On Endoclitics: Some Facts from Degema*

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Whereas there is a consensus among linguists with regard to proclitic and enclitic, as possible clitic types, linguists disagree on endoclitic as a possible clitic type. Reported cases of endoclitics have been reanalyzed as *morph metathesis, inflected clitics*, etc. This follows from the general claim that clitics attach externally (sometimes considered as external affixation), and never within a word (cf. Zwicky 1977, Zwicky and Pullum 1983, Klavans 1995, Nevis 1988 & 1989). In this paper, we examine a case of endoclitic in Degema, which results from a metathesis rule that applies after external clitic attachment, and show that this kind of metathesis is somewhat different from the type described in the literature on clitics. Furthermore, we show that the observed case of endoclitic in Degema does not seem to be accounted for by the four possible explanations for surface endoclitics.

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* Two autonomous communities, on the Degema Island, speak Degema in the Degema Local Government Area of Rivers State of Nigeria. These communities are Usokun-Degema and Degema Town. Each of these communities speaks a variety of Degema that is highly mutually intelligible with the other. The varieties spoken are Usokun and Degema Town (Atala), corresponding to the names of the communities. The order of the names of these communities or dialects is arbitrary and does not suggest the relative importance of either of the communities or the dialects. This study is based on the Usokun variety.

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1. Introduction

We shall begin this paper with the following quotation from Nevis (1988, p.39f).

Endocliçis\textsuperscript{1}) is such a rare phenomenon that it has been argued not to exist at all, except as a result of something else in the grammar. The basic problem with endocliçis is a problem in how clitics get to be located internally. Apparent endocliçis have been reanalysed as other phenomena—notably morph metathesis, an inflected clitic, or unproductive relics from some earlier stage in the language. We can conclude that cliticization is always external attachment of morphemes, never internal attachment....

Nevis's (1988) paper is centred on the comitative in Northern Saame. We take his paper as a starting point for our discussion, for the reason that he examines the case of Northern Saame against a number of approaches that have been utilized by different authors in the analysis of surface endocliçis. In his discussion, he shows the problems with some of these analyses with regard to the Northern Saame data, leading to the conclusion that the comitative in Northern Saame is not an endoclitic. In our discussion on Degema, we shall also show the problems associated with the four different approaches discussed in Nevis (1988) in the light of our data, leading to the conclusion, unlike Northern Saame, that there is an endoclitic in Degema, albeit a surface one. In what follows, we shall attempt to highlight some of the issues discussed in that work.

Nevis (1988) notes an instance in Northern Saame where the possessive suffix occurs before a case suffix in the comitative plural, unlike the regular case suffix + possessive suffix combination. He claims that although the internally located comitative plural appears to be an endocritic, it is not. He examines the Northern Saame case within Zwicky and Pullum (in progress)\textsuperscript{2}) morph metathesis rule, which holds that 'some instances of surface endocliçis

\textsuperscript{1}) The words in each of the following pairs are often used interchangeably: endocliçis/endoclitic, proclisis/proclitic, and enclisis/enclitic.

\textsuperscript{2}) I do not have this material, cited by Nevis (1988), at my disposal whether in its unpublished or published form to evaluate some of the arguments in favour of the 'morph metathesis' analysis.
are the result of morph metathesis rules that apply after a clitic is attached externally...’ (Nevis 1988, p.40). Consider the metathesis rule, and the Ewe example he claims Zwicky and Pullum (in progress) used as one of the bases for their argument. This rule and the Ewe example are given here as (1) and (2).

(1) STEM + CL + AX  \rightarrow  STEM + AX + CL

(2) wọ me dzọ ọ  \rightarrow  me wọ dzọ ọ  
PRO NEGI leave NEG2  NEGI PRO leave NEG2
‘They didn’t leave yet’

According to Nevis (1988, p. 40), Zwicky and Pullum (in progress) ‘...derive Ewe endoclitic pronouns from external clitic attachment with subsequent morph metathesis’.

He rejects the metathesis rule, and its derivations for Northern Saame, given here as (3), (4), and (5), on the grounds that the rule is unmotivated, and that it would be applying only to a single morpheme in the language.

(3) STEM + PL + CASE + PX  (i. e. STEM + PL + guim + PX)

(4) STEM + PL + PX + guim

(5) rak'kasi-ida-m -guim  \rightarrow  rakkasi-ida-guim -m
love -PL-1SG-COM  love -PL-COM-1SG
‘with my loves (=beloved ones)’

Furthermore, he examines the putative endoclitics in Northern Saame in connection with Klavans’s (1979) view, which holds that a clitic can be inflected3), and considers the inflected clitic analysis as undesirable, for the reasons that the possessive suffixes ‘...are not members of an inflectable word class, and that ‘...guim does not behave syntactically as an inflected affix’. See (6) and (7).

(6) STEM + CL + AX  \rightarrow  STEM + [CL + AX]

(7) STEM + [PX + guim] where [PX + guim] is a Px inflected for comitative

3) Klavans’s (1979) view that clitics can be inflected argues against endoclitic as a possible clitic type (see also Klavans 1995). Cases of endoclitics are seen as inflected clitics whereby ‘...the clitic is not really attached between a stem and its affix, but rather, the affix is an inflection on the clitic. Under her view, then, the endoclitic still results from external attachment’ (Nevis 1988, p.41).
With facts from conjunction reduction, agreement, and morphophonology in Northern Saame, he argues that syntactically comitative plural -guim in the language behaves like a postposition rather than like a case suffix.

In addition to the ‘morph metathesis’ and ‘inflected clitic’ analyses, he notes two other possible explanations for surface endoclitics, namely, the reanalysis of an endoclitic as an affix, and the reanalysis of an affix as a clitic, so that the first clitic is not really an endoclitic. These analyses are thought to be different from the one that directly attaches the clitic internally. Although he does not reanalyze the Px as true affixes, he considers the fourth possibility, that appears to derive from the third, and sees the external affix (Px) as a clitic. According to him, ‘this possibility allows us to retain both the external attachment of clitics and the internal location of affixes’. This appears to follow from the general view that clitics occur externally in relation to affixes. Like the reanalysis of Px as a clitic, he contends that -guim is a clitic rather than an affix.

This consideration that Px and -guim are clitics does away with any conceived case of endoclitic, as far as the positional relationship between the comitative plural -guim and the possessive markers are concerned, as there exists now two enclitics in juxtaposition, Px followed by the clitic postposition -guim.

2. Definitions of Metathesis and Endoclitic

In this section, we shall briefly consider the definitions of metathesis and endoclitic respectively.

2.1. Definition of Metathesis

Spencer (1998, p.138) says of ‘metathesis’ as the reordering of phonemes that often accompanies affixation, and which sometimes gives the impression of being the sole exponent of a morphological property. Metathesis may not be a strictly phonological phenomenon, as it can also involve the reordering of morphemes too. For instance, Hale (1973, p.329) assumes that in Walbiri the basic order of clitics is subject-object but that a metathesis rule shifts a number marker from the subject clitic to the right of an immediately following object clitic (See also Simpson and Withgott 1986, p.163 for metathesis involving clitics in Middle French). This suggests that there are two kinds of metathesis-a phonological metathesis and a morphological metathesis. What is, however, common to both kinds of metatheses is that there is some reordering of elements. These elements could be phonemes or morphemes. Thus in a phonological metathesis, there is a reordering of phonemes, while in a morphological metathesis, there is a reordering of morphemes. Metathesis in each case does not involve a reordering between phonemes and morphemes, as we shall see in the case of Degema where there is a reordering between the factative morpheme and the final consonant of its host.
2.2. Definition of Endoclitic

*Endoclitic* refers to a phenomenon whereby a clitic occurs inside a word. Klavans (1995, p.123) notes that:

In strictly linear terms, there are three types of clitics: those that occur at the beginning of a word are PROCLITICS, those that occur at the end of the word are ENCLITICS, and those that occur within the word are ENDOCLITICS.

Whereas there seems to be a consensus among linguists as regards *proclitic* and *enclitic*, as possible clitic types, linguists disagree on *endoclitic* as a possible clitic type. For example, Zwicky (1977) analyzes the reduplicative morpheme *-pul-* in Madurese, an Austronesian language, as an endoclitic given that the morpheme is not found at the margins of words, as other clitics in the language do, but rather it is found within words. Zwicky (1977, p.8) notes that:

We appear to have a case here of a clitic that is neither a proclitic-preceding the word to which it is attached-not an enclitic-following the word to which it is attached-but rather is an endoclitic..., or ‘infixed clitic’, interrupting the morphemes within the word to which it is attached.

Other languages in which he notes the presence of endoclitics include Turkish, Hua (New Guinea language), and Estonian. Nevis (1984), however, argues that Estonian *-gi* is a derivational suffix rather than an endoclitic as analyzed by Zwicky.

Klavans (1979, 1995) argues against the consideration of endoclitic as a possible clitic type. According to her, ‘...apparent cases of endoclitic are the result of suffixation on clitics’ (Klavans 1995, p.123). The idea of suffixation on enclitics is, perhaps, what informed her designating certain clitics as ‘inflected’.

3. Types of Clitics in Degema

Kari (1997, 2001a, and 2001b) discusses two types of clitics in Degema-proclitics and enclitics. Proclitics occur before a verb and/or particle, and refer to the subject noun phrase, as in (8) - (12), while enclitics occur after a verb or object pronoun with a CV(C) structure, as in (11) and (12). Proclitics are marked for person and number. Enclitics are not marked for these features. The vowels of both types of clitics agree with those of the host, i. e. they become expanded if the vowels of the host are expanded, and non-expanded if those of the host are non-expanded. Table 1 shows proclitics and enclitics in Degema.
(8) óhóso  mó=kótú  wá.
   Ohoso  3SgPCL=call you
   ‘Ohoso is calling you (sg.)’

(9) ivíóso no bijén  če=ma  ta.
   Ivioso and Binyen 3P1PCL=IMPR BOX GO
   ‘Ivioso and Binyen have not gone yet’

(10) ma  a= čá  má=gbɛdè  ó βáj  jɛ.
     you 2P1PCL=1NIPRT 2P1PCL=SPR CH  DEF
     ‘You (pl.) are about to sweep the house’

(11) eni če=tá= 'tɛ.
     we 1P1PCL=GO=CE
     ‘We have gone’

(12) ɛɛ=ɔɛn  wɛ=ɛɛnɔ.
     they 3P1PCL NEG=SEE YOU=DEF
     ‘They will not see you (sg.) again’

<table>
<thead>
<tr>
<th>Proclitics</th>
<th>Enclitics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Sg m/E, m/I</td>
<td>Vn</td>
</tr>
<tr>
<td>2S m/U/U, E</td>
<td>tɛ</td>
</tr>
<tr>
<td>3Sg m/O/O</td>
<td>tɛ</td>
</tr>
<tr>
<td>1P1 m/E</td>
<td>β ɛɛɛɛɛɛ</td>
</tr>
<tr>
<td>2P1 m/A</td>
<td>Anɛ</td>
</tr>
<tr>
<td>3P1 m/E, m/I</td>
<td>mUnɛ</td>
</tr>
</tbody>
</table>

| Table 1. Proclitics and Enclitics⁵ |

4. Metathesis and Endoclitic in Degema

In this section, we wish to discuss a case of metathesis that results in endoclitic in Degema. Of particular interest is the case of metathesis discussed in Kari (1997). See also Kari (1998). As we noted in section 2, Spencer (1998) considers metathesis as the reordering of phonemes that often accompanies affixation. We also noted the situation in Walbiri (Hale 1973) where there is metathesis involving morphemes rather than phonemes. This is

⁴) Clitic-host combination is separated with ‘=’, while affix-stem combination is separated with ‘.’.

⁵) Capital letters in the forms of clitics represent two phonological alternants, as follows: A=a/a, E =e/e, I=i/i, O=o/o, and U=u/u. V is an underspecified vowel.
similar to the morph metathesis discussed in Nevis (1988), credited to Zwicky and Pullum (in progress) whereby there is a reordering of morphemes. A case of metathesis that is discussed in Degema does not accompany affixation but cliticization. Kari (1997) observed that encliticization of the factative enclitic to the verb often results in metathesis that yields a surface endoclitic.

In what follows, we shall examine the behaviour of the factative clitic Vn in respect of its hosts (verb and pronoun). Subsequently, we shall look at enclitic-host sequences with regard to the morph metathesis rule, inflected clitic analysis, reanalysis of endoclitic as affix view, and the reanalysis of affix as clitic view to see how the instances of metathesis and endoclitic in Degema can be analyzed within these approaches.

4.1. Factative Enclitic and Hosts Ending in Vowels in Clause-final Position

In this subsection, we consider the factative enclitic in relation to its hosts in clause-final position. Also of interest is the phonological structure of the host. Let us consider the following data involving hosts that end in vowels:

(13a) bi⁶ ‘be black’
(b) mi=bi=Vn.
1SgPCL=be black=FE
(c) mi=bi=‘ín.
1SgPCL=be black=FE
‘I am black’

(14a) sisé ‘remove’
(b) mt=sisé=Vn.
1SgPCL=remove=FE
(c) mt=sisé=‘én.
1SgPCL=remove=FE
‘I removed (sth.)’

(15a) wɔ ‘you’ (sg. obj)

6 There is some discrepancy in the transcription of data in this work and those in Kari (1997). Whereas the data in Kari (1997) are transcribed using orthographic symbols those presented in this work are transcribed using phonetic symbols that have IPA values.
(b) ɔ= nó  \( \text{wɔ}= \text{n} \text{.} \)
    3SgPCL = hit you = FE

(c) ɔ= nó  \( \text{wɔ}= \text{'án} \text{.} \)
    3SgPCL = hit you = FE
    'S/he hit you'

A look at (13) - (15) reveals that the factative enclitic is attached to a verb host in (13b) and (14b) but in (15b), it is attached to a pronoun host. In (13c), (14c), and (15c), the underspecified vowel of the factative enclitic becomes like the vowel in the last syllable of the host. Examples (13) - (15) show that the enclitic is attached externally to the host.

4.2. Factative Enclitic and Hosts Ending in Consonants in Clause-final Position

Here, let us consider (16) - (18), this time, using hosts that end in consonants in clause-final position.

(16a) tám 'chew'

(b)  \( \text{m}\text{í}= \text{tám} = \text{Vn} \text{.} \)
    1SgPCL = chew = FE

(c)  \( \text{m}\text{í}= \text{táVm}= \text{n} \text{.} \)
    1SgPCL = chew = FE

(d)  \( \text{m}\text{í}= \text{tá}= \text{'án} = \text{m} \text{.} \)
    1SgPCL = chew = FE
    'I chewed (sth.)'

(17a) sól 'hold'

(b)  \( \text{m}\text{í}= \text{sól} = \text{Vn} \text{.} \)
    1SgPCL = hold = FE

(c)  \( \text{m}\text{í}= \text{sólVl} = \text{n} \text{.} \)
    1SgPCL = hold = FE

7) The location of the factative enclitic inside the host interrupts the host so that the verb tám 'chew', for instance, becomes...t\( \text{á} = \text{'án} = \text{m} \text{.} \). The final m is part of the host, and so it does not constitute a separate morpheme. The gloss 'chew', therefore, should not be seen as associated with t\( \text{á} \) but with t\( \text{á}...\text{m} \). given that t\( \text{á} \), by itself, has no meaning in this context without m.
(d) \( mi = \text{6ô} = \text{1ô} = l. \)
1SgPCL=hold=FE
'I held (sth.)'

(18a) 6aw 'them'

(b) \( o = nô \) 6aw=Vn.
3SgPCL=hit them=FE

(c) \( o = nô \) 6aVw=n.
3SgPCL=hit them=FE

(d) \( o = nô \) 6á = 1á = w.
3SgPCL=hit them=FE
'S/he hit them'

Examples (16) - (18) reveal that the factative enclitic is located within the host, unlike (13) - (15) where the factative enclitic is externally attached to the host. The point to note in respect of the factative enclitic attachment to hosts that end with consonants in clause-final position is that it is not restricted to the data given in (16) - (18). It appears to be a general phenomenon whereby the enclitic occurs inside all hosts ending in consonants in clause-final position in positive factative constructions.

The explanation provided in Kari (1997, 1998), with respect to this case of metathesis, is that first there is a reordering of the final consonant of the host and the underspecified vowel of the enclitic. Second, the underspecified vowel of the factative enclitic copies all the features of the vowel of the final syllable of the host (see (16c), (17c), and (18c)), with a subsequent deletion of the nasal element of the enclitic, as ( (16d), (17d) ), and (18d) show. The reason for the deletion of the nasal element of the factative is not given in Kari (1997, 1998). The deletion, we speculate, results from the fact that since there are no cases of \( VCC \) syllables in the language, the presence of the nasal consonant would yield a \( VCN \) structure. The nasal, therefore, is deleted to avoid the anomalous \( VCC \) structure.

However, it is observed that in positive factative constructions where a host ends in a consonant, followed by a word beginning in a vowel, the nasal of the enclitic is retained, while the vocalic part is deleted, as shown in (19) and (20). Now, the question is to which word is the nasal element of the factative morpheme attached, given that a \( VCC \) sequence is not allowed? Is it attached to the preceding verb host or to the following word? If it is attached to the preceding verb, will it not be a violation of the non-permissible \( VCC \) sequence? The way out is to assume that the nasal element of the factative morpheme is proclitic to the following word. This assumption is, in fact, correct as the nasal element is pronounced
together with the following word than with the preceding verb that ends in a consonant. In cases where the following word begins with a consonant the factative morpheme is dropped completely, as in (21).

(19) ɔ=tám ĩn=ĩnám
     3SgPCL=chew FE=meat
     ‘S/he chewed meat’

(20) o=ból  n=şi
     3SgPCL=hold FE=him
     ‘S/he held him/her’

(21) ɔ=sòl pél dìhile jɔ
     3SgPCL=jump go across umbrella-shaped anthill the
     ‘S/he jumped across the umbrella-shaped anthill’

The explanation given above describes how the factative enclitic gets to be located word-internally. In Degema it is not a problem at all to explain how the enclitic gets to be located within a word, contrary to what is expressed in Nevis (1988, p.39f.) that ‘the basic problem with endoclitcs is how the clitics gets to be located internally’.

Now, if metathesis strictly refers to the reordering of phonemes that often accompanies affixation (cf. Spencer 1998), or the reordering of morphemes (cf. Hale 1973, Zwicky and Pullum in progress), then the case of Degema represents another kind of metathesis. For as we can see in our Degema data, there is no reordering of phonemes, or a reordering of morphemes. What we see in Degema that looks like a reordering of phonemes is actually a case involving a reordering between a morpheme (clitic) and a phoneme (consonant). Again, the situation we observe in Degema does not accompany affixation in the true sense of the term ‘affixation’ -a morphological phenomenon-but a reordering of a phoneme and a morpheme that results from encliticization-a syntactic phenomenon.

What facts from factative enclitic attachment to hosts ending in consonants in clause-final position suggest is that ‘metathesis’, as conceived by these authors, is too restricted to accommodate the kind of metathesis observed in Degema. Facts from Degema also suggest that there is endoclitc, albeit as a result of a process, in addition to proclitic and enclitic, which do not result from a process. However, let us quickly add that this case of endoclitc does not involve a clitic outside the enclitics that we have already established in the language. The factative morpheme is enclitic in one instance but is endoclitic in another. This behaviour, we must say, is peculiar to the factative enclitic.

Those that argue against endoclitics could argue, alternatively, that what we claim to be an
endoclitic in Degema is just a mere case of lengthening of the vowel in the last syllable of the host. In fact, Kari (1997, p.42) makes reference to metathesis under the heading ‘long vowels in verbs’ as a result of factative enclitic attachment, although he says nothing about endoclitics. One piece of evidence to prove that the factative morpheme is endoclitic, and not a mere lengthening of the vowel of the host, is tone. The tone of host-factative enclitic sequence (i.e. when the factative enclitic attaches after hosts that end with an open syllable) is high-downstep. The high tone is found on the last syllable of the host, and the downstepped high tone on the vowel of the factative enclitic (See examples (13c), (14c), and (15c)). This tone pattern is maintained even in hosts that end with a closed syllable (See (16d), (17d), and (18d)). Here it is observed that the vowel in the last syllable of the host bears a high tone, while the vowel of the factative enclitic that follows that of the host bears a downstepped high tone. This suggests that the vowel that bears the downstepped high tone is actually that of the factative morpheme. If it were a mere case of lengthening of the vowel of the host, we would probably have had a different tone pattern.

As we noted in subsection 2.1., there appears to exist, in Degema, instances of morphological metathesis of the type credited by Nevis (1988) to Zwicky and Pullum (in progress) whereby a morpheme (clitic) swops its position with another morpheme (suffix) after the clitic is attached externally. Consider examples (22) - (24).

(22a) o=gbóm-ósé=’én
    3SgPCL=bite-CAS=FE
    ‘S/he caused (sb./sth.) to bite (sb./sth.)’

(b)  *o=gbóm=’én=ósé
    3SgPCL=bite=FE=CAS

(c)  gbom-os-né
    bite-CAS-RES
    ‘cause to bite oneself’

(d)  e=gbóm-ós-né=’én
    3PlPCL=bite-CAS-RES=FE
    ‘They caused themselves to be bitten (by sth.)’

(e)  *e=gbóm-osé=’é=né
    3PlPCL=bite-CAS=FE=RES

(23) o=gbóm-ós-né=’é=j
    3SgPCL=bite-CAS-RES=FE=HAB
    ‘S/he caused herself/himself to be bitten many times’
(24) o=gim-éné = í é = j
3SgPCL = pin RES = FE = HAB
‘S/he (used a pointed object to) pierce herself/himself many times’

A critical examination of (22) - (24) shows that whereas the factative enclitic attaches externally to the host in (22a) and (22d), the same factative enclitic is sandwiched between the reflexive and habitual suffixes in (23) and (24). Example (22b) is ungrammatical because the factative enclitic occurs between the verb root and a suffix. Example (22e) also is ungrammatical because the factative enclitic occurs between two suffixes, but most importantly it occurs before a suffix whose phonological shape is not one that should occasion a reordering of the factative enclitic and it.

In general, the attachment of the factative in (22a) and (22d) follows that same pattern as (13) - (15), and that in (23) and (24) follows the same pattern as (16) - (18). Given this similarity in behaviour between hosts without suffixes and those with suffixes in terms of factative enclitic attachment, we can say that (23) - (24) are also cases of endoclisis. A point that is worth noting is that unlike morph metathesis where there is metathesis between two morphemes, the factative enclitic treats the stem-suffix combination as a unit, and sees the consonant of the habitual suffix as a phoneme rather than as a morpheme.

A lesson that we learn from Degema is that it is not always the case that clitics attach externally, i.e. outside affixes, as generally believed to hold cross-linguistically. Clitics can attach internally, i.e. inside affixes on the one hand, and inside root morphemes on the other. This makes the distinction between the affix and the clitic even more problematic, given the view that clitics always occur outside affixes.

4.3. Summary of Conditions for Encliticization and Endocliticization
We noted that the factative clitic is enclitic in one instance but endoclitic in another. In this section we briefly summarize the conditions for encliticization and endocliticization in Degema.

4.3.1. Conditions for Encliticization
Some conditions for encliticization of the factative morpheme is that (a) the factative morpheme must occur clause-finally; (b) it must occur after an open syllable host, i.e. after a host that ends with a vowel; (c) its vocalic part must not delete, except in the cases where it occurs after a closed syllable host followed by a word that begins with a vowel; (d) the host must occur in positive constructions.

8) This may be true if external attachment of clitics is understood as the underlying structural position of clitics.
4.3.2. Conditions for Endocliticization

Some conditions for endocliticization of the factative morpheme is that (a) the factative morpheme must occur clause-finally prior to endocliticization; (b) it must occur after a closed syllable host; (c) its vowel must swop position with the final consonant of the host; (d) its non-vocalic part must delete, (e) it must occur in positive constructions.

5. The Four Possible Explanations for Surface Endoclitics

Nevis (1988, p.40) notes that there are four types of possible explanations for surface endoclitics. These are morph metathesis rule, inflected clitic analysis, reanalysis of endoclitic as affix view, and the reanalysis of affix as clitic view. We shall examine these possible explanations in the light of facts from Degema. The purpose is to see if our Degema case can be accounted for by these ‘possible explanations’.

5.1. Morph Metathesis Rule

The morph metathesis rule, as given in Nevis (1988, p.40), involves reordering of morphemes, as we saw in examples (1) and (2) repeated here as (25) and (26), where there is a reordering between the pronoun and the first negative morpheme in Ewe. By this reordering of elements, the pronominal clitic comes between the first negative morpheme and the verb.9 What we observe in Degema is not a case of morph metathesis because there is no reordering between morphemes (although they have something in common—the reordering of elements). It is essentially a reordering or call it metathesis between a morpheme and a phoneme, which is not what the morph metathesis rule is formulated to explain. The morph metathesis rule, as it is formulated, does not account for what we observe in Degema as regards the behaviour of the factative enclitic.

(25) STEM + CL + AX ← STEM + AX + CL

(26) mě wō dzó ḍo ← wō mě dzó ḍo
   NEGI PRO leave NEG2  PRO NEG1 leave NEG2
   ‘they didn’t leave yet’

5.2. Inflected Clitic Analysis

This is an analysis advocated for by Klavans (1979, 1995). She analyzes cases of apparent endoclitics in Ngiyambaa and Beja (See Klavans 1995, p.98) as inflection on clitics, by suffixation. Consider (27) and (28) for Ngiyambaa and Beja, respectively.

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9) The elements in (26) are rearranged (cf. Nevis 1988, p.40).
(27) bara- bara: y = ndu -gal (Ngiyambaa)  
REDUP-quick+ABS=2NOM-pl  
‘Put some speed on, all of you!’

(28) dabaloo-aa-b = aa-na (Beja)  
small -pl-ACC. masc=be-2nd. pl  
‘You are small’

She remarks that the pronominal clitic =ndu of Ngiyambaa is inflected for number, while the copular clitic =aa of Beja is inflected for person, giving =ndu-gal and =aa-na, respectively.

Although this analysis is correct for Ngiyambaa and Beja, and does away with the apparent endoclisis in both languages, what we have observed in Degema with respect to the behaviour of the factative enclitic cannot be explained by adopting the inflected clitic analysis. First, the factative enclitic reorders itself with what it sees as a phoneme rather than as a morpheme (cf. factative enclitic attachment in hosts ending with consonants). Second, the element with which the factative enclitic reorders itself has nothing inflectional in it, even if the enclitic sees it as a morpheme (suffix).10) We, therefore, reject this analysis for Degema.

5.3. Reanalysis as Affix View
The approach whereby an endoclitic is reanalyzed as an affix (See Nevis 1984 analysis for Estonian -gi in indefinites), like the morph metathesis rule (in its present formulation) and the inflected clitic analysis, will not work for Degema. The reason is that the factative enclitic that has become endoclitic is not an affix but one of the enclitics established in Kari (1995a, 1995c).

5.4. Reanalysis of Affix as Clitic View
The last of these views, which appears to follow from the third, is one where an affix is reanalyzed as a clitic, so that the first clitic is not really an endoclitic. This is, in fact, the approach pursued in Nevis (1988), and which led to his conclusion that comitative -guim in Northern Saame is not an endoclitic. Whereas this analysis works for Northern Saame, it does not work for Degema for two reasons. We, therefore, reject the reanalysis of affix as clitic view on the following grounds. First, the factative clitic that occurs within the host is not an affix. Second, what follows the factative clitic that is located within the host is not a clitic.

We have examined the four possible explanations for surface endoclisis, as listed in Nevis (1988). Of these, only morph metathesis comes close to accounting for what is going on in

10) For the semantics of suffixes in Degema, see Kari (1995b).
Degema, as it has to do with the reordering of elements. Again, metathesis and subsequent endocliticization in Degema seem to agree with the argument credited to Zwicky and Pullum (in progress) that ‘...some instances of surface endoclisis are the result of morph metathesis rules that apply after a clitic is attached externally…’ (Nevis 1988, p.40). However, we have observed that the morph metathesis rule in its present formulation does not fully capture our data in Degema. We, therefore, need to modify the name of the rule and the rule itself to capture the behaviour of the factative in Degema. We refer to morph metathesis simply as metathesis, since we have essentially a reordering of elements that may not necessarily be morphemes. Similarly, the morph metathesis rule in (25) should be what is given in (29):

(29) STEM + CL + X $\rightarrow$ STEM + X + CL

In the reformulated rule AX, which appears to stand for affix or word in (25), is replaced simply with X in (29). Thus, X could be taken as representing an affix, word, syllable, or even phoneme. The reformulated rule, in fact, agrees with Crystal’s definition of metathesis as:

A term used in linguistics to refer to an alteration in the normal sequence of elements in a sentence-usually of sounds, but sometimes of syllables, words, or other units’ (Crystal 1997, p.240).

The modified rule, as given in (29), accounts for the data in Ewe and Degema. Thus whereas in Ewe, the rule will make reference to a reordering between morphemes, in Degema it will make reference to a reordering between a morpheme and a phoneme. It will also apply to cases where the reordering is between a word and an affix, if such cases exist.

6. Conclusion

The rarity of endoclitics, unlike proclitics and enclitics, has led to the conclusion that they do not exist at all. In languages where there is an apparent case of endoclitic, different analyses have been proposed. The apparent endoclitic has either been reanalyzed as an inflected clitic (Klavans 1979, 1995), an affix (Nevis 1984), or a clitic followed by another clitic, so that the first clitic is not really an endoclitic (Nevis 1988). Part of the reanalysis of apparent endoclitics derives from the general claim that clitics are never located within a word, but rather lie outside affixes (cf. Zwicky and Pullum 1983, Nevis 1989).

In the cause of our study, we have examined four possible explanations for surface endoclitics in human language. Of these, only the morph metathesis rule comes close to accounting for what we observe in Degema, as it has to do with the reordering of elements. Consequently, the morph metathesis rule is modified to accommodate the Degema case.
Degemba, thus, provides evidence that in spite of the rarity of endoclitics, they do exist. Facts from Degemba also suggest that the claim that clitics are always located externally, i.e. outside affixes does not hold cross-linguistically.

Some abbreviations used in this paper:

1Sg = 1st person singular  
2Sg = 2nd person singular  
3Sg = 3rd person singular  
1Pl = 1st person plural  
2Pl = 2nd person plural  
3Pl = 3rd person plural  
1SgPCL = 1st person singular proclitic  
1PlPCL = 1st person plural proclitic  
3SgPCL = 3rd person singular proclitic  
3PlPCL = 3rd person plural proclitic  
ACC = Accusative case  
ABS = absolutive case  
AX = affix  
CAS = causative suffix  
CE = completive enclitic  
CL = clitic  
COM = comitative  
DE = discontinuation enclitic  
DEF = definite article  
FE = factative enclitic  
HAB = habitual suffix  
IMPRT = imperfective particle  
INIPRT = inceptive non-imperative particle  
NEG = negative  
NOM = nominative case  
PL = plural  
PRO = pronoun  
PX = possessive suffix  
REDUP = reduplication  
RES = reflexive suffix  
SG = singular

References


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