Clause-typing and evidentiality in Ecuadorian Siona

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Chapter 5: Subject agreement morphology and other verbal morphology

5.1 Introduction

Ecuadorian Siona is an agglutinative suffixing language with some fusion. Bound morphology plays a crucial role in the expression of grammatical categories in the language. Two of the grammatical categories that are expressed by bound morphology constitute the focus of this dissertation: clause typing and evidentiality. These two categories are conveyed by a set of verbal portmanteau suffixes that also carry subject agreement and tense values. In order to provide a thorough analysis of the use and semantics of evidentials and of the different clause types in Ecuadorian Siona in chapter 6, I will provide a description of the subject agreement system in this chapter, among other morphological aspects.

Verbs and verbal morphology play an important role in Ecuadorian Siona. Sentences in the language generally contain a series of verbs with varying categories of attached morphemes that yield distinct verbal manifestations. These manifestations of verbs include main verbs, dependent verbs, nominalized verbs, and serialized verbs. These verb types are illustrated in the example below:

(1) më'ë bë̱i̱ñona yë'ë aiyodojaiyona yë're oicobi ico nego'yaona yë'ë ba'iyë.
mɨ'ɨ [bɨ̃-i-o-na]$_{DV}$ jɨ'ɨ
2S [be.mean-IMPF-S.F.PRS-DS]$_{DV}$ 1S
[aijo-doha-i-o-na]$_{DV}$ jɨ'-de [o-i-ko-bi]$_{NV}$
[suffer-wander-IMPF-S.F.PRS-DS]$_{DV}$ 1S-OBJ [cry-IMPF-NOM.F-SBJ]$_{NV}$
ih-ko [ne-go'ja-o-na]$_{DV}$ jɨ'ɨ
DEM.PRX-CLS:ANIM.F [do-cure-S.F.PRS-DS]$_{DV}$ 1S
[ba-'i-jɨ]$_{MV}$.
[live-IMPF-OTH.PRS.ASS]$_{MV}$.
'You were mean and I was suffering, the woman who took pity on me cured me and I am alive.' (20110328slicr002.017).

Example (1) shows four types of verbal uses in Ecuadorian Siona. The verbs *bɨ̃ɨona* 'you were mean,' *aijodojaiona* 'I was suffering' and *nego'jaona* 'she cured' are instances of dependent verbs, and the verb *oikobi* 'the one who took pity' is an instance of a nominalized verb. The third type of verb that is found in this example is the serialized verb. The

instances *aijodojaiona* 'I was suffering' and *nego'jaona* 'she cured' both consist of serialized verbs: the former contain *aijo* 'suffer' and *dojai* 'wander' and the latter of *ne* 'make' and *go'ja* 'cure.'[109] The final type of verbal use in example (1) is the main verb *ba'ijɨ* 'I live.' Main verbs are crucial to our understanding of sentential force and evidentiality because these categories are marked on main verbs.

Three of these types show distinct subject agreement paradigms, namely, the nominalized verbs, the dependent verbs and the main verbs. These paradigms exhibit considerable overlapping morphology. For instance, all three paradigms comprise the suffixes *-ko*, *-kɨ* and *-je*. This overlap is not a historical coincidence since these suffixes seem to have a single origin, as I will show in chapter 8.

Synchronically, these suffixes must be analysed as members of different paradigms. The first argument for this paradigmatic analysis is that the organization of the paradigms is distinct for various contrastive verb uses. For instance, the organization of the person, number and gender categories is different in main verbs and in dependent verbs. In main clause verbs, the categories person, number and gender are represented, while in dependent verb morphology only number and gender are expressed. The second argument is that not all paradigms consist of exactly the same morphemes. For instance, plural subject agreement is distinctive in most of the paradigms.

Therefore, the subject agreement morphology and its organization will be described in the following sections for every verb type. Since subject agreement is fused with tense and is different for various verb classes, these categories will also be discussed in the sections below. I will describe the main clause verb morphology and its use in section 5.2, and the non-main clause verb morphology and its use in section 5.3. In section 5.4 I will discuss the possible semantic and prosodic motivation for the existence of distinct verb classes in Ecuadorian Siona. This section is highly important for the understanding of the use of different suffix forms in the different contexts. I will conclude this chapter in subsection 5.5 with an overview of the verb morphology discussed.

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[109] The verb *dojai* 'to wander' is only used in these serial verb constructions and often has a progressive interpretation. The verb *ne* 'to make' is often used as the first verb of a serial verb construction in order to emphasize the transitive or causative character of the action. The verb *go'ja* in the example above is a transitivized version of the verb *go'i* 'to return' and means literally 'to make return.' The use of the verb *ne* 'to make' emphasizes the transitivity of the verb *go'ja*.

5.2 Main verbs

As mentioned in the introduction to this chapter, Ecuadorian Siona morphology shows some fusion. This means that the language has portmanteau morphemes that encode more than one grammatical function. A clear example of this portmanteau morphology is the subject agreement morphology, which can express tense, sentential force and evidentiality. The main verb in example (2) expresses these three different categories:

(2) caëna i̱o̱ a̱'so dutajani a̱o̱ guë'toni i̱o̱ a̱o̱ neoña.
ka-ɨ-na ĩ-o ã'so
say-S.M.PST-DS DEM.PRX-CLS:ANIM.F cassava
duhta-hã-ni ãõ gɨ'to-ni ĩ-o
pull.out-go-SS cassava grate-SS DEM.PRX-CLS:ANIM.F
ãõ [ne-o-jã]$_{MV}$.
cassava [make-2/3S.F.PST.N.ASS-REP]$_{MV}$
'After he said (that) she went to pull out cassava, grated the cassava and she made cassava (bread), it is said.' [110] (20101123slicr001.022).

The morphology of the main verb *neojã* 'she made, it is said' expresses subject agreement, tense, and evidentiality. The subject agreement category that is displayed in this verb is second or third person singular feminine. The verb occurs in the past tense, its sentential force is non-assertive, and it is marked for reportative evidentiality.

Main verbs represent only a small percentage of the verbs used in the corpus used for this study. As examples (1) and (2) above illustrate, there are other types of verbs as well. The main verb is generally the final verb in the sentence. The end of a sentence can be recognized by its sentence contour intonation. At the end of a sentence the pitch goes down and the speech becomes breathy. Ecuadorian Siona has a nominative-accusative case alignment. In terms of subject agreement, this means that the subjects of both intransitive and transitive verbs are cross-referenced on the verb. This is also illustrated by the examples in (1) and (2). The main verb in example (1) is the intransitive verb *ba'ijɨ* 'I live' and it agrees with the subject of the verb *jɨ'ɨ* 'I.' This is reflected in the 'other' subject agreement morphology on the verb. The main verb in (2) is the transitive verb *neojã* 'she made, it is

[110] The Siona word *ã'so* refers to the cassava root and *ãõ* to the processed cassava.

said.' This verb also agrees with the subject of the verb: *ĩo* 'she,' which is reflected by the second or third person singular feminine subject agreement morphology on the verb.

The subject agreement system that occurs on main verbs will be explained in this section. Since subject agreement morphology differs for different clause types, tenses and verb classes, I discuss these categories here as well. I begin with a discussion of the subject agreement morphology and its organization within the different clause types in subsection 5.2.1. Then I will describe the subject agreement morphology for the different tenses in subsection 5.2.2. Following this, I will present the subject agreement morphology that is used in the different verb classes in subsection 5.2.3. Finally, I will present the imperative and hortative forms in subsection 5.2.4.

5.2.1 Clause types and organization

Ecuadorian Siona has various subject agreement paradigms in which the person, number and gender of the subject are expressed.[111] In many languages of the world, person and / or number distinctions are neutralized. For instance, second and third person plural are encoded by the same marker in the Algonquian language Chipewyan and in the Athapaskan language Slave (Dixon, 2010, p. 199). This neutralization within a subject agreement system is often referred to as homophony (Cysouw, 2003; Siewierska, 2004). Ecuadorian Siona shows considerable homophony in its subject agreement marking system. Every subject agreement paradigm consists of three suffixes. Two of the suffixes are highly specified for person, number and gender and one is not.

The subject agreement morphology is different for distinct clause types. There is a split between main verb subject agreement morphology in assertions and in non-assertions, such as questions, reportatives and conjectural utterances. These different clause types do not only display different suffixes to mark subject agreement, but they

[111] The term agreement is used here in a broad sense, similarly as to Siewierska's (2004, p. 121) use of the term 'person agreement.' The subject agreement morpheme expresses the relation between the subject, which is the controller in this context, and the verb, which is the target. The subject does not need to be expressed in Ecuadorian Siona. Since there can be either an overt or a covert subject in the case of the Ecuadorian Siona subject agreement markers, the language shows ambiguous agreement marking in Siewierska's (2004, p. 126) terminology.

also divide the labor differently. First I will introduce the present tense subject agreement paradigm for assertions. I define the assertions in Ecuadorian Siona as the utterances in which the speaker asserts the truth value of a proposition. The division of labor in the assertive subject agreement morphology is illustrated in example (3):

(3) a. caco.
ka-ko.
say-3S.F.PRS.ASS
'She says.'
b. caji.
ka-hi.
say-3S.M.PRS.ASS
'He says.'
c. cayë.
ka-jɨ.
say-OTH.PRS.ASS
'I / you (S) / we / you (PL) / they say.'

The suffixes *-ko* and *-hi* are specified for person, number and gender. Both forms are mark only one person, number and gender category. The former is marked on third person, singular, feminine subjects and the latter on third person, singular, masculine subjects. The suffix *-jɨ* 'Other' marks a rest category that is used when the subject is either a first person or second person singular or any plural person of any gender. The hearer can only determine the subject of the rest form by virtue of an overt subject or based on the context. This means that Ecuadorian Siona shows a typical third versus non-third person distinction in assertive clauses with singular subjects. Cysouw (2003, pp. 48-51) refers to this type of person marking homophony as the English type. In Siewierska's (2004, pp. 96-98) person agreement typology, the assertive subject agreement shows both singular and vertical homophony. Singular homophony refers to the homophony between the first and second person marking and vertical homophony refers to the collapse of all plural person markers. The assertive paradigm for the present is summarized in table 5.1:

Table 5.1: The present tense subject agreement suffixes in assertions

Person / number / gender	Suffixes
3S.F	-ko
3S.M	-hi
OTHER	-j̵i̵

The second type of subject agreement paradigms is found in questions, reports, and conjectures. This group of clause types forms a natural class in Ecuadorian Siona because of the non-assertive character of the clause types. For instance, questions are non-assertions, because the speaker questions a proposition instead of asserting it. Reports are non-assertions in the language because the speaker only presents a proposition that someone else informed him or her about. Conjectures are a special case, because they are a subset of questions in Ecuadorian Siona. Conjecture is a conventionalized interpretation of a specific set of negative questions (for an analysis of the conjectural constructions see chapter 6, subsection 6.2.3). Therefore, conjecturals also have non-assertive subject agreement morphology.

Main verbs in questions, reports and conjectures are easily distinguishable despite the almost identical shared non-assertive subject agreement morphology. One of the ways to differentiate clause types is through intonation. Questions and reports have a specific question intonation while conjectures have declarative intonation. The reportative can be recognized because it has an extra suffix *-jã* that is not present in questions.

Conjectural utterances can be distinguished through the auxiliary verb construction that in other contexts expresses negation. This negative auxiliary construction containing a verbal suffix *-a* glossed as negation and the auxiliary verb *ba'i* 'to be' is illustrated in the example below:

(4) më'ë ja'co ba'ia ba'io.
mi̵'i̵ ha'-ko ba-'i-a ba-'i-o.
2S parent-CLS:ANIM.F be-IMPF-NEG be-IMPF-2/3S.F.PRS.N.ASS
'Your mom must be (at home).' (I conjecture, because her boots are outside). (20110529elicr001.033).

The combination of the negative auxiliary construction *-a ba'i* and the non-assertive morphology marks these conjectural utterances. The auxiliary verb *ba'i* belongs to a different verb class from the one of

which the verb morphology is discussed in this section. Therefore, I will return to the conjectural questions in subsection 5.2.3 on verb classes.

The subject agreement paradigms for non-assertions are organized in much the same way as the assertion paradigm, except for the second person. As in the case of assertions, the non-assertion subject agreement system consists of three forms. The difference is that the second person singular masculine and feminine are combined with the third person singular masculine and feminine, instead of with the first person. This is illustrated in example (5):

(5) a. ñacoña.
jã-ko-jã.
see-2/3S.F.PRS.N.ASS-REP
'You (S.F) / she see(s), it is said.'

b. ñaquëña.
jã-kɨ-jã.
see-3S.M.PRS.N.ASS-REP
'You (S.M) / he see(s), it is said.'

c. ñañeña
jã-je-jã.
see-OTH.PRS.N.ASS-REP
'I / we / you (PL) / they see, it is said.'

The suffix *-ko* in (5a) is used for both second person singular feminine and third person singular feminine. The suffix *-kɨ* in (5b) is used for second and third person singular masculine. The suffix *-je* in (5c) is used for the agreement of all other person, number and gender combinations. This means that Ecuadorian Siona shows homophony for second and third person singular in non-assertive clauses. Cysouw (2003, pp. 41-45) describes this singular homophony as the Dutch type of homophony. The non-assertive present tense subject agreement suffixes are provided in the table below:

Table 5.2: Subject agreement in present tense non-assertive utterances

Person / number / gender	Questions & Reportative
2/3S.F	-ko(-jã)
2/3S.M	-kɨ(-jã)
OTHER	-je(-jã)

An interesting peculiarity of the subject agreement suffixes in the non-assertive paradigm is that they are identical to the general

nominal classifiers in Ecuadorian Siona. The classifier *-ko* marks the feminine noun class and the classifier *-kɨ* marks the masculine class. The suffix *-je* is a general classifier that can be used to mark any type of noun class, however, it is most often found on words that refer to plural inanimate entities. Synchronically, it is difficult to analyze the non-assertive subject agreement morphemes as nominal classifiers because the agreement suffixes are used differently. For instance, the subject agreement morphemes are used to express person as well, which is completely unpredictable from the use of the classifiers. Another difference between the two types of markers is that the subject agreement markers express tense, whereas the classifiers do not. However, although these two types of uses of the suffixes *-ko*, *-kɨ* and *-je* cannot be analyzed as two uses of the classifiers from a synchronic perspective, these suffixes seem to have the same origin, as will be discussed in chapter 7.

5.2.2 Tense

Ecuadorian Siona has a typical grammatical tense system (cf. Comrie, 1985; Payne, 1997, pp. 233-238; Whaley, 1997, pp. 205-206): the past suffix anchors the described event before the moment of speech. Present suffixes refer to an event that is simultaneous with the moment of speech. As in the case of the present subject agreement morphology described above, there are different subject agreement paradigms for assertions and for non-assertions in the past tense. The organization of person, number, and gender agreement is the same in the past tense as in the present tense.

The different subject agreement markers for past tense assertions are illustrated in (6):

(6) a. cao.
ka-o.
say-3S.F.PST.ASS
'She said.'

b. cabi.
ka-bi.
say-3S.M.PST.ASS
'He said.'

c. cahuë.
ka-wɨ.
say-OTH.PST.ASS
'I / you (S) / we / you (PL) / they said.'

The subject agreement paradigms used in assertions in the present and past do not look completely irregular. As it happens, the vowels of the past and present are the same for the three agreement categories. The final vowel in the third person singular feminine is an *-o* in both the present and the past (present: *-ko* and past: *-o*). In the case of the third person singular masculine, the final vowel is *-i* (present: *-hi* and past: *-bi*) and in the case of the non-third person singular, *-ɨ* (present: *-jɨ* and past: *-wɨ*).

If the vowels carry out the function of subject agreement, then the consonants are likely to function as tense markers, if one were to assume a rigorous structuralist approach. At least there should be regular correspondences between the consonants that are used in the present and past. Synchronically, it is difficult to find any regularity between the consonants in the present and past suffixes. The consonants found in assertive contexts in the present tense are [k, h, j] and the consonants in the past tense are [Ø, b, w]. An overview of the present and past tense suffixes of assertive subject agreement morphology is presented in the table below:

Table 5.3: Subject agreement suffixes in present and past assertions

Tense	Person / number / gender	Assertions
Present	3S.F	-hi
	3S.M	-ko
	OTHER	-jɨ
Past	3S.F	-bi
	3S.M	-o
	OTHER	-wɨ

In the non-assertive paradigms, there are similar correspondences between the vowels of the past and present subject agreement suffixes. Once again the vowels of the present and past suffixes are the same, as illustrated in example (7):

(7) a. caoña.
ka-o-jã.
say-2/3S.F.PST.N.ASS-REP
'You (F) / she said, it is said.'
b. caëña.
ka-ɨ-jã.
say-2/3S.M.PST.N.ASS-REP
'You (M) / he said, it is said.'
c. careña.
ka-de-jã.
say-OTH.PST.N.ASS-REP
'I / we / you (PL) / they said, it is said.'

The past tense non-assertive suffixes have the same vowels as the present tense suffixes: *-o* for second and third person singular feminine (present: *-ko* and past: *-o*), *-ɨ* for second and third person singular masculine (present: *-kɨ* and past: *-ɨ*), and *-e* for non-second and third person singular (present: *-je* and past: *-de*).

In contrast to the consonants in the assertion paradigms, the consonants in non-assertive paradigms do show some regular correspondences that correlate with the tense distinctions. That is to say, both the second and third person singular feminine and masculine have a *-k* in the present and a *-Ø* in the past. This pattern does not extend to the non-second and third person singular forms, where distinct consonants are used: *-j* in the present and *-d* the past. Therefore, the consonant *-k* cannot be analyzed as a present marker, nor the *-Ø* as a past marker. Table 5.4 provides an overview of the subject agreement suffixes in questions and reportatives:

Table 5.4: Subject agreement in past & present questions and reportative utterances

Tense	Person / number / gender	non-assertive
Present	2/3S.F	-ko(-jã)
	2/3S.M	-kɨ(-jã)
	OTHER	-je(-jã)
Past	2/3S.F	-o(-jã)
	2/3S.M	-ɨ(-jã)
	OTHER	-de(-jã)

A comparison of the assertive and non-assertive paradigms, presented in table 3 and 4, respectively, reveals some commonalities. The forms of

the present and past feminine singular agreement suffixes are the same in assertions and non-assertions. The only difference between the assertive *-ko* and *-o* and the non-assertive *-ko* and *-o* lies in the persons that the forms encode. That is, the assertive suffixes only refer to third person singular feminine subjects, whereas the non-assertive suffixes also include second person singular feminine subjects. Because of the difference in organization of the paradigms and the differences between the masculine and 'other' suffixes, it is impossible to make any generalization for the assertive and non-assertive subject agreement paradigms with respect to subject agreement and tense marking. From a synchronic perspective, it is not feasible to identify a distinct tense morpheme in Ecuadorian Siona. Therefore, tense is analyzed here as one of the values that is marked by the portmanteau subject agreement morphemes in the language.[112]

5.2.3 Verb classes

In the previous subsections, I have described the subject agreement morphology for the largest set of verbs in Ecuadorian Siona. However, this does not cover the subject agreement patterns of all of the verbs in the language. There are classes of verbs with different sets of subject agreement suffixes. In one of these classes, the imperfective suffix *-i* or its allomorph *-'i* are found at the end of the stem in the present tense and in infinitival contexts. Because of the occurrence of the suffix *-i* on this verb class, I will refer to it as the *-i* verb class. I will refer to the verbs for which subject agreement suffixes were discussed in the

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[112] There is one type of tense marking in the closely related Western Tukanoan languages that can probably be generalized for assertions and non-assertions. This is the remote past marking, which is carried out by a combination of the nasalization of the final vowel of the verb stem and the insertion of a glottal stop between the stem and the subject agreement morphology, which is illustrated by an example from Colombian Siona:

(i) gaje̜'ji. (Wheeler, 1987b, p. 155).
gahe-∼'-hi.
descend-REM.PST-3SG.MSC.PRS
'He descended (a long time ago).'

The remote past in Ecuadorian Siona is less productive than in Colombian Siona. In the recordings and in elicitation, this remote past could only be used with the verb *ba'i* 'to be.' Therefore, I will not further discuss this tense in this dissertation.

previous subsections as the non *-i* verbs from now on. I will discuss the subject agreement morphology of the *-i* verb class in subsection 5.2.3.1. There are a few verbs that have a different agreement pattern than the non *-i* verb class and the *-i* verb class. These verbs are bound verbs, including the existential copula *-a* and the future verb *-si*. I will address the subject agreement paradigms of this class in 5.2.3.2.

5.2.3.1 The *-i* verb class

The class of the *-i* verbs is a smaller verb class than the class of the non *-i* verbs, but it contains verbs such as *ba'ije* 'to live / to be,' *saije* 'to go' and *daije* 'to come,' which are frequently used. As mentioned above, this class is characterized by its distinctive subject agreement morphology and by the imperfective suffix *-i,* which forms part of the stem in the present tense paradigms and in infinitival contexts.[113] I will describe the different *-i* verb subject agreement paradigms for the present tense in subsection 5.2.3.1.1 and for the past tense in subsection 5.2.3.1.2. The subject agreement morphology used with the auxiliary verb construction that expresses conjecture is described in 5.2.3.1.3.

5.2.3.1.1 Present tense subject agreement morphology of *-i* verbs

The present subject agreement morphology of the *-i* verbs is the same for most main verbs as the present subject agreement morphology of the non *-i* verbs. This is illustrated in the examples below for both assertive and non-assertive verb forms.

Assertive

(8) a. saiji.
sa-i-hi.
go-IMPF-3S.M.PRS.ASS
'He goes.'

[113] The suffix *-i* is found in combination with most of the *-i* verbs, except for the verbs ending in the vowel *e*. In these verbs, such as the verb *hẽje* 'to cross,' *sẽje* 'to ask' and *weje* 'to lie down in a hammock,' the vowel *-i* does not appear at all in the surface structure. This is due to the assimilation of the *-i* to the preceding vowel *e*, as discussed in the phonology chapter (subsection 3.5.1). In all other respects, these verbs ending in *-e* behave as the other *-i* verbs.

b. saji.
sa-a-hi.
go-TRS-3S.M.PRS.ASS
'He takes.'

Non-assertive

(9) a. saiquëña.
sa-i-kɨ-jã.
go-IMPF-2/3S.M.PRS.N.ASS-REP
'You (M)/ he goes, it is said.'

b. saquëña.
sa-a-kɨ-jã.
go-TRS-2/3S.M.PRS.N.ASS.REP
'You (M)/ he takes, it is said.'

One remark is in order about example (8) and (9) before discussing the present tense suffixes. Example (8b) and (9b) show that when the transitive stem *saa* 'to take' is derived from the root *sa* 'to go' with the valence changing suffix *-a,* the verb changes into a non *-i* verb. The reason why the underived verb stem *sai* 'to go' belongs to the *-i* verbs and the derived verb stem *saa* 'to take' does not is discussed in section 5.4.

Examples (8) and (9) show that the present tense forms for *-i* verbs and non *-i* verbs are identical in both assertions and (most) non-assertions. In example (8), it is shown that the suffix *-hi* is used for third person singular masculine subjects in present assertive contexts for both *-i* verbs (8a) and non *-i* verbs (8b). The suffix *-kɨ* 'second or third person singular masculine present non-assertive' is also used for both *-i* verbs (9a) and non *-i* verbs (9b). The same suffixes are found throughout the assertive, question, and reportative paradigms. An overview of the assertive suffixes is presented in table 5.5 and of the question and reportative suffixes in table 5.6:

Table 5.5: Present subject agreement morphology in assertions

Person / number / gender	Non *-i verbs*	*-i verbs*
3S.F	(sa)-ko	(sa-i)-ko
3S.M	(sa)-hi	(sa-i)-hi
OTHER	(sa)-jɨ	(sa-i)-jɨ

Table 5.6: Present subject agreement in questions and reportative utterances

Person / number / gender	Non *-i verbs*	*-i verbs*
2/3S.F	(sa)-ko(-jã)	(sa-i)-ko(-jã)
2/3S.M	(sa)-kɨ (-jã)	(sa-i)-kɨ (-jã)
OTHER	(sa)-je(-jã)	(sa-i)-je(-jã)

The only difference between present tense forms of the two verb classes is the presence of the suffix *-i* or its allomorphic variant *-'i* for most main verb paradigms.[114] This vowel *-i* is also found with infinitives, nominalizations and serial verb constructions. The use of an *-i* verb in nominalizations and in serial verb constructions is illustrated in the examples below:

Nominalization

(10) yure daisiquëni ñahuẽ.
jude da-i-sih-kɨ-ni jã-wɨ.
then come-IMPF-CMPL-NLZ.M-OBJ see-OTH.PST.ASS
'Then I saw the one who had come.' (20120918elicr005.001).

Serial verb construction

(11) tuiñaquëna…
tu-i-jã-kɨ-na
follow-IMPF-see-S.M.PRS-DS
'He was following and watching (her)…'
(20110807salsu001.022).

In example (10), the *-i* occurs as a nominalization and in example (11) the suffix *-i* is found attached to the first verb in a serial verb construction. These infinitival contexts and the present tense context are typical imperfective contexts and therefore, the suffix is analyzed here as an imperfective suffix.

5.2.3.1.2 Past tense subject agreement morphology of *-i* verbs

In the past tense, *-i* verb morphology differs more from non *-i* verb morphology than in the present tense. One difference is that the past tense assertive *-i* verb suffixes are more complex than the non *-i* verb

[114] It is lexically determined which verbs contain the suffix *-i* or *-'i*. The presence or absence of the glottal stop does not influence the inflection of the verb.

suffixes. This is illustrated in (12) below, in which the (a) examples illustrate the *-i* verb morphology and the (b) examples the non *-i* verb morphology:

(12)	a.	saco'ë sah-ko'ɨ go-3S.F.PST.ASS 'She went.'	b.	sao sa-a-o go-TRS-3S.F.PST.ASS 'She took.'
(13)	a.	saja'i. sa-ha'i. go-3S.M.PST.ASS 'He went.'	b.	sabi. sa-a-bi. go-TRS-3S.M.PST.ASS 'He took.'
(14)	a.	saë'ë sa-ɨ'ɨ go-OTH.PST.ASS 'I / you (S) / we / you (PL) / they went.'	b.	sahuë sa-a-wɨ go-TRS-OTH.PST.ASS 'I / you (S) / we / you (PL) / they took.'

The past tense *-i* verb suffixes presented in examples (12a-14a) were likely morphologically complex in the past because they seem to consist of two parts. The first part is different for every person, number, and gender category: *-ko*, *-hV* and *-ɨ*. These parts are similar to the present tense suffixes *-ko*, *-hi* and *-jɨ*. This part of the suffixes probably formed the original subject agreement morpheme. The second part is more uniform for all categories of the paradigm. It consists of a glottal stop and a high vowel in all three suffixes: *-'ɨ* for both third person singular feminine and the 'other' category; and *-'i* for third person singular masculine. This part of the suffix was probably a past tense morpheme at an earlier stage of the language. The table below provides an overview of the past tense assertive non *-i* verb and *-i* verb subject agreement morphology:

Table 5.7: The past tense subject agreement in assertions.

Person / number / gender	Non *-i verbs*	*-i verbs*
3S.F	(sa)-o	(sah)-ko'ɨ
3S.M	(sa)-bi	(sa)-hV'i
OTHER	(sa)-wɨ	(sa)-ɨ'ɨ

The complexity of the past tense morphemes is not the only difference between the inflection systems of the *-i* verb and the non *-i* verb class. Another difference, as mentioned above, is that *-i* verbs have a different stem in the past tense and in the present tense. The stem in the past tense does not include the imperfective suffix *-i*. The third person singular feminine suffix displays another particularity. In past tense assertive contexts, a glottal fricative *h* surfaces in the coda position, as illustrated by the verb form *sahko'ɨ* 'she went' in (12a). The *h* in coda position is more commonly found within disyllabic root morphemes. In these environments, the consonant always appears before a voiceless onset consonant.

Another peculiarity that needs to be clarified is the assimilation process in the third person singular masculine suffix *-hV'i*. When this suffix is attached to the verb, the first vowel of the suffix assimilates to the vowel in the verb. This is illustrated in the examples below:

(15)	a.	huëiye wɨ-i-je fly-IMPF-INF 'to fly'	b.	huëjë'i wɨ-hɨ'i fly-3S.M.PST.ASS 'He flew.'
(16)	a.	sę̲ñe sẽ-i-je ask-IMPF-INF 'to ask'	b.	sę̲ję̲'i̲ sẽ-hẽ'i ask-3S.M.PST.ASS 'He asked.'
(17)	a.	tuiye tu-i-je sit.on-IMPF-INF 'to sit on top of something.'	b.	tuhu'i tu-hu'i sit.on-3S.M.PST.ASS 'He sat on top of something'
(18)	a.	choiye cho-i-je invite-IMPF-INF 'to call / to invite'	b.	chojo'i cho-ho'i invite-3S.M.PST.ASS 'He called / he invited.'

Examples (15-18) show that the first vowel of the third person singular masculine past tense assertive suffix differs in each of these cases. It is always a copy of the vowel in the verb root.

The past tense subject agreement morphology found among the non-assertive sentence types is less elaborate than the morphology found in assertive sentences. The verbal suffixes on non-assertives do not seem to have been morphologically complex. The past tense non-assertive subject agreement morphology is illustrated for *-i* verbs in the examples (19a-21a) and for the non *–i* verbs in the examples (19b-21b):

(19) a. sacoña.
sah-ko-jã.
go-2/3S.F.PST.N.ASS-REP
'You (M)/ he goes, it is said.'

b. saoña.
sa-a-o-jã.
go-TRS-2/3S.F.PST.N.ASS-REP
'You (M)/ he takes, it is said.'

(20) a. saquëña.
sah-k~~i~~-jã.
go-2/3S.M.PST.N.ASS-REP
'You (M)/ he goes, it is said.'

b. saëña.
sa-a-~~i~~-jã.
go-TRS-2/3S.M.PST.N.ASS-REP
'You (M)/ he takes, it is said.'

(21) a. sateña.
sah-te-jã.
go-OTH.PRS.N.ASS-REP
'You (M)/ he goes,
it is said.'

b. sareña.
sa-a-de-jã.
go-TRS-OTH.PST.N.ASS-REP
'You (M)/ he takes, it is said.'

There are many similarities between the *-i* verb and non *-i* verb subject agreement morphemes in the past tense. The subject agreement suffixes for past tense non-assertive *-i* verbs all contain the same vowel as their non *-i* verb counterparts. In the 'other' categories there are even more similarities, namely, the consonants *t* and *d* have the same place of articulation. The *-i* verb paradigm itself also seems to be very regular. All

the consonants are voiceless stops that cause the consonant *h* to appear in the coda position of the verb root. The table below presents an overview of all the non-assertive past tense subject agreement morphemes:

Table 5.8: The past tense subject agreement in questions & reports

Person/ number/ gender	Questions & Reports	
	Non *-i* verbs	*-i* verbs
2/3S.F	(sa)-o(-jã)	(sah)-ko(-jã)
2/3S.M	(sa)-ɨ(-jã)	(sah)-kɨ(-jã)
OTHER	(sa)-de(-jã)	(sah)-te(-jã)

5.2.3.1.3 Conjectural auxiliary verb constructions and *-i* verbs

There is one present tense main verb paradigm that differs from the others, namely, the conjectural non-assertive paradigm. The conjectural in Ecuadorian Siona is formed by an auxiliary verb construction consisting of the negation suffix *-a* and the auxiliary verb *ba'ije*, as discussed in subsection 5.2.1.[115] There is no distinction between the subject agreement morphology that is used with *-i* verbs and non *-i* verbs. The reason for this is that the auxiliary verb *ba'ije* and not the main verb always carries the subject agreement morphology. This is illustrated in the examples below:

-i verb

(22) i̱ a̱i̱ña ba'i.
ĩ-ɨ̱ ã-i-a ba-'i-ɨ̱.
DEM.PRX-CLS:ANIM.M eat-IMPF-NEG be-IMPF-2/3S.M.PRS.N.ASS
'He is eating, I conjecture.' (20110325elicr001.003).

non *-i* verb

(23) i̱ cuëa ba'i.
ĩ-ɨ̱ kʷɨ̱-a ba-'i-ɨ̱.
DEM.PRX-CLS:ANIM.M take.down-NEG be-IMPF-2/3S.M.PRS.N.ASS
'He is taking (it) down, I conjecture.' (20110325elicr001.007).

The examples in (22) and (23) show that the subject agreement suffixes are similar for *-i* verbs and non *-i* verbs in that the subject agreement

[115] The semantics and pragmatics of the conjectural auxiliary verb construction are discussed in chapter 6, in subsection 6.2.3.

morpheme is applied to the auxiliary verb *ba'ije* 'to be' and not to the main verbs *ãije* 'to eat' and *kʷɨje* 'to take down.'

There are differences, however, between the present tense non-assertive subject agreement paradigm for conjectures and the one for questions and reports. In examples (22) and (23), it was shown that the second or third person singular masculine present tense suffix is *-ɨ* for conjectures.[116] This suffix does not apply to second or third person singular masculine present tense verbs inquestions and reports. In these, both *-i* verb and non *-i* verbs carry a *-kɨ* suffix.

In spite of this difference, there are phonological similarities among the suffixes found in conjectures and questions/ reports. Namely, the conjectural suffix *-ɨ* contains the same vowel as the suffix *-kɨ* that is found in questions and reports and it marks the same subject category, namely, second and third person singular masculine. There exists a similar regularity between the second or third person singular feminine suffixes for conjectures on the one hand, and questions and reports on the other:

Conjecture

(24) cua'coa ba'io
kʷa'ko-a ba-'i-o
cook-NEG be-IMPF-2/3S.F.PRS.N.ASS
'She is cooking, I conjecture.'

Reportative

(25) cua'cocoña
kʷa'ko-ko-jã
cook-2/3S.F.PRS.N.ASS-REP
'She is cooking, it is said.'

The second or third person singular feminine suffix for present tense is *-o* as shown in example (24), whereas its counterpart in questions and reportatives is *-ko* as illustrated in example (25).

The examples above show that there is a consistent difference between the second or third person singular subject agreement suffixes in conjectures and in questions and reports: the conjectural suffixes have an empty onset while the question and reportative suffixes have a *-k* onset. There is no difference between the non-second or third

[116] This subject agreement suffix collides with the vowel [i] in the imperfective suffix *-i* as a consequence of a regular phonological process in the language, as described in chapter 3, subsection 3.5.1.

person singular subject agreement suffixes in conjectures and in questions and reports. The 'other' suffix is *-je* in both paradigms. An overview of all the present tense non-assertive suffixes for both *-i* verbs and non *-i* verbs is presented in the table below:

Table 5.9: Present subject agreement in non-assertive utterances for both *-i* verbs and non *-i* verbs

Person / number / gender	Questions and reports	Conjectures
2/3S.F	-ko	-o
2/3S.M	-kɨ	-ɨ
OTHER	-je	-je

Although there are some differences between the interrogative and reportative present tense paradigm and the conjectural paradigm as shown in table 5.9, I still refer to both paradigms as non-assertive. First of all, the organization of the interrogative and reportative paradigm is identical to the organization of the conjectural paradigm. Secondly, the discrepancies between the question and reportative paradigm and the conjectural paradigm are due to historical processes such as analogy and sound change.[117]

The past tense *-i* verb morphology in non-assertive clauses is more homogeneous than the present tense morphology; the conjectural past tense morphology is identical to the past tense *-i* verb morphology in reports and questions. As in the case of the present tense, the past tense *-i* verb subject agreement paradigm can be extended to both *-i* verbs and non *-i* verbs.

Table 5.10: The past tense subject agreement in questions, reports and conjectures

Person/ number/ gender	Questions & Reports		Conjectures
	Non *-i* verbs	*-i* verbs	All verbs
2/3S.F	(sa)-o(-jã)	(sah)-ko(-jã)	(sa/sai)-a bah-ko
2/3S.M	(sa)-ɨ(-jã)	(sah)-kɨ(-jã)	(sa/sai)-a bah-kɨ
OTHER	(sa)-de(-jã)	(sah)-te(-jã)	(sa/sai)-a bah-te

[117] These historical processes will be discussed in chapter 7.

5.2.3.2 Bound verbs

The final verb class that is discussed in this chapter consists of the bound copula *-a* and the bound future verb *-si*.[118] I will first discuss the copula and then the future verb. The copula *-a* is used in nominal predicates and is suffixed to the nominal part of the predicate, as illustrated below:

(26) ba̱i̱ huë'ea'ë.
bãĩ wɨ'e-a-'ɨ.
people house-COP-OTH.PRS.ASS
'It's a people's house.' (20100701swicr001.020).

In example (26), the copula is used in combination with a simple nominal predicate consisting of the underived noun *wɨ'e* 'house'. This is not the most common use of the copula *-a*. It is used considerably more frequently in combination with nominalized verbs. These combinations are used to express habituality or ability, as in example (27) and (28):

(27) yë'ë tǫnoquëa'ë.
jɨ'ɨ tõno-kɨ-a-'ɨ
1S snore-NLZ.M-COP-OTH.PRS.ASS
'I snore.' (Lit.: I am a snorer). (20110226elicr001.005).

(28) cuëquëabi.
kʷɨ-kɨ-a-bi.
swim-NLZ.M-COP-3S.M.PRS.ASS
'He can swim.' (Lit.: He is a swimmer). (20110228elicr001.002).

The nominalized verbs *tõnokɨ* 'snorer' in example (27) and *kʷɨkɨ* 'swimmer' in example (28) refer to the agent of the action. These 'to be a V-er' contexts refer to the habits and abilities of the subject.

There is a second frequent use of the copula *-a* in combination with the agentive nominalizer, where the nominalizer is preceded by the suffix *-hã'*. When combined with the copula, it is used to express a future event, as shown in example (29):

[118] There are indications that the bound verb *-ma* 'negation' also belongs to the same verb class. However, I have not found instances of this bound verb in the environment of main verbs. Therefore it will not be discussed here.

(29) yë'ë sani trabajaja̱'quëa'ë.
jɨ'ɨ sa-ni trabaha-hã'-kɨ-a-'ɨ.
1S go-SS work-PRP-NLZ.M-COP-OTH.PRS.ASS
'I am going to go to work.' (20101119oispa001.147).

There is a second frequent use of the copula *-a* in combination with the agentive nominalizer, where the nominalizer is preceded by the suffix *-hã'*. When combined with the copula, it is used to express a future event, as shown in example (29):

(29) yë'ë sani trabajaja̱'quëa'ë.
jɨ'ɨ sa-ni trabaha-hã'-kɨ-a-'ɨ.
1S go-SS work-PRP-NLZ.M-COP-OTH.PRS.ASS
'I am going to go to work.' (20101119oispa001.147).

As noted above, the most frequent use of the copula *-a* is in habitual and future assertions such as the ones in examples (27-29). The agreement morphology of this copula is slightly different from the agreement morphology of the other verb classes. In particular, it only has present tense morphology and it resembles past morphology in the non *-i* verb assertive paradigm; the present suffixes for third person singular feminine, *-o,* and for third person singular masculine, *-bi,* are the same as the past third person singular masculine and feminine suffixes found on non *-i* verbs. The present non-third person singular suffix *-'ɨ* is not found in the non *-i* verb past morphology, but it is reminiscent of the past tense of the *-i* verbs as the subject agreement segment of the suffix *-ɨ'ɨ*. An overview of the present subject agreement suffixes is provided in table 5.10:

Table 5.10: Present agreement morphology for the copula in assertions

Person / number / gender	Suffixes
3S.F	-o
3S.M	-bi
OTHER	-'ɨ

Similarly to the other verb classes, the copula has a distinct subject agreement paradigm for questions. Example (30) below illustrates the use of the second or third person singular masculine suffix *–i* for this verb class.

(30) me yo'që më'ë nëcaquëaë'ne?
me jo'-kɨ mɨ'ɨ nɨhka-kɨ-a-ɨ-'ne?
how do-S.M.PRS 2S stand-NLZ.M-COP-2/3S.M.PRS.N.ASS-Q
'Why are you standing (there)?' (20100913slicr002.012).

The complete non-assertive subject agreement paradigm for the bound verbs is presented in table 5.11:

Table 5.11: Present agreement morphology for the copula in questions

Person / number / gender	Suffixes
2/3S.F	-o
2/3S.M	-ɨ
OTHER	-je

Interestingly, this paradigm is identical to the present tense subject agreement paradigm for conjectural utterances.

In contrast to the other verb classes, the non-assertive paradigm presented above is not used for reportative and conjectural utterances. In the case of reportatives, the copula *-a* does not receive any subject agreement suffix; the reportative suffix *-jã* is directly attached to the copula. The nominalizer is the only reference to the subject in these contexts. This is illustrated in example (31):

(31) co'sime co'sijaico ba'icuaña.
ko'si-me ko'si-hai-ko ba'i-ko-a-jã.
shiny-CLS:FILIFORM shiny-VLZ-CLS:ANIM.F be-NLZ.F-COP-REP
'It is very, very shiny, it is said.' (20100701swicr001.013).

The verb *ba'ikoajã* 'it is, it is said' in example (31) does not carry any subject agreement morphology. It can only be deduced from the singular feminine nominalizer that there is a singular subject. The singular feminine nominalizer can also be used for non-animate subjects such as in example (31).[119]

The non-assertive subject agreement morphology of bound verbs is not found in conjectural constructions either. The reason for this is a different one from that invoked for reportative constructions. In the case of conjecturals, it is due to the fact that they never occur with

[119] Because the suffix *-ko* and its allomorphic variants are used throughout the language to refer to feminine entities, I analyze this nominalizer here as a feminine suffix as well. I do this despite the fact that it is used in this example to refer to an inanimate entity.

the copula *-a*. It is possible to form a habitual in combination with a conjectural construction, however, the copula *ba'i* 'to be' is used in these contexts, as shown in example (32):

(32) më'ë cuëco ba'ia ba'io.
mɨ'ɨ kʷɨ-ko ba-'i-a ba-'i-o.
2S swim-NLZ.F be-IMPF-NEG be-IMPF-2/3S.F.PRS.N.ASS
'You (F) can swim, I conjecture.' (20110325elicr001.019).

The subject agreement suffix *-o,* 'second or third person singular present tense non-assertive conjecture', is not an example of bound subject agreement morphology since it is not used with a bound verb. It is an instance of regular present tense conjectural morphology. The examples of habitual constructions in reportative and conjectural contexts illustrate that there is no non-assertive bound verb morphology for these contexts.

The *-a* copula is only used in the present tense, as mentioned above. There is no past tense morphology for this verb class. If one wants to express a past, the verb *ba'i* 'to live, to be' is used just as in the case of the conjectural utterances. This past habitual construction is illustrated in example (33):

(33) yë' ñicuë cuëquë baja'i.
jɨ' jĩhko-ɨ kʷɨ-kɨ ba-ha'i.
1S grandparent-CLS:ANIM.M swim-NLZ.M be-3S.M.PST.ASS
'My grandfather used to swim/ was able to swim.' (20110328elicr001.009).

The past habitual construction in example (33) contains the nominalized verb *kʷɨkɨ* 'swimmer.' Its more literal interpretation is 'my granddad was a swimmer.'

The subject agreement morphology found on bound verbs is also attested with the bound future verb *-si*. This verb is mostly used in assertions with a first person subject and is more restricted in other contexts. The first person assertive use is illustrated in the example below:

(34) yure tạsi'i.
jude tãh-si-'i.
now sow-FUT-OTH.PRS.ASS
'Now I am going to sow.' (20101119oispa001.083).

The subject agreement morpheme *-'ɨ* appears as *-'i* in combination with the verb *-si* as shown in example (34). This is due to progressive vowel assimilation. Under the influence of the stressed high front vowel, the vowel [ɨ] becomes a front vowel as well.[120] I have only found this future suffix *-si'i* for first person singular subjects.

Speakers usually prefer to use the purpose construction, which contains a nominalized verb and the copula *-a* to express future events for other persons. This was shown above in example (29). They only sporadically use the morphologically complex form *-sio* for third person singular feminine and the form *-sibi* for third person singular masculine to express future actions. This use is illustrated in examples (35) and (36):

(35) ñamina'a yë' mamaco cua'cosio.
jãmina'a jɨ' mama-ko kʷa'ko-si-o.
tomorrow 1S child-CLS:ANIM.F cook-FUT-3S.F.PRS.ASS
'Tomorrow my daughter will cook.' (20110226elicr001.036).

(36) ñaminatạ'ạ sasibi reunión.
jãmina-tã'ã sah-si-bi *reunion*.
tomorrow-CNTEXP go-FUT-3S.M.PRS.N.ASS meeting.
'Tomorrow he will/can go to the meeting.' (20100920elicr001.025).

The bound verb *-si* is also occasionally used in questions with second and third person singular subjects. The same non-assertive morphology is used as in questions with the copula *-a*. This use of subject agreement morphology is presented in examples (37) and (38):

(37) dutasio?
duhta-si-o?
take.out-FUT-2/3S.F.PRS.ASS
'Are you (F) / is she going to take (it) out?' (20110328elicr001.038).

[120] This assimilation process is described in more detail in chapter 3, subsection 3.5.2.

(38) dutasi?
duhta-si-ɨ?
take.out-FUT-2/3S.M.PRS.ASS
'Are you (M) / is he going to take (it) out?' (20110328elicr001.039).

The subject agreement suffix that is found in second or third person singular feminine questions is *-o*, as illustrated in (37). The subject agreement suffix for second or third person masculine forms is *-ɨ*. However, this suffix is not overtly attested in the language due to the process of vowel coalescence.[121] The 'other' non-assertive subject morpheme *-je* is not attested for the future verb *–si* and speakers do not accept the form *-sije* as grammatical.

5.2.4 The imperative and the hortative

Ecuadorian Siona has another variety of main clause verb morphology, used for imperatives and hortatives. The imperative is represented by the suffix *-hɨ̃ʼɨ̃* and the hortative by the suffix *-jũʼũ*. These main verb suffixes mark yet another clause type in the language: commands. An example of the use of these suffixes is provided below:

(39) paëjë̦ʼë̦!
paɨ-hɨ̃ʼɨ̃!
scare.off-IMP
'Scare (it) off!' (20110326elicr001.014).

(40) Ñamina'a ñañu'u!
jãmina'a jã-jũʼũ!
tomorrow see-HORT
'Let's see (each other) tomorrow!' (20110830elicr001.118).

In example (39) the speaker uses the imperative form *paɨhɨ̃ʼɨ̃* to order the addressee to scare off something. The speaker takes the authority to give orders, that is, the speaker is the deontic authority in these contexts.

The same can be said for the hortative sentence in example (40). The speaker is the deontic authority in this sentence as well. The difference between the imperative and the hortative is that the speaker

[121] These are regular phonological processes that are described in the phonological sketch of Ecuadorian Siona in chapter 3, in subsection 3.5.1.

does not include her/himself in the directed party in the case of the imperative and she / he does in the case of hortative.[122]

5.3 Non-main verbs

There are various types of non-main verbs in Ecuadorian Siona, as shown in the introduction of this chapter. The language contains dependent verbs, nominalizations and serial verb constructions. These types of non-main verbs display a distinct usage and the dependent verbs and nominalizations also show some differences in morphology. The serial verb constructions do not have specific morphological material. The use and morphology of the dependent verbs will be described in subsection 5.3.1 and of the nominalizations in 5.3.2. I will address the usage of serial verb constructions in subsection 5.3.3.

5.3.1 Dependent verbs

A very common non-main verb type in Ecuadorian Siona is the dependent verb. Dependent verbs mark switch-reference and are used for clause-chaining purposes. This is cross-linguistically not uncommon:

> Marking switch-reference is often associated with clause-chaining. In clause chains one clause can be considered 'main' in the sense that it bears all tense, aspect, and mood specifications. Other clauses are dependent: they can be marked for person of the subject and the tense relative to that of the main clause. (Aikhenvald, 2012, p. 339).

The Ecuadorian Siona dependent verbs function as described by Aikhenvald in the quotation above. This type of verb is very frequent in the language; most sentences contain at least one dependent verb.

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[122] Aikhenvald (2010, pp. 4-5) treats the second person imperative as the 'canonical' imperative and the first and third person imperatives as 'non-canonical.' She states (p. 4) that for some languages, such as the Tungusic language Evenki and the Papuan language Una, "treating imperative as one paradigm for all the persons is the most appropriate decision" (Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4)(Aikhenvald, 2010, p. 4). I believe a similar conclusion can be drawn for the Ecuadorian Siona imperative and hortative.

I refer to these verbs as dependent verbs because they are syntactically dependent on the main verb without being subordinate. In other words, these verbs depend on the main verb for their anchoring to speech time, but semantically they are not subordinate to main verbs. This is also not cross-linguistically uncommon for dependent verbs in clause chaining constructions (Aikhenvald, 2012, p. 339). The observation that the dependent verbs are not subordinate to the main verb is based on occurrences of dependent verbs such as the one in the example below:

(41) yë'ë ñacona saja'i.
jɨ'ɨ jã-ko-na sa-ha'i.
1S see-S.F.PRS-DS go-3S.M.PST.ASS
'I saw that he left.' (Lit. I saw (him) and he left).
(20110325elicr001.054).

The dependent verb *jãkona* '(I) saw' in (41) is syntactically dependent on the main verb *saha'i* '(he) left' because it cannot appear alone. The main verb anchors the two actions described in the example on the timeline before the moment of speech.

The two actions in example (41) are, however, two semantically independent actions as indicated by the literal interpretation. The example expresses the action of the speaker seeing a male person leave. In many other languages, the action of leaving would be presented as the complement of the action of seeing. In English, one would say, for instance, 'I saw that he left' or 'I saw him leave'. In the former case, the subordinate clause 'that he left' is the complement of the main clause 'I saw.' In Ecuadorian Siona, however, the action of leaving is not presented as the complement of the action of seeing as shown in example (41). Because the action of leaving is the final verb in the sentence, it is the main verb and the action of seeing is expressed by an independent verb. It is most clearly comparable to English 'He left, I saw'.

Dependent verbs in Ecuadorian Siona are used in order to express various actions. This is illustrated in the example below:

(42) jąë bǫsë ñocua neni dani sereni cua'coni cuenani į̱ ñocua oyaquë bą̱'quëña.
hã-ɨ̵ bõsɨ̵ jõhkʷa ne-ni
DEM.DST-CLS:ANIM.M young.man chambira make-SS
da-ni sede-ni kʷa'ko-ni kʷena-ni ĩ-ɨ̵
bring-SS peel-SS cook-SS dry-SS DEM.PRX-CLS:ANIM.M
jõhkʷa oja-kɨ̵ ba-∼'-kɨ̵-jã.
chambira roll-NLZ.M be-REM.PST-2/3S.M.PRS.N.ASS-REP
'The young man made 'chambira,' he brought (it), stripped (it), cooked (it) and rolled the 'chambira.'' [123] (20100913slicr001.002).

The dependent verbs in example (42) describe a series of successive actions. The actions referred to maintain their semantic independence. The main verb phrase *ojakɨ̵ bã'kɨ̵jã* 'he was rolling' is not more important than the dependent verbs; it is just the last action in a series of actions. The series of dependent verbs is only syntactically dependent on the main verb *bã'kɨ̵jã* 'he was,' which places the whole series of events in the remote past.

As mentioned above, dependent verbs are marked for switch-reference and most dependent verbs contain a portmanteau morpheme that marks subject agreement and tense, similarly to the subject agreement morphology on main verbs. Another similarity between the morphology of main and dependent verbs is that the verb classes have distinct subject agreement paradigms in both cases. In subsection 5.3.1.1, I will discuss the switch-reference marking. In subsection 5.3.1.2, I will explain the organization of the subject agreement paradigms. In subsection 5.3.1.3, I will describe the use of the different tense suffixes and show the differences between present tense and past tense morphology. Finally, I will discuss the differences between the subject agreement morphology in the distinct verb classes in subsection 5.3.1.4.

5.3.1.1 Switch-reference

The switch-reference system in Ecuadorian Siona is used for reference tracking. Hearers can determine the identity of the subject by means of this system. Every dependent verb is marked to indicate whether there

[123] The Latin name for *chambira* is *Astrocaryum chambira*. It is a palm tree found in the Amazonian region that is used to make threads for knotting bags and hammocks.

is a switch in the subject ('different subject,' DS) or not ('same subject,' SS). This is illustrated in the example below:

(43) go'ini ñajɇ̈na yohuë hue'sere huahuaëña.
go'i-ni jã-hɨ-na jo-wɨ we'se-de.
return-SS see-PL.PRS-DS canoe-CLS:CONTAIN outside-OBJ
wawa-ɨ-jã.
float-2/3S.M.PST.N.ASS-REP
'They came back and saw that the canoe was floating outside (the harbor).' (20100907slicr002.008).

Example (43) shows two dependent verbs: *go'ini* 'they came back' and *jãhɨna* 'they saw.' The first verb *go'ini* contains the SS suffix *-ni*. This indicates that the subject of this verb is the same as the subject of the next verb *jãhɨna*. This verb *jãhɨna* features the DS marker *-na*. This suffix indicates that the subject of this verb is different than the subject of the next verb, *wawaɨjã* 'it was floating' in this instance.

It is important to note that the reference point for the switch-reference marker is the verb that follows the switch-reference form, which is not necessarily the main verb in the sentence. Thus, in the case of SS marking, the subject of the verb is the same as the one of the next verb. This is illustrated in example (43). The dependent verb *go'ini* 'they came back' shows up with the same subject marker *-ni*, although its subject is different from the subject of the main verb *wawaɨjã* 'it was floating.' The SS marker *-ni* indicates the switch-reference relation between *go'ini* and the following verb *jãhɨna* 'they saw,' which have the same subject.

When a dependent verb employs DS marking it has a subject that is different from that of the next verb. This is illustrated in the first example of this chapter, repeated here as (44):

(44) më'ë bë̱ñona yë'ë aiyodojaiyona yë're oicobi ico nego'yaona yë'ë ba'iyë.
mɨ'ɨ bɨ̃-i-o-na jɨ'ɨ
2S be.mean-IMPF-S.F.PRS-DS 1S
aijo-doha-i-o-na jɨ'-de o-i-ko-bi
suffer-wander-IMPF-S.F.PRS-DS 1S-OBJ cry-IMPF-NOM.F-SBJ
ih-ko ne-go'ja-o-na jɨ'ɨ
DEM.PRX-CLS:ANIM.F do-cure-S.F.PRS-DS 1S
ba-'ï-jɨ.
live-IMPF-OTH.PRS.ASS.
'You were mean and I was suffering, but she took pity on me and she cured me and I am alive.' (20110328slicr002.017).

The dependent verb *aijodohaiona* 'I was suffering' in example (44) contains the DS marker *-na*, although it has the same subject as the main verb *ba'ijɨ* 'I am alive.' This is because the DS marker does not necessarily show a switch-reference relation between the dependent verb and the main verb. It shows a switch-reference relation between the dependent verb and the following verb, which is *nego'jaonã* 'she cured' in this case. This verb has a subject that is different from that of the verb *aijodohaiona*. It means that both the SS and the DS marker take the next verb as a reference point. If the verb that follows the dependent verb has the same subject as the dependent verb, then an SS is used. If it has a different subject, a DS marker is used.[124]

5.3.1.2 The organization of the subject agreement morphology

Most dependent verbs display subject agreement morphology just like main verbs. The difference between main clause verb morphology and dependent verb morphology is found in the organization of the paradigm. Dependent verb subject agreement does not make any person distinction, only gender and number are marked. Gender is only differentiated for singular subjects: *-ko* for singular feminine subjects

[124] This type of system in which the switch-reference marking depends on the anticipated subject of next verb is not always considered to be the canonical switch-reference. For instance, Aikhenvald (2012, p. 339) considers 'canonical switch-reference' to be: "a category of the verb of the dependent clause indicating whether the subject is the same as that of the main clause, or whether it is different." However, it is typologically not uncommon (Haiman, 1983; Lynch, 1983).

and *-kɨ* for singular masculine subjects. The plural subject agreement suffix for dependent verbs is *-hɨ* regardless of the gender of the subject.

In contrast to main verb paradigms, first person singular subjects do not show the same agreement as plural subjects; they display singular subject agreement depending on the gender of the speaker. The examples below show that all dependent verbs with a singular masculine subject display subject agreement with the *-kɨ* suffix irrespective of its person:

First person

(45) yë'ë nequëna ñajẽ'ẽ.
jɨ'ɨ ne-kɨ-na jã-hɨ̃'ɨ̃.
1S make-S.M.PRS-DS see-IMP
'See how I make (money).' (20101119oispa001.113).

Second person

(46) më'ë hua'i neñe bą̃quëna më' dëjọ̃ bẽį̃ñona më' yo'dojaiquë?
mɨ'ɨ wa'i ne-je bã-kɨ-na mɨ' dɨ̃hõ
2S meat make-INF NEG.COP-S.M.PRS-DS 2S wife
bɨ̃-i-o-na mɨ'ɨ jo'-doha-i-kɨ?
be.angry-IMPF-S.F.PRS-DS 2S do-wander-IMPF-2/3S.M.PRS.N.ASS
'You are walking around here, because your wife got mad, because you don't hunt anything?' (20100913slicr002.018).

Third person

(47) į̃bi ja'ruquëna tsoe huẹ̃sico baquëña.
ĩ-ɨ-bi ha'ru-kɨ-na zoe
DEM.PRX-CLS:ANIM.M-SBJ sit-S.M.PRS-DS time
we-sih-ko bah-kɨ-jã.
be.tied.up-CMPL-NLZ.F be-2/3S.M.PST.N.ASS-REP
'He sat and it was already tied up.' (20100913slicr001.011).

The dependent verb *nekɨna* 'make' in example (45) has a first person subject, the dependent verb phrase *wa'i neje bãkɨna* 'do not hunt' in example (46) has a second person subject, and the dependent verb *ha'rukɨna* 'sit' in example (47) has a third person subject. Despite the differences in person, all the verbs are marked with the singular masculine agreement suffix *-kɨ*.

The subject agreement paradigm of dependent verbs is the same for SS and DS-marked verbs in the present tense. The only difference between SS and DS-marked verbs is that the clauses featuring different

subjects have the switch-reference marker *-na*. The SS-marked verbs do not have any additional morphology following the subject agreement suffix. The use of the same agreement suffixes for SS and DS clauses is illustrated below:

Same subject

(48) caëna mamajë̱maña siwajë a̱o̱ nea bia sareña.
ka-ɨ-na mama-hɨ-mah-jã siwa-hɨ
say-S.M.PST-DS child-CLS:COL-DIM-PL brighten.up-PL.PRS
ãõ nea bia sa-de-jã.
cassava black pepper take-OTH.PST.N.ASS-REP
'When he had said (that) the children brightened up and they took cassava and black pepper.' (20101123slicr001.024).

Different subjects

(49) du̱ri neni o̱cuajëna gueëña.
dũdi ne-ni õhkʷa-hɨ-na
'dũri' make-SS give.to.drink-PL.PRS-DS
gʷe-ɨ-jã.
refuse-2/3S.M.PST.N.ASS-REP
'They made 'dũri'[125] and they gave (it) to him to drink, but he refused.' (20101123slicr001.006).

In example (48), the plural subject marker *-hɨ* is used to mark the subject of a SS dependent verb and in example (49) the same marker is used in a DS construction. An overview of the dependent subject agreement morphology organized according to gender and number is presented in table 5.12:

Table 5.12: Subject agreement suffixes for present tense dependent verbs from the non *-i* verb class

Number / gender	Suffixes
S.F	-ko(-na)
S.M	-kɨ(-na)
PL	-hɨ(-na)

[125] *Dũri* or *chonduri* is a plant that is used in a medicinal drink that helps against anemia. It is given to the parents of a newborn or to girls who have their first menstruation.

5.3.1.3 Relative tense

There are distinct dependent subject agreement paradigms for the past and present tense, just as in the case of main clause verb morphology. In the previous subsection, I provided an overview of the present tense suffixes that are used both in SS as in DS contexts. In the past tense, the portmanteau subject agreement suffixes are only used in DS contexts. As in the present tense, the DS morphology in the past tense consists of a number and gender suffix and the DS suffix *-na*:

(50) airo sañu'ụ carena bë'caquë ñajẽ̈ daojẽ̈'ẽ̈ caëna…
ai-do sa-jũ'ũ ka-de-na bɨ'ka-kɨ
big-CLS:PLACE go-HORT say-PL.PST-DS parent-CLS:ANIM.M
jã-hɨ dao-hĩ'ĩ̃ ka-ɨ-na…
see-PL.PRS wander-IMP say-S.M.PST-DS
'After they said: "Let's go to the forest," their father said: "Watch out while you go!"…' (20100907slicr002.004).

The dependent verbs *kadena* 'they said' and *kaɨna* 'he said' in example (50) contain the portmanteau suffixes *-de* (plural) and *-ɨ* (singular masculine), which both also mark past tense, and the DS suffix *-na*.

In past SS contexts, there is only one suffix, *-ni*, which is used for all number and gender categories. This is illustrated in the example below:

(51) huani daëna ị dẽjọ̃ soeni te'teni cua'coni mamajẽ̈re ạọ̃ña.
wa-ni da-ɨ-na ĩ-ɨ dĩhõ
kill-SS bring-S.M.PST-DS DEM.PRX-CLS:ANIM.M wife
soe-ni te'te-ni kʷa'ko-ni mama-hɨ-de
pluck-SS cut-SS cook-SS child-CLS:COL-OBJ
ãõ-o-jã.
feed-2/3S.F.PST.N.ASS-REP
'When he had killed (the game), he brought (it home) and his wife plucked (it), cut (it) to pieces and cooked (it) and gave (it) to eat to the children.' (20100913slicr003.006).

The first dependent verb in example (51) *wani* 'killed' has a third person masculine subject. This can partially be deduced from the fact that the following subject, *daɨna* 'he brought' has a singular masculine suffix *-ɨ*. The other past SS verbs in example (51) *soenĩ* 'plucked,' *te'tenĩ* 'cut into pieces' and *kʷa'konĩ* 'cooked' all have the third person singular feminine

subject *ĩ dɨ̃hõ*[126] 'his wife.' This is particularly indicated by the fact that these verbs have the same subject as the following verb, which is *ãõjã* 'she cooked, they say.' Third person singular masculine subjects and third person singular feminine subjects display different suffixes in all subject agreement paradigms. However, there is no difference in the marking of SS in past dependent verbs, as (51) shows. An overview of the SS and DS morphology in the present and past tense is presented in table 5.13:

Table 5.13: The subject agreement suffixes for dependent verbs of the non *-i* verb class

Aspect	Gender / number	SS	DS
Present	S.F	-ko	-ko-na
	S.M	-kɨ	-kɨ-na
	PL	-hɨ	-hɨ-na
Past	S.F	-ni	-o-na
	S.M		-ɨ-na
	PL		-de-na

The portmanteau suffixes in the dependent paradigms are almost identical to the suffixes in the non-assertive paradigms. The present paradigms contain the forms *-ko* and *-kɨ* in the case of both the dependent verbs and the non-assertive verbs. The only suffix that is absent in the non-assertive paradigm is the plural suffix *-hɨ*. The past tense paradigms of the DS dependent verbs and the non-assertive verbs are identical; both paradigms contain the suffixes *-o*, *-ɨ* and *-de*. These suffixes, however, are distributed differently over person, number and gender in the two paradigms.

Tense does not function in the same way with dependent verbs as with main verbs. In the case of the dependent verbs, tense is relative, while it is not in the case of main verbs. Main verbs are marked for past tense when the event took place before the moment of speech. That means that the reference point is the moment of speech. The selection of tense in dependent verbs does not depend on the moment of speech. Rather, dependent verbs take the time frame of the next verb as a reference point. When the event described by the dependent verb occurs before the event described by the following verb, the dependent

[126] The NP *ĩ dɨ̃hõ* is represented as *ĩ-ɨ dɨ̃hõ* in example (51). The former representation illustrates the phonological form of the words and the latter the underlying morphological structure.

verb has past tense morphology. When the dependent verb event occurs simultaneous to the event described by the following verb, the dependent verb has present tense morphology. This is illustrated in the examples below:

Present tense

(52) yë'ë ñacona saja'i.
jɨ'ɨ jã-ko-na sa-ha'i.
1S see-S.F.PRS-DS go-3S.M.PST.ASS
'I saw that he left.' (Lit. I saw (him) and he left).
(20110325elicr001.054).

Past tense

(53) yë'ë ñaona saja'i.
jɨ'ɨ jã-o-na sa-ha'i.
1S see-S.F.PST-DS go-3S.M.PST.ASS
'I saw (him) and then he left.' (Lit. First I saw (him) and then he left). (20110325elicr001.055).

The present tense dependent verb *jãkona* 'saw' in example (41), which is repeated here above in (52), takes place in the present with respect to the following verb *saha'i* 'he left;' the actions occur simultaneously. The past tense verb *jãona* 'saw' in example (53) occurs in the past with respect to the following verb *saha'i* 'he left;' the action of seeing occurs before the action of going. This type of tense system occurring with dependent verbs can be analyzed as a relative tense system (see Whaley, 1997, pp. 209-210).

5.3.1.4 Verb classes

As in main clause verb morphology, dependent verb morphology displays different suffixes for the different verb classes. The dependent subject agreement morphology presented in the previous subsections belongs to the non *-i* verbs. The *-i* verbs show different subject agreement suffixes that are similar to the subject agreement suffixes found in the non-assertive paradigms. The present tense suffixes are illustrated in the examples below:

(54) a. saiona…
sa-i-o-na…
go-IMPF-S.F.PRS-DS
'I (F) / you (F) go / she goes…'

b. saina…
sa-i-ɨ-na…
go-IMPF-S.M.PRS-DS
'I (M) / you (M) go / he goes…'

c. saijëna…
sa-i-hɨ-na…
go-IMPF-PL.PRS-DS
'We / you (PL) / they go…'

The present tense feminine and masculine singular *-i* verb suffixes *-o* and *-ɨ*[127] in examples (54a-b) are identical to the past tense feminine and masculine singular non *-i* verb suffixes. A similar phenomenon occurs in the case of the non-assertive conjectural subject agreement morphology. The present tense paradigm for conjectural utterances shows *-i* verb morphology that is very similar to the past tense morphology for non *-i* verbs.

The *-i* verb plural marker *-hɨ* is identical to the plural marker that is used with non *-i* verbs. However, there is dialectal variation with respect to plural marking on dependent *-i* verbs. Only in Puerto Bolívar Siona is the form *-hɨ* used to mark plural subjects. In the Siona spoken in Sototsiaya, the plural marker for plural *-i* verb in the present tense is *-bɨ*:

[127] The suffix *-ɨ* is mostly not overtly, because it fuses with the preceding vowel [i]. This regular phonological process of coalescence in Ecuadorian Siona is described in chapter 3, in subsection 3.5.1. There is a trace of the present tense dependent suffix *-ɨ* when it is attached to an *-i* verb ending in the vowel [e]. This is illustrated in the example below:

(ii) hueina…
we-i-ɨ-na…
lie.in.hammock-IMPF-S.M.PRS-DS
'I (M) / you (M) / he is lying in a hammock…'

The imperfective suffix *-i* in example (ii) fuses with the vowel /e/ because of the regular process of coalescence in the language. Furthermore, the vowel /ɨ/ assimilates the vowel /e/ and becomes a front vowel [i]. Therefore, the vowel in /i/ in example (ii) is a trace of the singular masculine present tense suffix

(55) saibëna…
sa-i-b~~ɨ~~-na…
go-IMPF-PL.PRS-DS
'We / you (PL) / they go…'

It seems that the use of the form *-h~~ɨ~~* with *-i* verbs in Puerto Bolívar Siona is an innovation in the language. Sototsiaya Siona is considered to be more conservative by the Siona people.

The past tense dependent subject agreement suffixes of the *-i* verbs are all identical to the past non-assertive suffixes of the *-i* verbs: *-ko*, *-k~~ɨ~~* and *-te*. The dependent suffixes are preceded by the *-i* verb root that ends in a glottal fricative *h*, as in the case of the non-assertive past *-i* verbs. This is illustrated for the feminine form:

(56) sacona…
sah-ko-na…
go-S.F.PST-DS
'I (F) / you (F) go / she went…'

The dependent verb *sahkona* can be characterized by its verb root ending in *h* and the lack of the vowel *-i,* just as in all other past contexts. The past tense *-i* verb suffixes are only used when the subject is different from the subject of the following verb. As in the case of the non *-i* verbs, same subject past verbs are marked with the suffix *-ni*:

(57) sani trabajajë̱'ë̱.
sa-ni trabaha-h~~ɨ~~̃'~~ɨ~~̃.
go-SS work-IMP
'Go and work!' (20101119oispa001.148).

When the suffix *-ni* is used with an *-i* verb, such as the verb *saije* 'to go' as shown in example (57), it is attached to the bare verb root. The imperative suffix *-i* is absent,[128] just as in other past tense contexts. The

[128] The vowel of the verb root *sa* is lengthened ([sa:]) in order to satisfy the bimoraic stem constraint. See chapter 3, subsection 3.2.2 for more information on the bimoraic stem constraint and chapter 7, subsection 7.4.3.1 for more information on the influence of the bimoraic stem constraint in the *-i* verb morphology.

dependent paradigms discussed in this subsection are presented in table 5.14 below:[129]

Table 5.14: The subject agreement suffixes for dependent verbs

Tense	Num-ber / gender	SS		DS	
		Non *-i* verbs	*-i* verbs	Non *-i* verbs	*-i* verbs
PRS	S.F	-ko	-o	-ko-na	-o-na
	S.M	-kɨ	-ɨ	-kɨ-na	-ɨ-na
	PL	-hɨ	-hɨ /-bɨ	-hɨ-na	-hɨ /-bɨ-na
PST	S.F	-ni		-o-na	-ko-na
	S.M			-ɨ-na	-kɨ-na
	PL			-de-na	-te-na

5.3.2 Nominalizations

The second type of non-main verb that is frequently used in Ecuadorian Siona is the nominalized verb. In chapter 4, section 4.2, it was already shown that the nominal classifiers *-ko* for feminine and *-kɨ* for masculine can be used to nominalize verbs. In particular, these classifiers are used to form an agentive nominalization. This is illustrated in the example below:

(58) ñu'iquëbi caëña…
jũ-'i-kɨ-bi ka-ɨ-jã…
sit-IMPF-NLZ.M-SBJ say-2/3S.M.PST.N.ASS-REP
'The one who was sitting said…' (20101123slicr001.055).

The nominalized verb *jũ'ikɨbi* 'the one who was sitting' in example (58) refers to the agent of the verb: the male person who is sitting.

[129] The bound verbs *-a* (copula) and *-si* (future verb) are not used in dependent verb constructions. Therefore, it seems that there is no separate subject agreement paradigm for dependent bound verbs. Nevertheless, the bound verb *-ma'* (negation) shows a different subject agreement pattern than the non *-i* verbs and *-i* verbs in dependent contexts. This bound verb displays present tense subject agreement suffixes for singular feminine and masculine subjects that are identical to *-i* verb present tense suffixes; they both have the suffixes *-o* and *-ɨ*. The difference between the *-i* verb forms and the bound verb forms is the presence of the vowel *-i*; the bound verbs do not contain a vowel *-i* in present tense. This can be observed in the examples: *sewoma'o* 'without answering' and *ko'ema'ɨ* 'without searching.'

The nominal classifiers *-ko* 'feminine' and *-kɨ* 'masculine' that are used to nominalize verbs are identical in form to the feminine and masculine dependent suffixes. Nevertheless, it is possible to distinguish nominalizations from dependent verbs. One way to make this distinction is to pay attention to the case marking that is usually found on nominalizations and never on dependent verbs. The use of a case suffix on a nominalization is illustrated in example (58), where the nominalized verb *jũ'ikɨbi* contains the subject suffix *-bi*.

A second way to distinguish nominalizations from dependent verbs is through plural marking. Dependent verbs have a separate plural marker, *-hɨ / -bɨ*. In nominalizations, the nominal plural suffix *-wa'i* is added to the feminine classifier *-ko* in order to express that there is a plural agent. This distinction is illustrated in (59):

(59) a. ụcujë…
ũhku-hɨ…
drink-PL.PRS
'we / you (PL) / they are / were drinking…'

b. ụcucua'i…
ũhku-ko-wa'i…
drink-CLS:ANIM.F-PL.ANIM
'The ones that drink / the shamans'

Example (59) shows that plural subjects display different marking in dependent verbs and in nominalizations. The combination of the suffixes *-ko* and *-wa'i*, which is used for nominalizations with plural agents, is reduced to *-kʷa'i*.

A third way to distinguish nominalizations form dependent verbs is by means of the *-i* verb stem that is used. Nominalized *-i* verbs employ the infinitival stem that contains the imperfective suffix *-i*, as shown in example (58). The nominalized verb *jũ'ĩkɨbi* displays the *-i* stem *jũ'ĩ* in this example. Dependent *-i* verbs either have different morphology or they show a different stem. This distinction is illustrated in the examples below:

Nominalization
(60) saiquë
sa-i-kɨ
go-IMPF-CLS:ANIM.M
'The one who goes / went.'

Dependent verb

(61) a. sai
sa-i-ɨ̶
go-IMPF-S.M.PRS
'When I / you (S) go / he goes.'

b. saquë
sah-kɨ̶
go-S.M.PST
'When I / you (S) / he went.'

The nominalization *saikɨ̶* 'the one who goes / went' in example (60) has a stem that contains the imperfective suffix *-i* and the classifier *-kɨ̶*. The dependent verb counterpart in present tense in example (61a) shows an *-i* stem as well, but it has a different subject agreement suffix *-ɨ̶*. The dependent verb counterpart in past tense in example (59b) shows the same agreement suffix *-kɨ̶*, but it has a different verb stem *sah*.

An overview of the classifiers that function as agentive nominalizers is presented in the table below:

Table 5.15: The classifiers that function as agentive nominalizers

Person/Gender	Suffixes
S.F	-ko
S.M	-kɨ̶
PL	-k^{w} a'i

The classifiers presented in table 5.15 are not necessarily attached to a verb stem. They often follow the modal or aspectual suffixes: *-hã'* 'purpose,' *-ma'* 'negation' and *-sih* 'completive.' The use of the modal suffix *-hã'* is illustrated in the example below:

(62) jaë̱hua'ija̱'re co̱ni i̱ño ë̱mëtoayohuë gajeja̱'core ma'a jëocaë'ë.
hã-ɨ̶-wa'i-hã'de kõ-ni ĩhjõ
DEM.DST-CLS:ANIM.M-PL-COM help-SS here
ɨ̃mɨ̶-toa-jo-wɨ̶ gahe-hã'-ko-de
high-fire-canoe-CLS:CONTAIN descend-PRP-CLS:ANIM.F-OBJ
ma'a hɨ̶o-ka-ɨ̶'ɨ̶.
path clear-BEN-OTH.PST-ASS
'We accompanied them here, we helped (them) to clear the path where the plane would land.' (20100630srocr001.004).

The nominalized verb *gahehã'kode* 'where (the plane) would land' refers to the purpose of the clearing: so that the plane would land there. The purpose suffix *-hã'* is always followed by a nominalizing classifier in Ecuadorian Siona. This construction in combination with the copula *-a*, as shown in subsection 5.2.3.2 in example (29), is the most common way to express a future action.

A second suffix that can precede the nominalizing classifiers is the suffixed negation verb *-ma'*. An example of this construction is presented in the example below:

(63) cuëma'quë baja'i yë' ñicuë.
kʷɨ-ma'-kɨ ba-ha'i jɨ'
swim-NEG-CLS:ANIM.M be-3S.M.PST.N.ASS 1S
jĩhkʷ-ɨ.
grandparent-CLS:ANIM.M
'My granddad couldn't swim.' (Lit. My granddad was a non-swimmer.' (20110328slicr001.010).

The nominalized verb *kʷɨma'kɨ* 'the one who does not swim' refers to the quality of not being a swimmer. The negation suffix *-ma'* is regularly employed with non-main verbs in Ecuadorian Siona.

The final suffix that often precedes the nominalizing classifiers is the completive suffix *-sih*. The main function of this suffix is providing aspectual modification to the verb. A secondary function of this suffix can be a shift from agentive nominalization to nominalization of another object. Examples of the use of the suffix *-sih* with and without this shift are presented below:

Agentive
(64) saisicua'ibi yohuë ayamëni sateña.
sa-i-sih-kʷa'i-bi jo-wɨ aja-mɨ-ni
go-IMPF-CMPL-CLS:ANIM.PL-SBJ canoe-CLS:CONTAIN fill-ascend-SS
sah-te-jã.
go-OTH.PST.N.ASS-REP
'The ones who left got into the canoe and left.' (20100907slicr002.004).

Non-agentive

(65) yë' waisicua'ire jẹ̱ą̱goaye bą̱jë'ẽ̱.
jɨ'ɨ wai-sih-kʷa'i-de hẽã-goa-je bã-hɨ̃'ɨ̃.
1S kill-CMPL-CLS:ANIM.PL-OBJ throw.away-just-INF NEG.COP-IMP
'Don't just throw the ones (animals) that I have killed away.' (20100907slicr002.010).

The nominalized verbs *saisihkʷa'ibi* 'the ones that had left' in example (64) and *waisihkʷa'ire* 'the ones that (I) have killed' in example (65) both refer to completed actions. The difference between these nominalizations lies in the reference to the argument in the nominalized action. The nominalization *saisihkʷa'ibi* in example (64) refers to the agent of the action, the people that left. In this case, the plural classifier *-kʷa'i* functions as a regular agentive nominalizer. The nominalization *waisihkʷa'ire* in example (65) refers to the patient of the action, the animals that were killed. The function of the classifier *-kʷa'i* in this example deviates from the regular agentive nominalization function. The agent can be co-referenced with a pronoun or a noun, the latter as shown in example (63). The variation in reference of the general classifiers *-ko*, *-kɨ* and *-kʷa'i* is only found in constructions with the completive suffix *-sih*.

There are also some nominalizing suffixes that do not perform agentive nominalization: *-se'e* 'object,' *-je* 'non-completed action,' *-dɨ̃* 'a long ago completed action' and *-to* 'circumstantial.' At least three of these four nominalizing suffixes are nominal classifiers: *-je* is used as a general classifier; *-d* is a classifier of time, and *-to* is a classifier of place. The function of these classifiers as nominalizing suffixes is closely related to their functions in other contexts.

The nominalizing suffix *-se'e* does not seem to have a currently existing classifying counterpart in Ecuadorian Siona.[130] The suffix is used to refer to the objects of completed actions. This is illustrated in the example below:

[130] The suffix *-se'e* is found as a nominal classifier in Ecuadorian Secoya (Schwarz, 2011). However, the function of this classifier does not seem related to the function of the nominalizer *-se'e*. The classifier is used to refer to objects that are made to fix something (Schwarz, 2011, p. 4). Because of the difference in function, I consider these suffixes to be homophones.

(66) sai hua'i sëyose'e ĩ dẽjǫ̣ quë'ro saëña.
sa-i-ɨ wa'i sɨjo-se'e ĩ-ɨ
go-IMPF-S.M.PRS meat smoke-NLZ.PST DEM.PRX-CLS:ANIM.M
dɨ̃hõ-kɨ'-do sa-ɨ-jã.
wife-POSS-CLS:PLACE take-2/3S.M.PST.N.ASS-REP
'While he was going, he took the smoked fish to where his wife was.' (20100913slicr002.022).

The nominalized verb *sɨjose'e* 'the smoked thing' refers to the object of the action of smoking. Since the function and form of the suffix *-se'e* are very similar to the function and the form of the suffix *-sih*, it is possible that these two suffixes have the same origin.

The second nominalizing suffix discussed here is the general classifier *-je*. Its function as a general classifier in non-verbal contexts includes the reference to any type of noun class, animate or inanimate. In a verbal context, this classifier has a general function as well. When the suffix is attached to a verb, the combination forms a deverbal noun that refers to an action in general. This action can be referred to as an argument in the sentence. This is a function that is portrayed by the infinitive in many languages including English, as the translation of example (67) shows:

(67) de'oji ẽnë mëtoye.
de'o-hi ɨ̃nɨ mɨhto-je.
be.good-3S.M.PRS.ASS peach.palm peel-CLS:GEN
'It is nice to peel peach palm. (20110328elicr001.044).

In (67), the nominalized verb *mɨhtoje* 'to peel' functions as the subject of the main verb *de'ohi* 'it is good.' The use of this general classifier *-je* as marking the argument of a verb is not very common. The suffix *-je* is more commonly used in periphrastic constructions. Periphrastic constructions containing a nominalized verb ending in *-je* can express negation and deontic modality:

Negation
(68) hue'eye bąjẽ'ẽ.
we'e-je bã-hɨ̃ ɨ̃.
carry-CLS:GEN NEG.COP-IMP
'Don't carry (it)!' (20100907slicr001.005).

Deontic modality

(69) jąę̈bi tsoaye ba'iji.
hã-ɨ-bi zoa-je ba-'i-hi.
DEM.DST-CLS:ANIM.M-SBJ wash-CLS:GEN be-IMPF-3S.M.PRS.ASS
'He has to wash (something).' (Lit. There is (the obligation) that he washes) (20120912elicr007.020).

The nominalized verb *we'eje* 'to carry' in example (68) is used in a periphrastic construction that expresses negation. The periphrastic construction *zoaje ba'ihi* 'has to wash' in example (69) is a deontic modal construction. Because of the general character of the suffix *-je*, the subject of these nominalized verbs can be of any person, number or gender.

The nominalizing classifier *-dɨ̃* refers to time periods in non-verbal contexts. Its use in verbal contexts has a very similar interpretation. It refers to a period in the past in which an event took place. This is illustrated in the example below:

(70) ja'quëmaca i̱ ja̱ bo̱'së ba'idë̱ yëquë ba̱'huë̱'ë̱.
ha'-kɨ-mahka ĩ-ɨ hã bõ'sɨ
parent-CLS:ANIM.M-DIM DEM.PRX-CLS:ANIM.M still young
ba-'i-dɨ̃ jɨhkɨ ba-∼'-wɨ'ɨ.
be-IMPF-CLS:TIME 1PL.EXCL be-REM.PST-OTH.PST.N.ASS
'We were (there) when daddy was still young.' (20100630slicr001.014).

The form *ba'idɨ̃* containing the suffix *-dɨ̃* in example (70) is used to refer to a period in the past during which the father of the speaker was still young. This function is very close to the function in non-verbal contexts.

The nominalizing classifier *-to*, which refers to a location in non-verbal contexts, also has a similar function in verbal contexts. In these contexts, the suffix can be used to refer to a specific place or it can refer to more general circumstances. This is illustrated in the examples below:

Place

(71) i̱o̱ saima'tona etasicobi huë'e ti̱taco…
ĩ-o sa-i-ma'-to-na
DEM.DST-CLS:ANIM.F go-IMPF-NEG-CLS:PLACE-GOAL
ehta-sih-ko-bi wɨ'e tĩhta-ko…
come.out-CMPL-CLS:ANIM.F-SBJ house arrive-S.F.PRS
'The one who came out arrived home to a place she had not gone to…' (20100907slicr001.011).

Circumstances

(72) de'oto trabajada'wë.
de'o-to trabaha-da'-wɨ.
be.good-CLS:PLACE work-CTF-OTH.PST.ASS
'If they had been healthy, they would have worked.' (20101119oispa001.123).

In example (71), the nominalized verb *saima'tona* 'to the place where (she) did not go' refers to a place. The nominalized verb *de'oto* 'if (they) would have been healthy' refers to more general circumstances of being healthy. Because of its more general function of referring to hypothetical circumstances, the suffix *-to* is often used as the conditional marker in conditional utterances such as the one in (72). This use derives from the locative function of this suffix. An overview of the general classifiers with their functions in verbal and non-verbal functions is provided in table 5.16 below:

Table 5.16: General classifiers and their functions in functions in verbal and non-verbal contexts

Suffix	Verbal contexts	Non-verbal contexts
-ko	(singular) feminine agentive	feminine animate
-kɨ	(singular) masculine agentive	masculine animate
-se'e	object of a completed action	–––
-je	infinitive	general
-dĩ	time period in the past	time period
-to	• place • circumstances	place

5.3.3 Serial verb constructions

The third category of non-main verbs that I discuss in Ecuadorian Siona are serialized verbs. Serial verb constructions in the language consist of two verbs that are compounded to form a single predicate.[131] These serialized verbs are understood as simultaneous actions:

(73) jaro jaicoreba ju'ataoco.
hã-do, hai-ko-deba
DEM.DST-CLS:PLACE big-CLS:ANIM.F-INTENS
hu'a-tã-o-ko.
push-fall-CAUS-3S.F.PRS.ASS
'Watch out, the very huge (girl) will push (you) and make (you) fall.' (20110328slicr001.003).

The serial verb construction *hu'atãoko* in example (73) consists of two verbs *hu'aje* 'to push' and *tãoje* 'to make fall' that happen at the same time. These constructions are common in the language.

Serial verb constructions may also have been the source of some grammatical markers in the language. Some serial verb constructions no longer express two simultaneous actions. Rather, they contain a bound verbal root that has undergone grammaticalization. An example of such a bound root is presented below:

(74) ñojaa tëcadojahuë.
jõ-hã'ã tɨhka-doha-wɨ.
here-PATH cut-PROG-OTH.PST.ASS.
'They have been cutting (leaves) around here.'
(20101123slicr001.037).

The construction *tɨhkadohawɨ* 'they have been cutting leaves' in example (74) consists of the verb *tɨhkaje* 'to cut' and *dohaje*[132] 'to wander around.' The latter verb has undergone semantic bleaching and is used here to mark the progressive aspect of the action. There is phonological support for the argument that the root *doha* has not acquired the status of a suffix. As discussed in chapter 3 subsection 3.4.1.2.1, the laryngealized

[131] I use the Aikhenvald's (2006, p. 55) definition of serial verb constructions (SVC): "a grammatical technique whereby two or more verbs form one predicate."

[132] This verb itself is probably the result of a verb serialization as well. It consists of a verb stem *do* which is related to the verb stem *dao* 'to go around' and the verb root *ha* that has meanings related to 'go' in many contexts.

stop /t̰/, <d>, is realized as /t̰/ and as /ɾ/ in suffixes. The morpheme *doha* is realized as /t̰oha/ and therefore can be best analyzed as a bound root.

5.4 The semantics of the verb classes

The question remains as to why there are three verb classes that behave differently with respect to their subject agreement and tense marking in Ecuadorian Siona. The *-i* verb class has been attested throughout the Western branch of the Tukanoan language family, although this class has been analyzed in different ways. Some authors have analyzed the *-i* verbs as a set of irregular verbs. Cook and Criswell (1993, pp. 53-55) describe this verb class in Koreguaje as a set of verbs with a variable root that contains a vowel *-i* in some contexts but not in others. Velie (1975, pp. 25-26), Velie and Velie (1981, pp. 123-125), and Michael (2012a), in more recent analyses, describe Máíhɨ̃kì as a language that contains regular and irregular verbs. The *-i* verbs, or the *ni-class* in Michael's (2012a, pp. 2-3) analysis, are viewed as irregular verbs.

Other authors have analyzed the *-i* verbs as a semantically motivated distinct verb class. Some have analyzed the imperfective suffix *-i* in Western Tukanoan languages as a valency change marker. According to Wheeler (1987b, pp. 144-147) and Johnson and Levinsohn (1990, pp. 58-60), the suffix *-i* marks the middle voice in Colombian Siona and Ecuadorian Sekoya, respectively,. Farmer (2011), providing a careful analysis of the Máíhɨ̃kì verb morphology, observes that verbs from the *-i* class in the language often have a lower degree of transitivity than non *-i* verbs. It therefore seems possible that voice plays a role in the assignment of verb class in Ecuadorian Siona. I will discuss the middle voice analysis of the *-i* verbs in subsection 5.4.1. I will also provide an alternative analysis for the difference between *-i* verbs, non *-i* verbs and bound verbs that is partially based on prosodic properties of the verbs in subsection 5.4.2.

5.4.1 The *-i* as a middle voice marker?

There are various arguments supporting the analysis of the *-i* class verbs in the Western Tukanoan languages as middle verbs. The first argument is that many of the frequently occurring *-i* verbs are intransitive, including all of the ones mentioned above: *ba'ije* 'to live / to be', *saije* 'to go' and *daije* 'to come.' Other typical examples are *hũije* 'to die,' *mɨije* 'to ascend' and *wɨije* 'to fly.'

The second and more important argument is that many *-i* verbs have non *-i* verb counterparts that are transitive or causative. The transitive counterparts contain the derivational suffix *-a*, and the causative counterparts the derivational suffix *-o*. Some examples of *-i* verbs and their transitive and causative counterparts are presented below:

(75) a. ą̱i̱ñe
ã-i-je
eat-IMPF-INF
'to eat'
b. ą̱o̱ñe
ã-o-je
eat-CAUS-INF
'to feed'

(76) a. mëiñe
mɨ-i-je
ascend-IMPF-INF
'to ascend'
b. mëañe
mɨ-a-je
ascend-TRS-INF
'to take up something'
c. mëoñe
mɨ-o-je
ascend-CAUS-INF
'to make someone ascend'

(77) a. saiye
sa-i-je
go-IMPF-INF
'to go'
b. saye
sa-a-je
go-TRS-INF
'to take'
c. saoye
sa-o-je
go-CAUS-INF
'to let something / someone go, to send'

Examples (75-77) illustrate that the derivational suffixes *-a* and *-o* are used to increase the valency of the verbs. The suffix *-a* transforms an intransitive verb into a transitive verb, and the suffix *-o* transforms a verb into a causative verb. These derivational suffixes seem to replace the *-i* that occurs in the non-transitivized and non-causativized verbs presented in (75a-77a). Therefore, the marker *-i* seems to be a third derivational suffix that is used to mark the middle quality of the non-transitivized and non-causativized *-i* verbs.

However, there are counterarguments to the middle analysis of the *-i* verb class as well. The first counterargument is that not all verbs with a lower degree of transitivity are part of the *-i* verb class. Two examples of intransitive verbs and their transitive or causative counterparts are presented below:

(78) a. cu̱neñe
kʷẽne-je
dry.oneself-INF
'To dry oneself'

b. cu̱nañe
kʷẽn-a-je
dry.oneself-TRS-INF
'To dry something / someone'

(79) a. jëyëye
hɨjɨ-je
break-INF
'to break (intransitive)'

b. jëyoye
hɨj-o-je
break-CAUS-INF
'to break something'

The examples (78a-79a) show that the suffix *-i* is not necessarily used to mark the intransitivity of verbs. The transitivity of the verbs cannot be due to the presence or absence of *-i*. Even though *kʷẽneje* 'to dry oneself' and *hɨjɨje* 'to break' have a transitive and a causative counterpart, respectively, the verbs do not have any 'middle' marker in order to signal that the intransitive variants of the verb are used.

The second counterargument to the middle analysis is that not all *-i* verbs display a low degree of transitivity. The *-i* verb class includes transitive verbs as well, such as the verbs *ãije* 'to eat,' *huije* 'hit with an

arrow' and *waije* 'to kill.' All three verbs can have overt direct objects, as illustrated below for the verb *waije*:

(80) Amo sẹ'sere huaja'i.
Amo sẽ'se-de wa-ha'i.
Amo wild.boar-OBJ kill-3S.M.PST.ASS
'Amo killed wild boar.' (20110830elicr001.062).

The verb *waha'i* 'he killed' in example (80) does not differ in behavior from non *-i* class transitive verbs, apart from its *-i* verb morphology. The verb can appear, just as any other transitive verb, in combination with a fully marked direct object, *sẽ'sede* 'wild boar' in (80).

The third counterargument is that various *-i* verbs do not have a transitive or a causative counterpart. If the vowel *-i* were to be analyzed as a middle voice marker, one would expect that the suffix *-i* derives middle stems from unmarked verb roots. Yet, various *-i* verbs do not have any type of counterpart, be it unmarked, transitive or causative. Examples of such verbs without counterparts are *hẽje* 'to cross,' *hũije* 'to die,' *kɨ̃'ije* 'to dig,' *kũ'ije* 'to bite,' *sẽje* 'to ask' and *waije* 'to kill.'

An even stronger argument can be formulated with respect to the lack of counterparts for the *-i* verbs. The *-i* verbs seem to represent the underived forms of a specific set of verbs, because not one of them has an unmarked counterpart without the *-i* marker. For instance, the verbs *mɨije* 'to ascend,' *mɨaje* 'to take up' and *mɨoje* 'to make someone ascend' lack an unmarked counterpart that does not contain one of the markers *-i*, *-a* or *-o*. It seems that the transitive and causative counterparts of the *-i* verb class are derived versions of these *-i* verbs, since these verbs contain the transitive suffix *-a* or causative suffix *-o*. The *-i* does therefore not seem to be a middle voice derivational suffix.

Further evidence for the underived status of *-i* verbs is that unmarked verbs do not have a counterpart marked with the vowel *-i*. By the term 'unmarked verbs,' I refer to those verbs that do not contain the markers *-i*, *-a* or *-o* in their stems. Examples of such unmarked verbs are *hɨjɨje* 'to break,' *je'jeje* 'to learn' and *ũhkuje* 'to drink.' These verbs do not have an *-i* verb counterpart. This suggests that the marker *-i* does not have a derivational function at this stage in the language. Table 5.17[133]

[133] This table was inspired by the voice tables in which Wheeler (1987b, pp. 144-147) and Johnson and Levinsohn (1990, pp. 58-60) present the middle voice, the active voice, and the causative voice in Colombian Siona and Ecuadorian Secoya, respectively. Just like these authors, I analyze the verbs *baje* 'to have', *daje* 'to bring' and *saje* 'to take' as a combination of the unmarked

provides an overview of various *-i* verbs and their transitive and causative counterparts, if they have any. It also shows that unmarked verbs can have a causative or transitive derivation but lack an *-i* verb counterpart.

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verbs ending in the vowel /a/ and the transitive suffix *-a*. One indication that this is the best analysis is that the verbs all contain the long vowel [a:]. A second indication is that the transitive suffix *-a* overtly appears on stems that do not end in the vowel *a*, as the verb *mɨaje* 'to take something up' shows.

Table 5.17: A non-exhaustive overview of verbs and their 'valency changing' morphology.

-i	**-Ø**	**-a**	**-o**
daije 'to come'		daje 'to bring'	daoje[134] 'to wander around'
mɨije 'to ascend'		mɨaje 'to take something up'	mɨoje 'to make someone ascend'
saije 'to go'		saje 'to take'	saoje 'to let go / to send'
ba'ije 'to be / to live'		baje 'to have'	
ãije 'to eat'			ãoje 'to feed'
tuije 'to sit on top of something'			tɨoje 'to put something on top of something'
weje 'to lie down in a hammock'			weoje 'to lay someone down in a hammock'
wɨije 'to get up / to fly'			wɨoje 'to wake up / to start'
hũije 'to die'			
kũ'ije 'to bite'			
waije 'to kill'			
	kʷẽneje 'to dry'	kʷẽnaje 'to dry something'	
	ũhkuje 'to drink'	õhkʷaje 'to give someone something to drink'	
	je'jeje 'to learn'	je'jaje 'to teach'	
	hɨjɨje 'to break'		hɨjoje 'to break something'

[134] The verb *daoje* 'to wander around' has shifted in meaning. It does not have a causative meaning anymore.

Table 5.17 shows that *-i* verbs do not have an unmarked counterpart and that unmarked verbs do not have an *-i* verb counterpart. This suggests that the *-i* verbs are the underived verb forms of this set of verbs and that the vowel *-i* is not a valency changing derivational suffix.

A final counterargument for the middle voice analysis of the suffix *-i* is that the vowel *-i* is absent from another category of derived verb stems, a category which does not involve valency change. This concerns a non-productive reduplication process in Ecuadorian Siona that derives repetitive actions from *-i* verbs. These actions can either be carried out by one person repeatedly or by various people simultaneously. In the examples below, the *-i* verbs are presented with their attested reduplicated forms:

(81) a. du'iye
du-'i-je
sink-IMPF-INF
'to sink'

b. dutuye
duh~tu-je
sink~REPET-INF
'to sink (PL), to sink repeatedly'

(82) a. ju̱'i̱ñe
hũ-'i-je
die-IMPF-INF
'to die'

b. ju̱ju̱ñe
hũ~hũ-je
die~REPET-INF
'to die (PL)'

(83) a. tuiye
tu-i-je
be.on.top-IMPF-INF
'to be on top of something'

b. tutuye
tuh~tu-je
be.on.top~REPET-INF
'to be on top of something (PL)'

(84) a. ta̱i̱ñe
tã-i-je
fall-IMPF-INF
'to fall'

c. ta̱taye
tãh~ta-je
fall~REPET-INF
'to fall various times, to fall (PL)'

Examples (81b-84b) illustrate the reduplicated forms of the *-i* verbs presented in (81a-84a). The root of the *-i* verb is reduplicated in this derivational process. It undergoes minor phonological changes in some instances. For instance, the laryngealized consonant /t̰/, <d> in the verb root *du* 'to sink' loses its laryngealization in the reduplicated form *duhtu*

'to sink (PL), to sink repeatedly', and the vowel /ã/ in the root *tã* 'to fall' loses its nasal quality in the reduplicated form *tãhta* 'to fall various times, to fall (PL).' Another peculiarity is that the underlying glottal fricative /h/ surfaces in the coda of the root of these reduplicated forms. This process of preaspiration occurs in many past tense forms of *-i* verbs, as shown in subsections 5.2.3.1.2 and 5.3.1.4.

Despite these minor phonological changes, the reduplicated verb stems are easily recognizable derivations of the *-i* verb roots presented above. Crucially, during the derivation process, the valency of these verbs does not change. The reduplicated verbs cannot control more arguments than the underived *-i* verbs. Only the lexical aspect of reduplicated verbs changes: the reduplicated verbs represent repetitive or plural actions. Because the underived *-i* stems do not exhibit a lower degree of valency than their reduplicated counterparts that do not contain the marker *-i*, this marker does not seem to be a valency changing suffix, suggesting that it should not be analyzed as a middle voice marker.

In the previous paragraphs, I have provided various counterarguments to the middle voice analysis of the *-i* verbs. Although these counterarguments do not completely rule out a middle voice analysis, they do show that the marker *-i* is not needed for the lowering of the degree of transitivity of a verb. Therefore, I do not analyze the suffix *-i* as a middle voice marking suffix. In my analysis, it is an imperfective suffix that only occurs with the *-i* verb class, as discussed in 5.2.3.1.1. In the following subsection, I argue that prosody is the main motivation for the existence of a separate class of *-i* verbs. In this analysis, the lower degree of transitivity that is often found with *-i* verbs is a mere side effect of a prosodic phenomenon in Ecuadorian Siona.

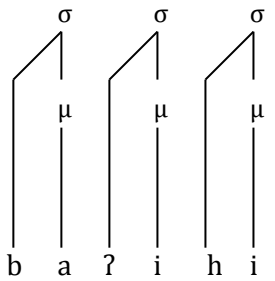
5.4.2 The *-i* verbs as underived monomoraic verb roots

In the previous subsection, I have shown that a semantically motivated analysis for the use of the marker *-i* on the basis of valency change is weak for Ecuadorian Siona. Rather, the prosodic structure of the language seems to provide a motivation for some of the differences in behavior between verbs of the *-i* class and non *-i* class verbs. The first indication that the motivation for the existence of different verb classes is prosodic is that all *-i* verb stems have either a CVV or a CV'V structure. The final vowel in these stems is always an /i/, except for the cases in which it fuses with the previous vowel. Non *-i* verbs, on the other hand, can have various structures: CVV, CV'V, CVhCV, CV'CV and CVCV. Farmer

(2011, p. 4) makes a similar observation for *-i* verbs in Máíhɨ̀kì. According to this author, the *-i* verbs have an exclusive CVV shape in the language. Non *-i* verbs do not have this restriction with respect to their shape, they occur as CVV or as CVCV.

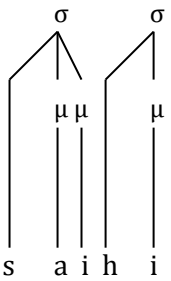
The second indication that the behavior of *-i* verbs can be explained on the basis of prosodic properties is that *-i* verbs do not always show a bimoraic stem. In the present tense and in infinitival contexts, the vowel *-i* fills the second mora of the *-i* verb stems. This is shown in the example below:

(85) a.



ba-'i-hi
be-IMPF-3S.M.PRS.ASS
'He is.'

b.

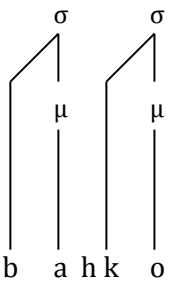


sa-i-hi
go-IMPF-3S.M.PRS.ASS
'He goes.'

The depiction in (85a) illustrates that the monomoraic verbal root *ba* 'to be' forms a bimoraic stem in combination with the imperfective suffix *-'i*. The same holds for the combination of the verb root *sa* 'to go' with the imperfective allomorph *-i* in (85b). Example (85) shows that the bimoraic stem constraint is satisfied for *-i* verbs in present tense thanks to the imperfective suffix. The phonological constraint of Ecuadorian Siona entails that all stems need to be bimoraic, as discussed in the phonological sketch in chapter 3, subsection 3.2.2.

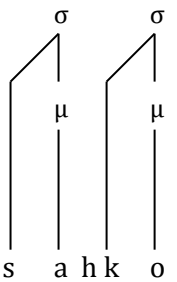
In the past tense, the *-i* verb roots do not satisfy the bimoraic stem constraint by themselves. The monomoraic roots of the *-i* verbs, such as *ba* 'to be' and *sa* 'to go,' are used in past tense contexts without the imperfective suffix *-i*. The vowels in these verb roots are not lengthened in order to obtain a bimoraic structure, unlike the long vowels that are found in non *-i* verbs such as [kaa] 'to say' and [jãã] 'to see.' Therefore, *-i* verbs seem to violate the bimoraic stem constraint in the past tense. Interestingly, the subject agreement morphology is used to complete the bimoraic structure of the stem in the past tense. This is illustrated in the example below:

(86) a.



bah-ko
be-3S.F.PST.N.ASS
'Is she?'

b.



sah-ko
go-3S.F.PRS.N.ASS
'Does she go?'

The vowel of the inflectional suffix *-ko* fills the second mora of the mandatory bimoraic structure in examples (86a-b).

The incorporation of subject agreement morphology may seem unexpected, because this type of morphology is not incorporated into the stem in any other context in Ecuadorian Siona. Nevertheless, there is evidence for this incorporation from the phonological shape of the inflected *-i* verbs in the past tense. In this context, a glottal fricative [h] emerges in coda position of the root before voiceless stops such as */k/* or /t/. This phonological process is found, for instance, in the past tense forms *sahko'i* 'she went,' *sahkɨjã* 'he went, it is said' and *sahtejã* 'I / we / you (PL) / they went, it is said.' The use of a coda [h] before voiceless consonants is much more common in roots and stems in Ecuadorian Siona than in inflectional morphology. Roots that show this phenomenon are, for instance, *bahku* 'pomfret fish sp.,' *ohko* 'water, to rain' and *wahti* 'bad spirit.' Examples of stems that illustrate this phenomenon are the reduplicated stems *duh~tu* 'to sink (PL), to sink repeatedly,' *tuh~tu* 'to be on top of something (PL)' and *tãh~ta* 'to fall various times, to fall (PL).'

Evidence for the fact that the use of a glottal fricative in coda position is a root/ stem phenomenon is even stronger in Eastern Tukanoan languages. As Stenzel (2007, pp. 355-356) shows, in the Eastern Tukanoan languages that have preaspiration, for example Tukano, Desano, and Wanano, the glottal fricative is restricted to the internal consonant in the root. In these languages, preaspiration does not occur with inflectional morphology. This could suggest that preaspiration is a root/ stem phenomenon throughout the language family. The fact that this stem property occurs in past tense *-i* verb

forms suggests that the past subject agreement suffixes are phonologically incorporated onto the verb stem, which satisfies the bimoraic stem constraint in the language.

The incorporation of subject agreement morphology onto the stem of the *-i* verbs is one process in Ecuadorian Siona that shows that *-i* verbs have underived monomoraic verb roots that need further morphology in order to complete the mandatory bimoraic stem structure. The use of the imperfective suffix *-i* in present and infinitival contexts is another phenomenon that strongly supports this analysis of *-i* verbs. There is additional evidence for the analysis from a third phenomenon in the language, namely, the insertion of an epenthetic syllable *-ti*. This insertion occurs before the counterfactual suffix *–da'*, which is used when an event could have happened, but did not. This function is illustrated in the example below:

(87) më'ni huani a̱nita̱'a̱ ju̱i̱ñe ba̱da'huë.
mɨ'-ni wa-ni ã-ni-tã'ã hũ-i-je bã-da'-wɨ.
2S-OBJ kill-SS eat-SS-CNTEXP die-IMPF-INF NEG.COP-CTF-OTH.PST.ASS
'I would have killed and eaten you and I would not be dying myself.' (20101123slicr001.064).

The sentence in example (87) is an utterance from a traditional story in which a cannibal complains to his wife that he is dying because of her. If she had shown up earlier he could have eaten her and he would not have died by eating parts of himself. The speaker uses a counterfactual in combination with the action of not dying, because his not dying was possible but it did not happen.

When non *-i* verbs are combined with the counterfactual suffix *-da'*, they do not show any stem changes. The negative copula *bãje* in example (87), for instance, displays its regular invariable stem *bã* [p̰ã:] in combination with the counterfactual suffix. The *-i* verb class shows a different behavior in combination with the suffix *-da'*. The epenthetic syllable *-ti* is inserted before this suffix when it is combined with an *-i* verb:

(88) a. a̱tida'huë.
ãh-ti-da'-wɨ.
eat-EP-CFT-OTH.PST.ASS
'I / you (S)/ we / you (PL) / they would have eaten.'

b. batida'huë.
bah-ti-da'-wɨ.
be-EP-CFT-OTH.PST.ASS
'I / you (S)/ we / you (PL) / they would have lived/been.'

c. satida'huë.
sah-ti-da'-wɨ.
go-EP-CFT-OTH.PST.ASS
'I / you (S)/ we / you (PL) / they would have gone.'

All verb stems that precede the suffix *-da'* in example (88) contain the epenthetic suffix *-ti*. This suffix is inserted in order to satisfy the bimoraic stem constraint. The suffix *-da'* itself seems unable to carry out this prosodic function. It cannot be incorporated in the verb stem in the same way as subject agreement morphology can be incorporated in the verb stem in the past tense.

An explanation for this might be found in the origin of the counterfactual morpheme. In section 5.3.3, it was already suggested that some suffixes have origins in serial verb constructions. The counterfactual construction appears to have this origin as well; it is a bound root that has undergone semantic bleaching. An indication that *-da'* is a root morpheme is the pronunciation of the initial consonant. The initial consonant in the suffix *-da'* is mostly pronounced as a laryngealized stop [t̰], although it occurs in an intervocalic position. The phoneme /t̰/ is only pronounced as a laryngealized stop [t̰] in intervocalic position when it occurs in bound root morphemes. In other intervocalic positions, such as in root internal position or in the onset of a regular suffix, the consonant /t̰/ is realized as a flap [ɾ]. The phoneme is, therefore, not subject to the regular phonological processes accompanying suffixation.

Because of its bound root status, the counterfactual morpheme *-da'* cannot be integrated onto the verb stem. This is why the monomoraic *-i* verbs do not satisfy the bimoraic stem constraint when followed by the morpheme *-da'*. Therefore, the epenthetic suffix *-ti* needs to be inserted between the monomoraic root and the morpheme *-da'*.

The insertion of the epenthetic suffix *-ti* probably used to be more widespread than it is now in Ecuadorian Siona. Evidence for this claim can be found in two lexicalized serial verb constructions that are still used today. Both constructions involve the verb *bɨ̃ije* 'to be angry.' One of these constructions is presented in the example below:

(89) ñajujani dɵ̈jo̱ yureta̱'a̱ bɵ̈tihuëoña.
jã-huha-ni dɨ̃hõ jude-tã'ã
see-IN.VAIN-SS wife now-CNTEXP
bɨ̃h-ti-wɨo-o-jã.
be.angry-EP-begin-2/3S.F.PST.N.ASS-REP
'After watching (him) in vain, (his) wife became angry, it is said.'
(20100913slicr002.003).

The serial verb construction *bɨ̃htiwɨojã* 'she became angry, it is said' in example (89) consists of the verb *bɨ̃ije* 'to be angry,' appearing in the *-ti* stem form, and the verb *wɨoje* 'to begin.' The other lexicalized serial verb construction that contains the *-ti* stem *bɨ̃hti* is *bɨ̃htijɨje* 'to become angry,' in which the verb *jɨje* 'to want' provides an inchoative interpretation. The use of the *-ti* stem is currently not grammatical outside of contexts with the counterfactual morpheme *-da'* and in these two lexicalized constructions.

The fact that *–i* verbs are indeed found (although infrequently) with *-ti* stems in other contexts than the ones with the morpheme *-da'* suggests that the use of this stem may have been more common in the past. Further evidence for this claim is found in other Tukanoan languages. Various languages throughout the language family display verbs with variable verb stems. One is a monosyllabic form and another is a disyllabic form that has a suffix *-ti* or a cognate form as its second syllable. Examples of variable morphemes are presented below for the Eastern Tukanoan language Tatuyo (Gomez-Imbert, 2004, p. 60, the translation is mine):

(90) a. a-hú-pó.
come-INFR-3F
'She came, I infer.'
b. atí-~ké-hu-po.
come-NEG-INFR-3F
'She did not come, I infer.'
c. atí-~kéti-~koá-jú-pó.
come-NEG-EMPH-INFR-3F
'She *did not* come, I infer.'

In example (90), it is shown that both the verb *a*/ *atí* 'to come' and the negation *-ké*/ *-kéti* have variable stems in Tatuyo. The *-ti* stem seems to be more widespread in Tatuyo than in Ecuadorian Siona, because the Tatuyo *-ti* stem is used before various morphemes. The choice of the

stem form depends on the type of morphology that follows the stem. One similarity between the use of the syllable *-ti* in Tatuyo and Ecuadorian Siona is that it lacks a grammatical function in both languages. Cognates of this epenthetic syllable *-ti* are also found in Barasana (Gomez-Imbert, 2004, pp. 59-60), Desano[135] (Miller, 1999, p. 114), and Retuarã (Strom, 1992, pp. 15-19). The widespread occurrence of the epenthetic verbal suffix *-ti* in Eastern Tukanoan languages suggests that *-ti* may have been present in Proto-Tukanoan and in an older stage of Ecuadorian Siona as well. It also supports the idea that the *-ti* stem used to have a more extensive use in the language.

To summarize this subsection, the deviant behavior of the *-i* verbs can be explained on the basis of their monomoraic structure. These verbs need additional morphology in order to satisfy the bimoraic stem constraint. This additional morphology includes the imperfective suffix *-i* in present tense and infinitival contexts, the subject agreement morphology in past tense contexts and the suffix *-ti* before the bound counterfactual verb root *-da'*. It is possible that the epenthetic syllable *-ti* had a grammatical function at some stage, but there is no good synchronic evidence for this claim. Further research into the other Tukanoan languages will potentially provide new insights concerning the origin of the epenthetic syllable *-ti* and its historical semantics.

5.5 An overview of the Ecuadorian Siona main clause verb morphology

In the previous subsections, I have discussed the similarities and differences among main and dependent verb subject agreement paradigms. I have shown that there are semantic and prosodic motivations for the selection of a specific paradigm. The semantic motivations include the clause type (assertive, non-assertive or dependent) and the tense (present or past) of the expressed event. The prosodic factor that is important in the selection of subject agreement morphology is the monomoraic or bimoraic character of the verb. Additionally, historical changes seem to have obscured some of the semantic patterns that may have been present in earlier stages of the language.

Another important observation made in the previous subsections is that there is much regularity in the portmanteau suffixes that express subject agreement, tense and sentential force. For instance, the vowel *-o* is part of all suffixes that refer to feminine entities and the

[135] The syllable *-ti* is described as part of the verb root, which does not seem to be variable in Desano (Miller, 1999, p. 114).

consonant *-k* is often found in the present tense. In this chapter, I have argued that although the regularity is not a coincidence, it is not possible to split the portmanteau suffixes into smaller suffixes that independently express subject agreement, tense, and sentential force. I explicitly do not analyze the vowel *-o* as a separate feminine marker or *-k* as a present tense marker. The main reason for this is that such analyses cannot be generalized to all uses of the vowel *-o* and the consonant *-k*. The vowel *-o* often shows a more specific use. For instance, in the assertive paradigms, it is found in third person singular contexts and it is not found in all feminine contexts or in non-assertive paradigms for second or third person singular. The consonant *-k* is not found in all present tense contexts; it is not found in the non-masculine and non-feminine forms.

Despite the fact that the regularities in the portmanteau suffixes cannot be used for splitting these suffixes into smaller morphemes, these regularities are highly important for the proper understanding of the development of the Ecuadorian Siona verbal system. This historical development is presented in chapter 7. An overview of the portmanteau suffixes that mostly express some type of subject agreement morphology is presented in the tables below:

Table 5.18: Subject agreement morphology in assertions

Tense	Person/ Gender/ Number	Assertions		
		Non *-i* verbs	*-i* verbs	bound verbs *-a* and *-si*
PRESENT	3S.F	-ko	-ko	-o
	3S.M	-hi	-hi	-bi
	OTHER	-jɨ	-jɨ	-'ɨ
PAST	3S.F	-o	-ko'ɨ	
	3S.M	-bi	-hV'i	
	OTHER	-wɨ	-ɨ'ɨ	

Table 5.19: Subject agreement morphology in non-assertions

Tense	Person/ Gender/ Number	Questions & Reports			Conjectures
		Non *-i* verbs	*-i* verbs	Bound verbs *-a* and *-si*[136]	All verbs
PRS	2/3S.F	-ko	-ko	-o	-a ba'i-o
	2/3S.M	-kɨ	-kɨ	-ɨ	-a ba'i-ɨ
	OTHER	-je	-je	-je	-a ba'i-je
PST	2/3S.F	-o	-ko		-a bah-ko
	2/3S.M	-ɨ	-kɨ		-a bah-kɨ
	OTHER	-de	-te		-a bah-te

Table 5.20: Subject agreement morphology in dependent verbs

Tense	Number/ gender	SS		DS	
		Non *-i* verbs	*-i* verbs	Non *-i* verbs	*-i* verbs
PRS	S.F	-ko	-o	-ko-na	-o-na
	S.M	-kɨ	-ɨ	-kɨ-na	-ɨ-na
	PL	-hɨ	-hɨ /-bɨ	-hɨ-na	-hɨ /-bɨ-na
PST	S.F	-ni		-o-na	-ko-na
	S.M			-ɨ-na	-kɨ-na
	PL			-de-na	-te-na

Table 5.21: Nominalizing morphology

Function	Suffix
singular feminine agentive	-ko
singular masculine agentive	-kɨ
plural agentive	-kʷa'i (-ko + -wa'i (PL))
object of a completed action	-se'e
infinitive	-je
time period in the past	-dɨ̃
place circumstances	-to

[136] This morphology is only found for questions and not for reports.