Aspects of the Syntax of Cross-referencing Clitics in Degema *

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Two types of clitics—subject clitics and non-subject clitics—are attested in Degema. These two types of clitics are found to exhibit interesting behavioural patterns in the grammar of the language. Of the two types of clitics, only subject clitics are noted as having co-referential properties. These clitics agree with nouns and pronouns in subject position in number, person and gender. They are among the various means of preserving discourse reference in Degema, especially as they carry the grammatical features of the subject, which ensure that information about the subject in respect of person, number and gender is not lost when the substantive subject noun phrase is omitted. In addition to cross-referencing, subject clitics are also noted to participate in the marking of tense, aspect, mood and polarity in Degema.

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**Keywords:** clitics, cross-reference, vowel harmony, Degema, animacy hierarchy

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Degema is an endangered Delta Edoïd language of the Niger-Congo phylum. It is spoken by a population that is slightly above 20,000 (going by the 1991 Nigerian population census figures) in the southeastern Nigerian communities of Usokun-Degema and Degema Town (Atala) in Degema Local Government Area of Rivers State. Degema data in this paper are drawn from the Usokun variety.
0. Introduction

Two types of clitics are attested in Degema. These clitics are distinguished on the basis of their position in a clause. One type labeled 'subject clitics' occurs in subject position, before the verb as proclitics, with or without a substantive noun phrase (NP)\(^1\), while the other type labeled 'non-subject clitics' occurs in the predicate as enclitics. Although the vowels of these clitics respond to ± ATR vowel harmony, by becoming expanded or non-expanded, depending on the set to which the vowels of the word they lean upon belong, the two types of clitics select different hosts\(^2\). Whereas non-subject clitics attach to verbs and object pronouns that begin with a consonant, subject clitics attach to verbs\(^3\). These two types of clitics are found to exhibit interesting behavioural patterns in the grammar of the language.

Of the two types of clitics, only subject clitics\(^4\) are noted as having co-referential properties. These clitics agree with nouns and pronouns in subject position in number, person and gender\(^5\). The grammatical properties are properties that subject clitics inherited from noun or pronouns (cf. Hale 1973)\(^6\), while the clitics themselves are neither nouns nor pronouns (see Kari 2002a, 2003b and 2004a).

The following examples illustrate the phonological dependence, the distributional patterns and the selectional behaviour of Degema clitics:

\[1\] \text{smọ\ jo\ o=dér=n}\quad \text{\textsuperscript{1}sé̃n}\textsuperscript{7}.

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1) The following abbreviations are used in this paper: 1SgSCL=1st person plural subject clitic, 2SgSCL=2nd person singular subject clitic, 2PISCL=2nd person singular subject clitic, 3PisSCL=3rd person singular subject clitic, 3PisSCL=3rd person plural subject clitic, AGR = agreement, ATR=advanced tongue root, AUX=auxiliary, CL=clitic, EAUX=emphatic auxiliary verb, FE = factitive non-subject clitic, IMAUX=imperfective auxiliary, INAUX=inceptive non-imperative auxiliary verb, NEG=negative morpheme, NP=noun phrase, NPM=non-past morpheme, PF=perfect non-subject clitic, Q=question morpheme, Sg/Sg=singular, SPEC AGGR=specifier of agreement, SVC=serial verb construction, VP=verb phrase.

2) 'Host', as used in this paper, refers to the items to which clitics attach themselves.

3) In previous works by the present author, it is claimed that subject clitics occur before main verbs, auxiliary verbs, and preverbal adverbs. In other words, subject clitics are claimed to occur before different hosts. If the so-called 'preverbal adverbs' are considered as auxiliary verbs, as is in fact suggested by some reviewers of the present author's works, then it could be send that subject clitics occur before verbs(main verbs and auxiliary verbs). Be that as it may, occurrence before a single host, the verb, is not sufficient reason to treat subject clitics as affixes(see Kari 2005c).

4) It has already been pointed out that non-subject clitics have no co-referential properties. For this reason, our discussion will concentrate more on subject clitics.

5) Gender, as used in this paper, refers to a human/non-human distinction—one of the semantic basis upon which nouns are classified in Degema. Gender in Degema has nothing to do with the biological sex of the noun in question, unlike languages such as Kalabari where sex forms one of the bases for the classification of nouns (cf. Jenewari 1979).

6) A well-known work that argues in favour of a copying analysis for clitics is Hale (1973). Hale distinguishes a 'constituent-copying' analysis, where clitics are seen as direct duplicates of determiners in NPs that the clitics are associated with, from a 'feature-copying' analysis, where clitics are seen as merely copying the features of (determiners of) NPs with which they are associated. The analysis advocated for Degema subject clitics is the second of Hale's (1973) analysis—the 'feature-copying' analysis, where clitics are seen as merely copying the features of (determiners of) NPs with which they are associated (see Kari 2003b).

7) The convention of separating clitics from their hosts with '=' is adhered to. Degema data are transcribed in phonetic symbols that have IPA values.
child the 3SgSCL=cook=FE fish
‘The child cooked fish’

(2) ñmọ ọ ọ=mọn ọ=mẹ̀=ẹ́n.
child the 3SgSCL=see me=FE
‘The child saw me’

(3) ñmọ ọ ọ=má mọn ọ me. 
child the 3SgSCL=IMAUX see me
‘The child has not seen me yet’

(4) ñmọ ọ ọ=sì8) mọn ọ me. 
child the 3SgSCL=NEG=still see me
‘The child still didn’t see me’

Examples (1)–(4) show that the subject clitic attaches to verbs. The factative non-subject clitic attaches respectively to the verb and object pronoun in (1) and (2). It is also clear from examples (1)–(4) that the quality of the vowels of clitics is determined by those of the hosts.

The foregoing discussion demonstrates the interplay between syntax and phonology in cliticization. Subject clitics are syntactically and semantically related to the head of the subject NP (cf. Zwicky 1977), while being phonologically attached to the host (cf. Klavans 1985 and 1995), which is a verb.

1. External and Internal Syntax of Degema Clitics

1.1. External Syntax of Clitics

The external syntax of clitics is concerned with the syntactic relationship between clitics and hosts. There is only one preferred position in which Degema subject clitics occur—preverbal position. Interestingly, subject clitics occurring before auxiliary verbs, especially before the inceptive non-imperative, the emphatic10, the progressive, and iterative, auxiliary verbs in positive constructions get repeated with the same grammatical features before the main verb, as in (5), (6) and (7) respectively. This fact is amply discussed and exemplified by Kari (2003b and 2004b)11.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Forms of Subject Clitics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Person</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Singular</td>
<td></td>
</tr>
<tr>
<td>1st</td>
<td>me/me, mi/mi</td>
</tr>
<tr>
<td>2nd</td>
<td>mu/mu, u/u, e/e</td>
</tr>
<tr>
<td>3rd</td>
<td>mo/mo, o/o, mi/mi, i/i</td>
</tr>
<tr>
<td>Plural</td>
<td></td>
</tr>
<tr>
<td>1st</td>
<td>me/me, e/e</td>
</tr>
<tr>
<td>2nd</td>
<td>ma/ma, a/a</td>
</tr>
<tr>
<td>3rd</td>
<td>me/me, e/e, mi/mi, i/i</td>
</tr>
</tbody>
</table>

8) In this paper, the so-called preverbal adverbs kiri/kuru ‘again’ and sì/su ‘still’ are reanalyzed as auxiliary verbs, ‘iterative auxiliary’ (ITAUX) and ‘progressive auxiliary’ (PAUX) respectively. This reanalysis is based on the fact that the meanings associated with these so-called preverbal adverbs are more aspectual than adverbial. The meaning of kiri/kuru suggests repetition, while that of sì/su suggests that an action or event that started some time in the past is still in progress (cf. Kari 2003b and 2004b, among others). The vowels in each pair of the auxiliaries can be used interchangeably. Like other auxiliaries, the quality of the vowels of these auxiliaries is not dependent on that of the vowels of the preceding or following word (see Kari 2003b and 2004b).

9) For the forms of non-subject clitics and a discussion of the forms of subject clitics in Degema, see Kari (2003b, 2004a and 2004b).

10) For a discussion of the emphatic auxiliary verb, see Kari (2003b and 2004b).

11) See Kari (2005a) also.
1.2. Internal Syntax of Clitics

The internal syntax of clitics concerns the relationship that exists among clitics. In particular, it borders on the conditions that are imposed on the co-occurrence of clitics. Unlike non-subject clitics (see Kari 2003b and 2004b) where it is possible to have an uninterrupted sequence of clitics, the sequence of subject clitics do not occur in sequence before a particular linguistic unit12).

2. Subject NPs and Cross-referencing Clitics

Nouns or pronouns that function as the subject of the sentence are cross-referenced by subject clitics. In other words, the identity of subjects in chained clauses is shown by cross-referencing subject clitics. Identical subjects may be omitted, while leaving behind their anaphoric subject clitics. Agreement of subject clitics with nouns and pronouns is not only crucial for the grammar of Degema but also essential for communication in the language, for the reason that participants need to be identified in discourse. These cross-referencing clitics serve as one of the means of identifying a preceding overt or covert antecedent in the same clause or in different clauses. They bear human/non-human features in addition to person and number features of the cross-referenced NP. These features are reflected in the forms of 3rd person subject clitics in (8a)–(11):

(8a) s'mɔ  mɔ=kpɔr  i'bi. child 3SgSCL=sing song [+HUMAN] [+HUMAN] ‘A child is singing’

(8b) aj  mɔ=kpɔr  i'bi. he 3SgSCL=sing song [+HUMAN] [+HUMAN] ‘He is singing’

(9a) tʃɛn jɔ  i=βɛβ=ɪte. birds the 3PISCL=fly=PE [-HUMAN] [-HUMAN] ‘The birds have flown’

(9b) sɔw  i=βɛβ=ɪte. they 3PISCL=fly=PE [-HUMAN] [-HUMAN] ‘They have flown’

In (8a) and (8b), the subject clitics agree with the cross-referenced NP in person, number and human features, while in (9a) and (9b) the subject clitic agrees with the cross-referenced NP in person, number and non-human features13). Subject clitics agree with

12) That there is no subject clitic cluster in Degema is due to the fact that it is not possible to have more than one subject NP or topic. There are, however, instances where two forms of a subject clitic occur before different hosts in the same clause, such as we saw in 1.1. In such instances, the mV forms of the subject clitics always occur before a main verb, while the V forms, except the 1st person singular subject clitic, always occur before an auxiliary verb (see 1.1 and the examples there). The two forms in question must carry the same person, number and/or gender features as the cross-referenced subject NP or topic.

13) The cross-referenced pronominal NPs in (8b) and (9b) respectively also have human/non-human attributes by virtue of the fact that the nouns they substitute for have such features. These semantic features are corre-
cross-referenced NPs even when such NPs are not overt in the clause (cf. (8) and (10), and (9) and (11). This is because the subject clitics copied the relevant grammatical features of the cross-referenced NPs prior to the deletion or dropping of such NPs.\(^{14}\)

\begin{align*}
(10) & \text{mò=kpór} \quad t'i'vì. \\
& \text{3SgSCL=sing song} \\
& \quad [+\text{HUMAN}] \\
& \quad \text{‘He is singing’} \\
(11) & \text{i=βββ=}'t\vì. \\
& \text{3PISCL=fly=PE} \\
& \quad [-\text{HUMAN}] \\
& \quad \text{‘They have flown’}
\end{align*}

2.1. Cross-referencing of Subject NPs in Independent and Dependent Clauses

Subject clitics remain one of the formal means of expressing cross-reference between NPs that occur in independent and dependent clauses.\(^{15}\) Consider example (12) and (13):

\begin{align*}
(12) & \text{mè³è mi=kpery=n} \quad aji \quad mâ³mù \quad \text{I} \\
& \quad \text{1SgSCL=tell=FE him that} \\
& \quad \text{mè=ji' s.}
\end{align*}

\begin{align*}
(13) & \text{mè³è mì=kpery=n} \quad \text{tatanè mâ³mù} \\
& \quad \text{I} \\
& \quad \text{1SgSCL=tell=FE Tatane that} \\
& \quad \text{ò=}'ji. \\
& \quad \text{3SgSCL=come} \\
& \quad \text{‘I told Tatane to come’}
\end{align*}

In (12) and (13), the subject clitics in the independent and dependent clauses cross-reference their respective subject NPs, which may be overt or covert. Whereas the subject clitics in the independent clause cross-reference overt NPs, those in the dependent clause cross-reference covert NPs.

Degema subject clitics are one of the means by which the language keeps track of the subject, preserves discourse information and ‘lessens [information] processing and memory load, thereby making the language economical, efficient, and even probably workable’\(^{16}\) (Tegey 1977:21) \[brackets, added\].

\(^{14}\) sparsingly reflected in the subject clitics.

\(^{15}\) As (8) and (9) show, cross-referencing subject clitics can co-occur with the cross-referenced NPs. Needless to say that this is not peculiar to Degema (cf. Smith and Johnson 1985).

\(^{16}\) Other means of expressing cross-reference between NPs that occur in different clauses include pronouns, the emphatic reflexive, which has the structure subject pronoun +nu ‘and’ + in ti’iyn ‘body’ + possessive pronoun, and deletion (see Kari 2004b).

\(^{16}\) Instead of repeating the subject NP, which increases processing and puts much load on the human memory, the second sentence begins with a subject clitic that copies all the features of the subject NP of the first sentence which may not be overt. The dropping of the subject NP therefore lessens processing of the sentence, and reduces the load put on the human memory. Again, the processing speed increases and the load on the human memory decreases as the subject NP, which in all cases is phonologically longer than the subject clitic in respect of number of syllables, is omitted.

Subject clitics in Degema also preserve discourse information, especially of the subject of discourse, as they carry the relevant grammatical features of the subject. Thus they ensure that information about the subject, such as person, number and human/non-human, is not lost when the subject NP is omitted. Subject clitics thus serve as a means by which the language keeps track of the subject (see Harvey 2000).
2.2. Cross-referencing in Coordinate and Serial Verbs\textsuperscript{17} Constructions

Cross-referencing subject clitics, which have the same grammatical features as the cross-referenced NP, can refer to an overt or missing antecedent in their respective clauses in coordinate (14) and serial verb (15) constructions:

(14a) baw $e=kåkë=n$ \(\ddot{z}ji\) do \(\ddot{z}ji\)
they 3PISCL=show=FE him but he
\(\ddot{o}=\)meme\hspace{1cm}gen.
3SgSCL.NEG=agree look
'They showed him something but he refused to look at it'

(14b) $e=kåkë=n$ \(\ddot{z}ji\) do \(\ddot{o}=\)meme
3PISCL=show=FE him but 3SgSCL.NEG\hspace{1cm}gen.
=agree look
'They showed him something but he refused to look at it'

(15a) män $a=kötú=n$ \(\ddot{z}ji\) \(a=\)kpëřf=n
you 2PISCL=call=FE her 2PISCL=tell\hspace{1cm}\dddot{\ddot{n}}\dddot{\ddot{u}}m.
=FE something
'You called her and told her something'

(15b) $a=kötú=n$ \(\ddot{z}ji\) \(a=\)kpëřf=n
2PISCL=call=FE her 2PISCL=tell=FE\hspace{1cm}\dddot{\dddot{n}}\dddot{\dddot{u}}m.
something
'You called her and told her something'

In an NP where a singular human and a singular non-human noun are conjoined, the cross-referencing subject clitic agrees with the entire NP in person and number but specifically with the noun with a human attribute, as reflected in the form of the subject clitic. The order in which the nouns occur does not matter. This shows that the subject clitic is not agreeing completely with the NP but rather with one of the nouns in the conjoined NP. This situation suggests that in Degema [+HUMAN] outranks [-HUMAN] in the animacy hierarchy when singular nouns are involved:

(16) $\ddot{\phi}\ddot{\phi}\ddot{\phi}~nu~\ddot{o}wë\ddot{e}\ddot{j}~më=mësë$
fowl and person 3PISCL=sleep
mù \dddot{\dddot{e}}sïn\dddot{\dddot{a}}.
in here
'A fowl and someone sleep here'

(17) \(\ddot{o}wë\ddot{e}\ddot{j}~nu~\ddot{\phi}\ddot{\phi}\ddot{\phi}~më=mësë$
person and fowl 3PISCL=sleep
mù \dddot{\dddot{e}}sïn\dddot{\dddot{a}}.
in here
'Someone and a fowl sleep here'

Where an NP consists of conjoined plural human and a plural non-human noun, the cross-referencing subject clitic agrees with the entire noun phrase in person and number but specifically with the noun with a non-human attribute, as reflected in the form of the subject clitic. The order in which the nouns occur does not matter. This situation also shows that the subject clitic is not agreeing completely with the NP but rather with one of the nouns involved.

\textsuperscript{17} For a detailed discussion of serial verb constructions (SVCs) in Degema, see Kari (2003a). Example (15) is an example of a concordial SVC with more than one subject clitic. In this situation, each of the verbs in series—initial and non-initial is preceded by a subject clitic. The two subject clitics in (15b) cross-reference the missing subject. Although Kari (2003a) says that this type of SVC has one substantive subject, the substantive subject of the initial and non-initial verbs could, in fact, remain unexpressed as in (15b).
in the conjoined NP. What this suggests is that [-HUMAN] outranks [+HUMAN] in the animacy hierarchy when plural nouns are involved:

(18) ḣo ᵇo nu ےwéọj mǐ=mēṣe
    fowls and people 3PIsCL=sleep
    mǔ èsína.
    in here
    'Fowls and people sleep here'

(19) ےwéọj nu ḣo ᵇo mǐ=mēṣe
    people and fowls 3PIsCL=sleep
    mǔ èsína.
    in here
    'People and fowls sleep here'

3. Subject Clitics and the Doubling Phenomenon

Clitic doubling has been discussed extensively in the literature on clitics (see Borer 1986, Franks 1998, Franks and King 2000, Franco 2000 and Kayne 1975). It is a phenomenon whereby an NP in a sentence is duplicated by a clitic, which shares certain grammatical features with the doubled NP, such as person, number, case and gender. In Degema, subject clitics frequently double subject NPs and agree with them in person, number and human/non-human. What licenses clitic doubling in Degema is not associated with the presence of a preposition or preposition-like element, as in Spanish, or with specificity and topicality, as in Slavic languages (see Kari 2003b for a detailed discussion). Clitic doubling in Degema is made possible by syntactic (movement and anaphoricity) and discourse (emphasis and/or familiarity) factors. Consider the simplified bracketed sentence in (20), meaning 'Osomonwane is sleeping':

\begin{align*}
\text{Underlying representation} \quad & (20a) \quad [\text{AGR}[\text{AGR}[\text{CL}m₃] \quad [\text{VP}[\text{N}posomonwane][\text{VP}_t][\text{m}m₃][\text{VP}_t][\text{m}m₃][\text{m}m₃]])]. \\
& [+\text{HUMAN}] \\
& [+\text{3rd person}] \\
& [+\text{Sg}] \\
\text{surface representation} \quad & (20b) \quad [\text{AGR}[\text{SPEC}[\text{N}posomonwane][\text{AGR}[\text{AGR} \\
& [+\text{HUMAN}] \\
& [+\text{3rd person}] \\
& [+\text{Sg}] \\
& [\text{CL}m₃][\text{VP}_t][\text{VP}_t][\text{m}m₃][\text{m}m₃][\text{m}m₃]])]. \\
& [+\text{HUMAN}] \\
& [+\text{3rd person}] \\
& [+\text{Sg}]
\end{align*}

The explanation offered by Kari (2003b), in respect of how subject clitics double their associated NPs, is that the subject NP osomonwane is doubled when it moves from its underlying position in the verb phrase (VP) to the specifier of agreement (SPEC AGRP) position—a position that makes it possible for the subject clitic m₃ to copy all the relevant grammatical features, such as person, number and human/non-human that are associated with the NP. This analysis is consistent with some versions of the Principles and Parameters theory (see Chomsky 1993 and Pollock 1989).

Movement and anaphoricity combine with emphasis and/or familiarity between speaker and hearer of the subject of discourse. Emphasis and unfamiliarity of the subject of discourse to participants in a communication act result in the overt presence of the cross-referenced subject NP. Conversely, sentences in which the cross-referenced subject NP is
unemphatic and familiar have their subject dropped\(^{18}\) as (21a) and (21b) show:

(21a) ọjì mọ=kéj Ọtán.
\[\text{he 3SgSCL=split firewood}\]
\[\text{‘He is splitting firewood’}\]

(21b) —mọ=kéj Ọtán.
\[\text{3SgSCL=split firewood}\]
\[\text{‘He is splitting firewood’}\]

4. Subject Clitics and the Second Position Phenomenon\(^{19}\)

Degema cross-referencing clitics occur in ‘second position’—a position that is not defined uniformly across languages. Second position in Degema is defined as the position between the subject—the first constituent of the sentence—and the main verb\(^{20}\). The first constituent may be a phrase consisting of a single word or one consisting of more than one word. Let us consider (22)–(25):

(22) osomonwane mọ=réré.
\[\text{Osomonwane 3SgSCL=walking}\]

‘Osomonwane is walking’

(23) ọlegé ìdègíšò ìsaj nèni mọ=rọbọ̀
\[\text{knives old three our 3PlSCL=sharp}\]
\[\text{‘Our three old knives are sharp’}\]

(24) osomonwane nu tatane mọ=réré.
\[\text{Osomonwane and Tatane 3PlSCL=walk}\]
\[\text{‘Osomonwane and Tatane are walking’}\]

(25) osomonwane s=ma
\[\text{Osomonwane 3SgSCL.NEG=IMAUX}\]
\[\text{kotu me.}\]
\[\text{call me.}\]
\[\text{‘Osomonwane has not called me yet’}\]

Examples (22)–(25) show that the cross-referencing subject clitics occur after a single-word NP in (22), after a modified NP in (23) and after a conjoined NP in (24). In all these cases, the subject clitics occur in second position after the subject NP. Examples (22)–(25) all have one cross-referencing subject clitic, which is hosted by a verb.

Having considered second position in respect of sentences with one subject clitic, let us now consider sentences which have two

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\(^{18}\) It is argued in Kari (2003b) that the subject clitic doubles the cross-referenced NP prior to its deletion. In other words, the cross-referenced NP is dropped only when the subject clitic must have copied all the relevant grammatical features of the NP. The presence of the subject clitic renders the subject NP redundant, in the absence of emphasis and unfamiliarity (see Ndimele and Kari 2003 for an account of missing subjects in Degema).

\(^{19}\) Second position, known in the literature on clitics as Wackernagel's Law, is a phenomenon whereby clitics occur in second position after a non-clitic element. Second position in the discussion of clitics dates back to the 1892 classic work of the renowned Swiss Indo-European linguist, Jacob Wackernagel, cited in Anderson (1993). Wackernagel is said to be the first to observe that enclitic elements in Greek appeared as a group after the first or initial word of the sentence. Second position is not defined uniformly across languages. Different languages appeal to different factors in the definition of this position (cf. Zwicky 1977). Some languages appeal to syntactic and/or phonological factors in the definition of second position. In (Homerinc) Greek, for instance, enclitics appear in second position after the first word of the sentence. Serbian/Croatian clitics appear after the first accented constituent of the sentence or after the first accented word (cf. Spencer 1991). In Pashto (Tegey 1977), an affix (the perfective prefix), is among the elements that define second position.

\(^{20}\) A detailed argumentation in respect of the definition of second position in Degema is provided by Kari (2002b and 2003b:201f.). See Kari (2005b) also.
forms of the same subject clitic:

(26) osomonwane ə=da
Osomonwane 3SgSCL=1NIAUX
1m0=siré.
3SgSCL=run
‘Osomonwane has started to run’

(27) osomonwane ə=sí
Osomonwane 3SgSCL=1NIAUX
1m0=siré.
3SgSCL=run
‘Osomonwane is still running’

In examples (26) and (27), one form of the subject clitic occurs before the main verb while the other form of the same subject clitic occurs before the auxiliary verb. Kari (2003b) considers second position in cases with more than one form of a subject clitic as the position occupied by a subject clitic, which occurs before an auxiliary or main verb, in relation to the subject NP of the sentence. This consideration of what constitutes ‘second position’ allows us to regard the two forms of the subject clitic, as well as the auxiliary in (26) and (27) as occupying ‘second position’.

Now that we have known what constitutes second position in Degema, the relevant question that needs to be answered is how do these clitics get placed in second position in Degema? The explanation given in Kari (2003b) is that the subject clitic is placed in second position by subject NP movement\(^{21}\), which moves the underlying subject NP located in the VP and places it in juxtaposition to the subject clitic. By this movement, the subject NP is placed before the subject clitic. This automatically places the subject clitic in second position, as seen in the sentence meaning ‘Osomonwane is sleeping’in (20a) and (20b), repeated below as (28a) and (28b):

\[
\text{underlying representation}
\]

(28a) \[
\text{AGR}[\text{AGR}[\text{CLm0}][\text{VP}[\text{NP} \text{osomonwane}][\text{vmesé}]])].
\]

\[
\text{surface representation}
\]

(28b) \[
\text{AGR}[\text{SPEC}[\text{NP} \text{osomonwane}][\text{AGR}[\text{CLm0}][\text{VP}[\text{NP} \text{osomonwane}][\text{vmesé}]])].
\]

Example (28) contains only subject clitic. The explanation given by Kari (2003b) in respect of how more than one subject clitic in a sentence are placed in second position is that the subject NP moves through lower SPEC of AGRP to higher SPEC of AGRP to precede the leftmost subject clitic. Second, the auxiliary verb moves to AGR’ to adjoin to the form of the subject clitic in higher AGR. Third, the main verb moves to occur immediately after the subject clitic in the lower AGR’, as shown in the simplified labeled bracketed sentence in (29b), meaning ‘Osomonwane is about to sleep’:

\[
\text{underlying representation}
\]

(29a) \[
\text{AGR}[\text{AGR}[\text{CLm0}][\text{VP}[\text{auxda}]]][\text{AGR}[\text{CLm0}][\text{VP}[\text{NP} \text{osomonwane}][\text{vmesé}]])].
\]

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\(^{21}\) In Kari (2003b), the subject clitic in Degema is claimed to be base-generated. ‘Base generation means that clitics are underlyingly generated in the same position and structurally associated with the same node as that with which they appear on the surface’ (Klavans 1995:79).
surface representation

(29a) \[ \text{AGR}[\text{SPEC} [\text{NP} \text{osomonwane}]] \text{AGR}[\text{AGR} [\text{clz}_1] [\text{aux} \text{di}_1] [\text{VP} [\text{aux} \text{ct}_1]]] \text{AGR}[\text{SPEC} [\text{NP} \text{z}_1]] \text{AGR} [\text{AGR} [\text{clz}_2] [\text{VP} [\text{mz} \text{e} \text{sef}_k]]] [\text{VP} [\text{NP} \text{z}_1]] [\text{VP} [\text{ct}_1]]] \]

The foregoing discussion shows that the placement of subject clitics in second position in Degema is determined by purely syntactic considerations (cf. Bošković 2000). Subject clitics are automatically placed in second position when the underlying subject NP moves to SPEC AGRP—a position that precedes AGR, which houses the subject clitics.

5. Subject Clitics and the Expression of Tense, Aspect, Mood and Negation

Cross-referencing subject clitics interact with other elements such as auxiliary verbs and tone in the expression of the grammatical categories of tense, aspect mood and negation. We noted in footnote 12 that subject clitics have two forms—\text{mV} and \text{V} (see Table 1 also). A remarkable feature of subject clitics in Degema is the fact that they change their forms in the expression of these categories.

5.1. Subject Clitics and Tense

Forms of subject clitics occur in complementary distribution as far as tense is concerned. In this regard, it is observed that \text{mV}-forms of subject clitics occur in declarative sentences expressing non-past (present and future), as in (30) and (31):

(30) me=dé \text{r} \quad \overset{\text{1sgScl}{\text{u}}}{{\text{u}}\text{s}\text{sm}}.
1\text{sgScl}=\text{cook soup}
'\text{I am cooking/will cook soup}'

(31) mú=kpé\text{n} \quad \overset{\text{2sgScl}{\text{a}}}{\text{tōng}''}.
2\text{sgScl}=\text{wash wrappers}
'You are washing/will wash wrappers'

Constructions expressing past, however, feature the V-forms of subject clitics, except those involving 1st person singular, as in (32), (33) and (34):

(32) mi=dé\text{r}=\overset{\text{1sgSc}{\text{n}}}{\text{u}}\text{s}\text{sm}.
1\text{sgSc}=\text{cook}={\text{FE} \text{ soup}}
'I cooked soup'

(33) u=kpé\text{n}=\overset{\text{2sgSc}{\text{n}}}{\text{a}}\text{tōng}''.
2\text{sgSc}=\text{wash}={\text{FE} \text{ wrappers}}
'You washed wrappers'

(34) e=kpé\text{n}=\overset{\text{3plSc}{\text{n}}}{\text{a}}\text{tōng}''.
3\text{plSc}=\text{wash}={\text{FE} \text{ wrappers}}
'They washed wrappers'

5.2. Subject Clitics and Aspect

Like constructions expressing past, aspectual constructions also feature the V-forms of subject clitics, except those involving 1st person singular, as in (35) and (36):

(35) mi=dé=r tē.
1\text{sgcl}=\text{buy}={\text{PE}}
'I have bought something'

(36) u=dé=r tē.
2\text{sgcl}=\text{buy}={\text{PE}}
'You have bought something'

\[22] \text{The observation that subject clitics change their forms to reflect tense, aspect, mood and negation is well documented in the literature on clitics in Degema (see Kari 1997, 2001, 2003b and 2004b).} \]
5.3. Subject Clitics and Mood

Modal constructions, like those expressing aspect, feature the V-forms of subject clitics, except those involving 1st person singular, as in (37) and (38):

(37) mi=bíné=n 3ku nú
1SgSCL=want=FE way that mú=ji ɓána.
2SgSCL=come here
‘I want you to come here’

(38) t=kpé=n 3ku nú
3SgSCL=be necessary=FE way that mú=ɓene ɗkpá.
2SgSCL=play dance
‘It is necessary that you dance’

5.4. Subject Clitics and Negation

Like modal and aspectual constructions, negative constructions also feature the V-forms of subject clitics, except those involving 1st person singular, as in (39) and (40):

(39) mì=deńi ɗji.
1SgSCL.NEG=know him
‘I don’t know him’

(40) ɗ=ma kòtu me.
3SgSCL.NEG=call me
‘He hasn’t called me’

A notable feature of negative constructions in Degema is the obligatory presence of a high tone on the subject clitic. It is this high tone that triggers negation in the language.

6. Conclusion

It is noted in this paper that the agreement of subject clitics with nouns and pronouns in respect of person, number and gender is crucial not only for the grammar of Degema but is also essential for communication in the language, as it serves to identify discourse participants as well as to identify a preceding overt or covert antecedent in the same clause or in different clauses. It is established that clitic doubling in Degema is made possible by syntactic and discourse factors, and that Degema subject clitics occupy second position—a position that is defined in relation to the subject, which is the first constituent of the sentence, and the main verb, and determined by purely syntactic considerations. Also noted is the fact that there is a correlation between the forms of subject clitics and the expression of tense, aspect, mood and polarity. Specifically, it is observed that the V-form, including the 1Sg form, of subject clitics, features in past, negative, aspectual, and modal constructions, whereas the mV-form features in non-past constructions.

References


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