-de kudi so’ko-do
 1S uncle-PL 1S-OBJ money coin-CLS:FLAT.ROUND
 ĩsi-de-jã. jí-de hã-de ĩsi-je
 give-OTH.PST.N.ASS-REP. 1S-OBJ DEM.DST-OBJ give-INF
 bã-wi.
 NEG.COP-OTH.PST.ASS
 ‘My uncle and aunt, supposedly, gave me money, but they didn’t
 give me anything.’ (20110614elicr001.007 modeled after
 Faller’s example).
- (29) Jairo toto nejëyoëña. Caëna toto jëyëma’co baja’i.
 Jairo tohto ne-hijo-i-jã. ka-i-na
 Jairo board do-break-2/3S.M.PST.N.ASS-REP say-S.M.PST-DS
 tohto hiji-ma’-ko ba-ha’i.
 board be.broken-NEG-NLZ.F be-3S.M.PST.ASS
 ‘Jairo, supposedly, broke the board, (but although) someone said
 that, the board was not broken.’ (20110830elicr001.061).

Example (28) and (29) show that speakers can use a reportative in Ecuadorian Siona when they know that the information is false. As in

Cuzco Quechua, when speakers use a reportative, they just present the information without taking any authority over it or making any claim about the veracity of the information.

In this sense, the reportative is distinct from the assertive. Both verb forms are used in declarative contexts in which the speaker provides information without asking for it. The two categories differ, however, with respect to the speaker's claim about the truth of the information. The assertive can only be used when the speaker vouches for its truth, as shown in section 6.1. When speakers use a reportative, they do not do so. As a result, the reportative turns out to be of a non-assertive nature in Ecuadorian Siona. Because of this property, the reportative is in semantic opposition with the assertive.

The reportative shares its non-assertive nature with the interrogative. When speakers use an interrogative form they also do not vouch for the truth of the information, they inquire about it. The fact that these two categories share this non-assertive character is the reason that their shared subject agreement morphology is labeled non-assertive subject agreement morphology.

However, although interrogatives and reportatives share non-assertive subject agreement morphology and are both non-assertive categories, the forms are in semantic opposition. The interrogative and reportative interpretations never co-occur and are in complementary distribution. Whenever a reportative suffix *-jã* is added to an interrogative form, as in example (30b), it automatically loses its interrogative value and it becomes a reportative utterance:

- (30) a. De'ó ñataë? (Interrogative).
 De'ó jãhta-i?
 be.good become.morning-2/3S.M.PST.N.ASS
 'Did you (M)/ he wake up well?' (I am asking).
 (20110710eevpi001.002).
- b. De'ó ñataëña. (Reportative).
 De'ó jãhta-i-jã.
 be.good become.morning-2/3S.M.PST.N.ASS-REP
 'You (M)/he woke up well.' (Someone told me).
 (20110710eevpi001.003).

In example (30b), the interrogative value has disappeared and the sentence can be interpreted as a plain reportative. It is not a reported question, such as "Did you / he wake up well?" it is said/asked'.

By contrast, the reportative in Cuzco Quechua can mark a reported question. An example of this use of the reportative is provided below:

- (31) Imayna-ta-s ka-sha-nki?
 how-ACC-REP be-PRG-2
 ‘How are you?’ (It is asked). (Faller, 2002, p. 233 example (194)).

Faller (2002, p. 233) reports how she obtained the above example in a natural conversation. She asked the mother of her consultant how she was. Because she did not answer, the consultant repeats the question, but then with the reportative clitic *-s(i)*, illustrated in example (31).

In Cuzco Quechua the evidential clitics can only be used in content questions and not in polar questions. In Ecuadorian Siona, as shown above in example (30b), it is not possible to use the reportative in polar questions, as in Cuzco Quechua. However, it is also not possible to form reported questions on the basis of content questions. In this type of questions the use of reportative is ungrammatical:

- (32) *Queibi daiquëña?
 *Ke-i-bi da-i-ki-jã?
 what-CLS:M-SBJ come-IMPF-2/3S.M.PRS.N.ASS-REP
 Intended: ‘Who is reportedly coming? / Someone asked who is coming.’ (20110202elicr001.015).

As example (30b) and (32) show, it is not possible to create any type of reported question using reportative morphology in Ecuadorian Siona. The interrogative and reportative values exclude each other in the language. As is the case for the assertive and the reportative, the interrogative and the reportative seem to be in semantic opposition.

The reportative is not only mutually exclusive with the assertive and the interrogative, these three values also behave similarly as grammatical categories in Ecuadorian Siona. None of these three values can interact with propositional operators such as tense, modality, and negation. This means that the reportative, the assertive and the interrogative cannot take scope under negation. So when a negation and a reportative are used in the same clause, the sentence cannot mean something like: ‘It is not said that *p*’. This is illustrated in the examples below, for the assertive (33), the interrogative (34), and the reportative (35), respectively:

- (33) daiye baco.
 da-i-je bā-ko.
 come-IMPF-INF NEG.COP-3S.F.PRS.ASS
 ‘She isn’t coming.’ (I vouch for it).
 ≠ ‘I am not vouching that she is coming.’
 (20100920elicr001.001).
- (34) Tëõñe bako?
 tĩõ-je bā-ko?
 weave-INF NEG.COP-3S.F.PRS.INT
 ‘Isn’t she weaving?’ (I am asking).
 ≠ ‘I am not asking if she is weaving.’ (20110529elicr001.010).
- (35) Aĩñe bacoña.
 ā-i-je bā-ko-jā.
 eat-IMPF-INF NEG.COP-3S.F.PRS-REP
 ‘She isn’t eating.’ (I am told).
 ≠ ‘I was not told that she is eating.’ (20110830elicr001.038).

The fact that the reportative, as the assertive and the interrogative, does not interact with any propositional operators may suggest that the reportative is extra-propositional: its meaning is not interpreted as a propositional meaning.

Another property that is also shared by the reportative, assertive, and interrogative is that all three categories are main verb categories. The three categories cannot be embedded in a subordinate clause. For instance, the categories cannot be embedded under the antecedent of conditionals, because the antecedent is always expressed using a dependent verb form. It is possible to use the three categories in the consequent of conditionals,¹⁴⁶ as illustrated in (36) and (37):

- (36) Ocoye baquëna saija’quëabi ja’quë.
 Ohko-je bā-ki-na sa-i-hā’-ki-a-bi
 rain-INF NEG.COP-S.M.PRS-DS go-IMPF-PRP-NLZ.M-COP-3S.M.PRS.ASS
 ha’-ki.
 parent-CLS:ANIM.M
 ‘If it is not raining, dad will go.’ (I vouch for it).
 (20110830elicr001.105).

¹⁴⁶ Similar restrictions are also described for the use of evidentials in Cheyenne by Murray (2010, pp. 66-67).

- (37) Ocoye baquëna saija'quëaña ja'quë.
 Ohko-je bã-ki-na sa-i-hã'-ki-a-jã
 rain-INF NEG.COP-S.M.PRS-DS go-IMPF-PRP-NLZ.M-COP-REP
 ha'-ki.
 parent-CLS:ANIM.M
 'If it is not raining, dad will go.' (I am told).
 (20110830elicr001.106).

However, when an assertive, as in example (36), and a reportative, as in example (37), are used in the consequent of a conditional, these values are not embedded. When used in the consequent, they take scope over the whole conditional. So example (36) means: 'I assert that if it does not rain, my father will go,' and example (37) means 'I am told that if it does not rain, my father will go.'

It is also not possible in Ecuadorian Siona to syntactically embed assertive, interrogative, or reportative sentences under speech and thought verbs. Crosslinguistically, it is only possible to embed a clause syntactically under speech or thought verbs in indirect reports. In indirect reports the reported information is provided by a subordinated clause, as in the English sentence: 'He said that she would come.' 'That she would come' in this case is a subordinate clause. Ecuadorian Siona does not have this type of indirect reports, it only has direct speech and thought reports, which are illustrated in (38) and (39):

- (38) Chotena daë'ë caoña.
 Choh-te-na da-i'i ka-o-jã
 call-PL.PST-DS come-OTH.PST.ASS say-2/3S.F.PST.N.ASS-REP
 "'They called me and I came," she said.' (It is said).
 (20101202slicr001.012).
- (39) Aina dëjo quere aiquë'ne guachaoña.
 Ā-i-i-na dñhõ ke-de ã-i-ki-'ne
 eat-IMPF-S.M.PRS-DS wife what-OBJ eat-IMPF-2/3S.M.N.ASS-Q
 guahcha-o-jã.
 think-2/3S.F.PST.N.ASS-REP
 'While he was eating, the wife thought: "What is he eating?"'
 (20101123slicr001.015).

Because it is not possible to embed the reportative, it is clear that the reportative category, like the assertive and interrogative one, is a main clause category. The behavior of these three categories is very similar, and the values of these categories are mutually exclusive in the language.

Therefore it is very likely that the reportative in Ecuadorian Siona forms part of a semantic system together with the assertive and the interrogative categories.

6.2.2.3 The semantics and use of the reportative, a summary

The reportative in Ecuadorian Siona expresses general reportative evidentiality. It can be used with any type of reportative access including secondhand, thirdhand, and folklore. An important part of the semantics of the reportative is that it is non-assertive. That is, the speaker does not vouch for the information expressed by the utterance and does, therefore not claim epistemic authority for it.

This semantics can have various usage effects. The reportative can, for instance, be used to mitigate the responsibility for the information expressed. However, this does not mean that the speaker is necessarily uncertain about the information when she/ he uses a reportative form. It is possible that the speaker is highly certain, but she/he simply is unable to claim epistemic authority for the information, for instance because the described events happened before the speaker was born. Another use of the reportative is that it can express a reported order or request. I analyze this use as a pragmatic extension of the regular reportative use.

The reportative being of non-assertive nature constitutes a semantic system together with the assertive and the interrogative in Ecuadorian Siona. Indications for this claim are the fact that they are mutually exclusive and the fact that the three types of verbal morphology display a very similar behavior. A further indication that the assertive, interrogative and reportative form a semantic system is that the semantics of all categories relates to the assignment of the epistemic authority. This will be further discussed in section 6.3.

6.2.3 Negative interrogatives as conjecture

The non-assertive subject agreement paradigm is also used with a second type of evidential-like meaning that can be expressed in Ecuadorian Siona, namely, conjecture. However, this meaning is not expressed by a specific conjectural morpheme. Rather, negative polar questions are used in order to convey a conjecture. An example of such a negative polar question is presented below:

- (40) Tëia baquë.
 Tì-i-a bah-kì.
 break.off-IMPF-NEG be-2/3S.M.PST.N.ASS
 1. 'Didn't it break off?'
 2. 'It broke off.' (I conjecture). (20110531elicr001.031).

Example (40) is ambiguous between a negative polar question and a conjectural statement. The construction has the shape of a negative polar interrogative, consisting of a negation construction *-a ba'i* and non-assertive subject agreement morphology, *-kì* in example (40). However, this construction is often interpreted as a positive statement that is based on some type of conjecture of the speaker.

This subsection is dedicated to explaining the properties of this conjectural construction and the relation between conjecture and negative polar questions in the language. I will describe the evidential function of this conjectural construction, taking into account the type of evidence that this construction requires in 6.2.3.1. Interestingly, there is some dialectal variation between Puerto Bolívar Siona and Sototsiaya, which will be addressed in this subsection as well. In 6.2.3.2, I will show that cross-linguistically, there is a relation between conjecture and negative polar questions. In 6.2.3.3 I will summarize this subsection.

6.2.3.1 The conjectural function of negative polar questions in Ecuadorian Siona

During elicitation, the main consultant for this study from Puerto Bolívar tends to use negative polar questions in different types of conjectural contexts. For instance, in the example below, the speaker deduces that her husband is coming on the basis of auditive information. In this context, she uses the conjectural construction:

- (41) Context: I hear a motorized canoe coming towards the village.
 Yë' bakë daia ba'i.
 Jì' ba-kì da-i-a ba-'i-i.
 1S spouse-CLS:ANIM.M come-IMPF-NEG be-IMPF-2/3S.M.PRS.N.ASS
 'My husband is coming.' (I conjecture). (20100930 elicr002.015).

In example (41), the conjecture is based on auditive information. The conjectural construction can also be used when the inference is based on reasoning, as in the example below:

- (42) Context: My sister Neli always cooks at midday and it is midday now.

Neli cua'coa ba'io.
 Neli k^wa'ko-a ba-'i-o.
 Neli cook-NEG be-IMPF-2/3S.F.PRS.N.ASS
 'Neli is cooking.' (I conjecture). (20110402elicr001.034).

Example (42) is used in a context where the speaker does not have any tangible evidence for her sister cooking. She just imagines that her sister is cooking because she always does around that time. According to the Puerto Bolívar consultant, the conjectural construction can be used to express an conjecture on the basis of any type of information: results, reasoning, and also hearsay.

There are some differences between the Puerto Bolívar variety and the Sototsiaya variety with respect to this conjectural construction. The Sototsiaya speakers use the construction more often in the recordings than the Puerto Bolívar speakers. Additionally, Sototsiaya speakers also use negative polar questions in a different way: they also use these structures in traditional stories instead of a reportative, which Puerto Bolívar speakers did not do. An example of a reportative use of a negative polar interrogative is presented below:

- (43) jaḡni si'a jubē banē cuni tēa baquē.
 Hā-o-ni si'a jubī bāñi kū-ni
 DEM.DST-CLS:ANIM.F-OBJ all bunch hanging bite-SS
 tia-a bah-ki.
 cut-NEG be-2/3S.M.PST.N.ASS
 'He bit off the bunch while he was hanging.' (They say).
 (20110807salsu001.057).

It is not unheard of that a conjectural is used as a reportative: Murray (2010, p. 23) reports that the Cheyenne conjectural also is used when a speaker has thirdhand reportative evidence. However, according to the Sototsiaya consultants, negative polar interrogatives and reportatives can be used interchangeably and there is no clearly delineated use of the conjectural in their Siona variety. Both the reportative and the conjectural construction are used in the Sototsiaya variety in traditional stories in order to express that the speaker has reported access to the information. This suggests that polar negative questions can be used as a broad indirect evidential in the Sototsiaya variety. It seems to be used with any type of indirect evidence type.

The conjectural construction is not used to replace the reportative in Puerto Bolívar Siona. The construction is only used to express that the speaker conjectures that the information is true. The use of the conjectural construction is one aspect in which the two Siona varieties differ.

What the two varieties do have in common is that the conjectural construction cannot be used when the speaker has direct evidence and is highly certain of her/ his case. In those cases, a speaker would use an assertive verb form, and a conjectural construction is infelicitous. This was shown in example (4), which is repeated below:

(44) Context: I see that it is raining out of the window

- a. Ocoji. (Assertive).
 Ohko-hi.
 rain-3S.M.PRS.ASS
 'It is raining.' (I vouch for it). (20110402elicr001.003).
- b. #Ocoa ba'i (Conjectural).
 #Ohko-a ba-'i-i.
 rain-NEG be-IMPF-2/3S.M.PRS.N.ASS
 'It is raining.' (I conjecture). (20110402elicr001.002).
 'Consultant's comment: you can say this when you hear the wind and the thunder.'

According to the consultants, this conjectural construction can only be used when they do not have direct evidence and when they are not fully committed to the truth of the proposition. So the varieties have one element in common in this regard: speakers from both varieties use negative polar questions in order to express a positive statement based on some type of indirect evidence with some uncertainty on behalf of the speaker.

The fact that the speaker is generally uncertain about the information suggests that the conjectural constructions may have an epistemic modal function as well. If an epistemic modal is defined as an element that lowers the speaker's commitment to the truth of the information, the conjectural construction seems to carry out this function. The construction cannot be used when a speaker knows that the proposition is true, as shown in the previous example. So the construction certainly implies a lower degree of commitment to the truth of the information.

The earlier introduced ‘known falsity’ test¹⁴⁷ can also be used in order to obtain more insight into the function of this conjectural construction. When speakers use an epistemic modal, they claim that the proposition is either necessarily or possibly true. That is to say if a speaker knows that the information is false, she/ he cannot claim that it is possibly true.¹⁴⁸ In Ecuadorian Siona it is not possible to use a conjectural construction when the speaker knows that the information is false:

- (45) #Yě’ě ĩsia bate, yě’ě ĩsiye bahuë.
 #jĩ’ĩ ĩsi-a bah-te, jĩ’ĩ ĩsi-je
 1S give-NEG be-OTH.PST.N.ASS 1S give-INF
 bã-wĩ.
 NEG.COP-OTH.PST.ASS
 #‘I must have given it, but I did not give it.’
 Speaker’s comment: This can only be used with a little break in between the two sentences. Then it’s like the speaker is first asking and then answering her / himself.
 (20110328elicr001.159).

Example (45) shows that it is not possible to explicitly deny the truth of the information given in the conjectural construction. Therefore speakers need to at least believe that the information is possibly true when they use a conjectural construction. Since speakers seem to be committed to the information being possibly true when they use a conjectural construction, these constructions seem to have both a conjectural and an epistemic modal function.¹⁴⁹

6.2.3.3 The relation between negative questions and conjecture

It is not a coincidence that this construction is ambiguous between a negative interrogative and a conjectural interpretation. At first sight, these two interpretations may seem to be each other’s opposites. One interpretation consists of a negative question, while the other one represents a positive statement. Despite the apparently opposite nature

¹⁴⁷ As it was coined by Waldie et al. (2009).

¹⁴⁸ See for a more detailed explanation of the relation between the known truth or falsity of the proposition and epistemic modality, for instance Faller (2002), Matthewson et al. (2007), Peterson (2010) and Waldie et al. (2009).

¹⁴⁹ Faller (2002, 2007) also analyzes the conjectural evidential clitic *-chá* in Cuzco Quechua as both evidential and epistemic modal.

of the two interpretations, they are related. In other languages as well, speakers use negative polar questions in order to make a positive statement. For instance, various authors (Bolinger, 1957; Heritage, 2002; Koshik, 2002; Ladd, 1981; Quirk, Greenbaum, Leech, & Svartvik, 1985) have shown how negative polar questions in English discourse are used to make positive assertions. These questions are not used as a request for information, but they are employed in order to express the epistemic stance of the speaker (Koshik, 2002, p. 1855). Heritage (2002) argues that both the speaker and the addressee interpret these negative polar questions as positive assertions. The author shows how speakers use negative interrogatives as assertions discussing the example below. It is an extract from the examination of the Prosecutor's Panel during the Senate Judiciary Committee Hearings that preceded the impeachment of President Clinton. In the example, Heritage (2002) shows that the speaker, Senator Howard Cobel (abbreviated as *Sen* in the example), interprets his own negative question as an assertion:

(46) [Senate Judiciary Committee Hearings 8 December, 1998]
(Discussed in Heritage, 2002, p. 1431 example (3)).

1 Sen: Now lemme ask you this Mister Davis,
2 (1.5)
3 Sen: -> Would you:, (0.8) I started to say wouldn't you,
4 -> but then I'd be speaking for you.
5 Would you acknowledge (0.5) that this committee's
6 consideration of whether grand jury perjury and several
7 deposition perjury and potential witness tampering (0.3)
8 by the president_<I'm not saying it happened but
assuming
9 that it did, (0.8) that it merits (0.5) impeachment
10 (.) is- is a legitimate exerci:se for this committee.
11 Would you acknowledge that?

In example (46), the speaker was going to ask a negative polar question along the lines of: 'Wouldn't you acknowledge that etc.?' However, according to the speaker in line 4, he would be speaking for the addressee. It seems that the speaker reformulates his question, because he does not want to put words in the mouth of his addressee by imposing his epistemic stance (Heritage, 2002, p. 1431).

Heritage (2002) also shows how the addressees often take negative questions as positive assertions in the example below from a press conference with President Clinton:

(47) [Presidential Press Conference: 7 March 1997] (Discussed in Heritage, 2002, p. 1432 example (5))

- 1 IR: W'l Mister President in your zeal (.) for funds during
 2 -> the last campaign .hh didn't you put the Vice President (.)
 3 an' Maggie and all the others in your (0.4) administration
 4 top side .hh in a very vulnerable position, hh
 5 (0.5)
 6 IE: -> I disagree with that.hh u- How are we vulnerable
 because...

In the example above the addressee, President Clinton (IE), reacts to the implied opinion of the interviewer (IR): he disagrees with it. In this case, he treats the negative question as a positive assertion of the interviewer's opinion. The examples above indicate that negative polar questions in English presuppose that the speaker takes the opposite epistemic stance. The speaker takes a positive attitude towards the proposition and that she / he believes the proposition is true.

In the formal semantic literature, this ambiguity of negative polar questions has also been observed (Büring & Gunlogson, 2000; Ladd, 1981; Reese, 2006; Romero & Han, 2004; Van Rooy & Šafářová, 2003 among others). For instance, the following example has two readings:

(48) Isn't there a vegetarian restaurant around here? (Ladd, 1981, p. 164)

One interpretation of this type of questions is that the speaker has just inferred that $\sim p$ and is asking for confirmation. This is illustrated in the example below:

(49) (Situation: Bob is visiting Kathleen and Jeff in Chicago while attending CIS.)

Bob: I'd like to take you guys out to dinner while I'm here —we'd have time to go somewhere around here before the evening session tonight, don't you think?

Kathleen: I guess, but there's not really any place to go in Hyde Park.

Bob: Oh, really, isn't there a vegetarian restaurant around here?

Kathleen: No, about all we can get is hamburgers and souvlaki.
(Ladd, 1981, p. 164).

This is what Ladd (1981) calls ‘inside NEG’, because the negation falls within the scope of the proposition.

The other interpretation is that the speaker believes that *p* and is asking for confirmation. Ladd (1981) calls this reading ‘outside NEG’, because the scope of the negation falls outside of the scope of the proposition. This type of use of the negative question is illustrated in example (50):

(50) (Situation: Kathleen and Jeff have just come from Chicago on the Greyhound bus to visit Bob in Ithaca.)

Bob: You guys must be starving. You want to go get something to eat?

Kathleen: Yeah, isn’t there a vegetarian restaurant around here-- Moosewood, or something like that?

Bob: Gee, you’ve heard of Moosewood all the way out in Chicago, huh? OK, let’s go there.

So although Kathleen believes that there is a vegetarian restaurant, she does not assert it. Speakers often use a negative polar question, according to Romero and Han (2004, p. 630), when they have insufficient knowledge to assert the proposition. By using a negative polar question, they introduce their beliefs without asserting them.

The use of the negative polar questions in English with an ‘outside NEG’ reading is very similar to the conjectural use of negative polar questions in Ecuadorian Siona. Another language that has a similar use of negative polar questions is the Mayan language Tseltal. As in Ecuadorian Siona, one type of negative polar questions in Tseltal (Shklovsky, 2011, in prep.) is ambiguous between a negative question and an epistemic statement as illustrated in example (51):

(51) *ma’ yakal y-uch’-bel* ↓
NEG PRG ERG:3-drink-NF
Ambiguous between 1. ‘He might be drinking’ and 2. ‘Is he not drinking?’ (Shklovsky, 2011, p. 14)

In Tseltal, these negative polar questions are marked with a negation *ma’* and a descending tone, marked by the arrow ↓ in this example. This

descending tone is one of the strategies to form a polar question. These negative polar questions used as positive statements have an epistemic modal interpretation in Tseltal; they indicate that the speaker is not fully committed to the truth of the proposition. Shklovsky (in prep., pp. 8-9) notes that they also may have an evidential meaning, since according to Von Fintel and Gillies (2010) many epistemic modals have an evidential meaning.

The use of these negative polar questions in Tseltal is very similar to the use of those types of questions in Ecuadorian Siona.¹⁵⁰ In both languages, these questions can be used as positive statements denoting uncertainty on the side of the speakers, possibly because they do not have any conclusive direct evidence. In both languages, the speakers seem to be expressing their belief state, when they use a negative polar question as an conjectural / epistemic modal statement.

So, in various languages, when a speaker uses a negative polar question, she/ he implicates that she/ he believes the opposite. When a speaker uses it as a real question, she/ he is asking for an update of their belief state, as we have seen in the case of 'inside NEG' in Ladd's terminology (Ladd, 1981). In English, we have seen that in some contexts the request for a knowledge update is backgrounded and both speakers and addressees only take on the presentation of the speaker's belief state (Heritage, 2002; Koshik, 2002). Since this only seems to happen in certain contexts, the interpretation of negative polar questions as a positive statement is not a conventionalized interpretation. In Ecuadorian Siona, and possibly also in Tseltal, the backgrounding of the request for an update of the speaker's belief state appears to be more generalized. Negative polar questions always seem to be ambiguous out of context in the language. The presentation of speaker's belief seems to have become more conventionalized of the negative polar questions.

The interpretation of negative polar questions as positive statements, as in English negative polar questions, seems to have an epistemic modal function. When speakers do not have enough evidence in order to assert a proposition, they will introduce the information as a

¹⁵⁰ There is a third language that has a similar use of negative polar questions: Colombian Siona. Since Ecuadorian Siona and Colombian are very closely related it is not surprising that Colombian Siona has similar structures. Nevertheless, Colombian Siona uses a different negation structure to form these negative polar questions. Speakers of Colombian Siona use the negative suffix *-ma* in combination with non-assertive subject agreement morphology (see Wheeler, 1987b, pp. 153-156).

negative polar question in Ecuadorian Siona. The fact that the speakers are not asserting the proposition yields the evidential and epistemic modal reading of conjecture.

6.2.3.4 How to understand the conjectural reading.

In summary, conjecture in Ecuadorian Siona is expressed by a specific type of question, namely a negative polar question. In some ways this construction behaves like a modal structure: it can only be used when the speaker does not know whether the proposition is true or false. However, compositionally the conjectural construction is not an epistemic modal; the speaker does not assert that the proposition is possibly or necessarily true. This modal reading is not generated by a propositional modal, as it is in the case of the propositional modal evidentials in St'át'imcets and Gitksan (Matthewson et al., 2007; Peterson, 2010). In Ecuadorian Siona this epistemic modal reading is generated by means of an epistemic presupposition. The conjectural construction is used when speakers have insufficient evidence to claim that the proposition is true. As in the case of the Quechua conjectural *-chá* (Faller, 2007), negative polar questions in their conjectural use seem to tone down the assertion in Ecuadorian Siona.¹⁵¹

6.3 The system

In the introduction of this chapter, it was already mentioned that the Ecuadorian Siona subject agreement morphology systems is reminiscent of the evidential systems in Eastern Tukanoan languages. As in the languages of that branch of the family, subject agreement plays a role in the expression of evidentiality in Ecuadorian Siona. The major differences are that evidentiality cannot be expressed in questions, and that not all members of the system express evidentiality in the language. Therefore, the question arises whether Ecuadorian Siona actually has an evidential system. First, I will provide an overview of the subject agreement systems in the language that has been discussed in the sections before in 6.3.1 and then in 6.3.2 I will address the question whether the subject agreement system can be considered to be an evidential system.

¹⁵¹ Another analysis of the conjectural construction is that it is a clause type in its own right and that the conjectural value is not a pragmatic extension of negative questions. However, there are no clear indications that the conjectural has reached this stage of grammaticalization.

In section 6.3.3, I will present an alternative analysis of the Ecuadorian Siona system.

6.3.1 Subject agreement categories

Morphologically, the Ecuadorian Siona subject agreement system shows a clear cut between two categories: it expresses both assertive and non-assertive morphology. Assertive and non-assertive morphology are different in both form and organization, as shown in the previous chapter. Assertive morphology is only used in assertions, and non-assertive morphology is used in both questions and reports. Non-assertive subject agreement morphology is also used in conjectural constructions, but, as shown above, conjecturals are a subclass of questions; conjecture is expressed by negative polar questions.

The morphological connection between interrogatives and reportatives is not very common cross-linguistically, but it is not inconceivable that these two semantic categories go together. The link between the two categories lies in the fact that the speaker does not assert the proposition in both cases. In the case of the interrogative, the speaker inquires about the proposition, and in the case of the reportative, the speaker only presents the proposition that is provided to her/ him by a third party. So the non-assertive character of the two categories binds them together.

Semantically, there is a three way split in the subject agreement system. It consists of the following categories: assertive, interrogative, and reportative. These categories are expressed by the different subject agreement paradigms in combination with some additional morphology in the case of the reportative and content questions. Since these values are not expressed in a single slot on the verb, they cannot be interpreted as a single morphological system. Yet, as shown in subsection 5.2.2, they can be analyzed as a single semantic system, because they behave similarly and more importantly because the three values are mutually exclusive. A sentence cannot be assertive, interrogative, and reportative at the same time. Only a single value can be selected. Now the question remains what type of system this is.

6.3.2 An evidential system?

One of the values in this semantic system is an evidential one. The reportative is an evidential, but does that make this system into an evidential system? If we take an evidential system to be a system in

which all elements express an evidential meaning, it is not very plausible that the Ecuadorian Siona system, in contrast with the Eastern Tukanoan systems, is an evidential system. All the elements in the Eastern Tukanoan systems seem to express evidentiality, while in Ecuadorian Siona only a single element does.

Nonetheless, there is a way to preserve the evidential system analysis in the case of the Ecuadorian Siona subject agreement morphology. One could consider Ecuadorian Siona to be a language that only expresses evidentiality in declarative utterances. The type of evidential system that the language would then represent in declarative utterances is a system in which the reportative value is opposed to everything else, an A3 system in Aikhenvald's (2004) terminology. This type of evidential system is typologically common in- and outside of South-America. For instance, Arabela, a Zaparoan language, Dâw, a Nadahup language, Terêna, a Southern Arawak language and many others have a system in which only the reportative is marked and nothing else (Aikhenvald, 2004, pp. 31-34).

Another way to view the expression of evidentiality in the Ecuadorian Siona is that it does not have an evidential system, but that this function is carried out by scattered evidentials. The scattered evidentials are evidentials that are found in different morphosyntactic systems in the grammar (see Aikhenvald, 2004, pp. 80-82 for more on scattered evidentials). Conjectures, in this analysis, are expressed by a specific type of question while reports are expressed by a verbal suffix *-jã*. In this view, there is no tight-knit evidential system and the reportative and the conjectural are scattered evidentials in the language.

Although both of these analyses are descriptively accurate, they only focus on evidential meanings and neglect the fact that the reportative forms a semantic system together with the assertive and the interrogative. The two analyses also overlook the structural similarities between the reportative and the interrogative. In order to understand the Ecuadorian Siona subject agreement system better, I will argue that it is better not to analyze this it as an evidential system.

6.3.3 An alternative analysis

The semantic system of the assertive, the interrogative, and the reportative can alternatively be analyzed as a clause-typing system. The first aspect that leads to think that this system is a clause-typing system is that two of its three elements are clause-typing categories: assertions and questions are two different clause types that are marked in many

languages, as discussed in chapter 2 in subsection 2.3.1. Assertions are clause types that have the sentential force of asserting. When a speaker uses an assertive marker in a language, she/he asserts that the information is true. Questions have the sentential force of asking. When a speaker uses an interrogative marker, she/he asks for information. Therefore, assertive and interrogative markers provide information about the grammatical function of the sentence (Chierchia & McConnell-Ginet, 1990; Portner, 2009).

The category of reports is traditionally not considered to be a distinct clause type. However, there are various indications in Ecuadorian Siona that reports function as a clause type. Not only is the category in complementary distribution with two other clause-typing categories, reports semantically behave as a clause type as well. The sentential force of reports is different from the sentential force of assertion and questions. In reports, the information uttered in the sentence is not asserted or questioned. When a speaker uses a reportative verb from in Ecuadorian Siona, she/ he only presents the information in the sentence without making any claims about its veracity, as shown in subsection 6.2.2. Therefore, the assertive, the interrogative, and the reportative in the language can be considered as three distinct clause types. The three clause types and their associated sentential force are summarized in the table below.

Table 6.1: An overview of three main clause types in Ecuadorian Siona and associated sentential force

Clause Type	Sentential Force
Assertive	Asserting
Interrogative	Asking
Reportative	Presenting

When the semantics of the three clause types is further analyzed, the appeal of the clause-typing analysis becomes even more apparent. As discussed in chapter 2 in subsection 2.2.3, the function of clause types can be broken down into roles assigned to the different speech act participants. For instance, when a speaker makes an assertion she/ he claims to be knowledgeable about the uttered information: the speaker is assigned the role of epistemic authority. When a speaker asks a question, she/he assumes that the addressee is knowledgeable about the requested information. In this case, the role of epistemic authority is assigned to the addressee, while the speaker is only assigned the role of inquirer.

The semantics of reports in Ecuadorian Siona can be decomposed in this way as well. As discussed in subsection 6.2.2, it is possible to determine an epistemic authority in reports as it is in assertions and questions. In this type of clause, the epistemic authority is neither assigned to the speaker nor to the addressee, but to a non-speech act participant. In this case, the speaker merely assumes the role of presenter of the information.

The different functions of the three clause types can be best understood by analyzing the assignment of the epistemic authority. The speaker assigns the role of epistemic authority to a different deictic entity in each clause type. In assertions, she/he assigns this role to the speaker, in questions to the addressee, and in reports to a non-speech act participant. This is summarized in table 6.2 below:

Table 6.2: An overview of the major clause types and associated epistemic authority

Clause type	Epistemic authority
Assertive	Speaker
Interrogative	Addressee
Reportative	Non-speech act participant

The Ecuadorian Siona imperative and hortative, as discussed in chapter 5 in subsection 5.2.4, can also be included in this system. The imperative is commonly considered to be a clause type in the languages of the world and has the sentential force of requiring (Chierchia & McConnell-Ginet, 1990; König & Siemund, 2007; Portner, 2004, 2009; Sadock & Zwicky, 1985). This is no different in the case of the Ecuadorian Siona imperative. The hortative can be analyzed as a subtype of the imperative, because the hortative has the sentential force of requiring as well. The only difference between a regular imperative and a hortative is the directed party. In the imperative, the addressee is the person who is required to do something, while in the hortative, it is the speaker and the addressee who are required to do something. The Ecuadorian Siona clause-typing system including the imperative and its semantics is presented in table 6.3 below:

Table 6.3: An overview of the major clause types and associated sentential force

Clause Type	Sentential Force
Assertive	Asserting
Reportative	Presenting
Interrogative	Asking
Imperative	Requiring

As the semantics of the other clause types, the semantics of the imperative can be decomposed as well. It is possible to identify roles assigned by the speaker when she/ he utters an imperative. However, since the imperative does not concern the transmission of knowledge, these assigned roles do not include the epistemic authority, as discussed in chapter 2 in subsection 2.3.3. The roles that the speaker assigns when she/ he uses an imperative are the deontic authority and the directed party. The deontic authority refers to the role of requirer and the directed party is, as discussed above, the person who is required to do something. The speaker assigns the role of the deontic authority to her/himself in an imperative. The assignment of the directed party is different for the imperative proper and the hortative, as discussed above. The clause types and the associated types of authority are summarized in table 6.4 below:

Table 6.4: The main clause types and associated authority

Clause type	Type of authority	Authority
Assertive	Epistemic	Speaker
Interrogative	Epistemic	Addressee
Reportative	Epistemic	Non-speech act participant
Imperative	Deontic	Speaker

The question remains whether it is possible to assign the deontic authority to another deictic entity in Ecuadorian Siona. As discussed in chapter 2 in subsection 2.4.3, it is possible in some languages of the world, such as Shipibo-Konibo, to shift the deontic modality to a non-speech act participant. The example presented in chapter 2 in which this is the case is repeated below:

and not a grammatical function, it operates at the level of the speech act. It is an illocutionary function.

The analysis presented above has implications for linguistic theory, especially with respect to our understanding of the nature of evidentiality and clause-typing. These will be discussed in chapter 8.

