

Old French Proclisis and Enclisis: The Clitic Group or the Prosodic Word?

0. Introduction

In Old French, monosyllabic unstressed words could be pronounced either as part of the word that preceded them (enclisis), as in, for instance, *jot vi* 'I saw (perf.) you', or as part of the word that followed them (proclisis), as in, for example, *Erec m'apelent* 'They call me Erec.'[1]

The particular focus of this paper is the domain within which Old French enclisis and proclisis applied. With respect to enclisis, it will be demonstrated that the domain which comprises the enclitic and its host cannot be Nespor and Vogel's (1986) clitic group, but rather the Prosodic Word of Selkirk's (1986) and Selkirk and Shen's (1990) theory of prosodic structure. As such, the problems raised in this paper enable us to make a choice between two competing theories of prosodic structure.

This paper is organized as follows. In section 1, the main facts of Old French enclisis and proclisis will be presented. Section 2 examines the domain of application of proclisis and enclisis and shows that it cannot be the clitic group, a prosodic constituent proposed by Nespor and Vogel (1986). In section 3, we will discuss Selkirk's (1986) and Selkirk and Shen's (1990) so-called 'end-based' theory of syntax-phonology mapping. It will be argued that the Prosodic Word as defined by the latter theory constitutes the proper domain for the application of proclisis and enclisis. Finally, section 4 summarizes the main results of this paper.

1. The Facts

In (1), a representative list of Old French (12th century) enclitic forms, based on Einhorn (1974) and Rheinfelder (1967), is presented.

(1a)	a le	>	al	en le	>	el	
	a les	>	as	en les	>	es	
	de le	>	del				
	de les	>	des				
(1b)	ja le	>	jal	ne le	>	nel	que le > quel
	ja me	>	jam	ne les	>	nes	que se > ques
	je le	>	jel	ne me	>	nem	si le > sil
	je les	>	jes	ne te	>	net	si les > sis
	je me	>	jem	ne se	>	nes	si me > sim
	jo te	>	jot	qui le	>	quil	si se > sis
	jo le	>	jol	qui les	>	quis	si en > sin
	jo les	>	jos	qui me	>	quim	se le > sel
	tu le	>	tul	qui se	>	quis	se les > ses
	tu me	>	tum	qui en	>	quin	

Enclisis applied in two main environments, characterized in (2a) and (2b) and corresponding to the data in (1a) and (1b) (cf. Pope, 1956:323, Riefelnder, 1967:109, 131).

(2a)	PREPOSITION	+	ARTICLE	+	NOUN
	(a, de, en)		(le, les)		
ex:	al matin				'in the morning'
	Comment me puet li cuers el cors durer?				'How can my heart remain in my body'
(2b)	PRONOUN	+	OBJECT PRONOUN	+	VERB
	(je, tu, qui)		(me, te, se, les)		
	CONJUNCTION/PARTICLE				
	(ja, ne, si, se, que)				
ex:	Jol pert				'I lose it/him'
	Nem vidrent				'They didn't see me'

Whereas it applied obligatorily in the context defined under (2a), enclisis applied optionally in the environments given in (2b). Hence, besides *nel dis* 'I didn't say it' *ne le dis* was also possible (cf. De Kok, 1985:67-68).[2] Proclisis, on the other hand, was more general: in the environments listed in (2) it applied obligatory to the articles *le* and *la* (but not to *les*), to the possessives *ma*, *ta* and *sa*, to the object pronouns *me*, *te*, *se*, *le* and *la* (but not to *les*). Whereas enclisis only affected monosyllabic words (articles and object pronouns) which had *e* as their nucleus, proclisis also affected monosyllables containing other types of nuclei, such as *a* (as in *la* (article and object pronoun) and in the possessives) and *i* (as in *li* (article)).[3] Whether proclisis or enclisis applied was dependent on the nature of the initial segment of the following word. Before a vowel, proclisis was general and before a consonant only enclisis could apply. Furthermore, the application of proclisis was not dependent on preceding words, whereas the application of enclisis was possible only after a well-defined set of preceding monosyllabic words, as can be observed in the exhaustive example set in (1).

In this section, we have presented the main facts of Old French proclisis and enclisis. In the remainder of this paper, we will examine how the domain within which these processes applied, informally described as in (2a) and (2b), can be characterized in recent theories of prosodic structure. In section 2 we will first discuss Nespor and Vogel's (1986) clitic group as a possible domain for the application of proclisis and enclisis, and next, in section 3 we will examine the 'end-based' theory proposed by Selkirk (1986) and Selkirk and Shen (1990).

2. Enclisis, proclisis and the clitic group

With respect to enclisis in environment (2b), De Kok (1985:153) considers for the 12th and 13th century (which is the period of Old French she describes) as enclitic only the

unstressed object pronouns that are pronounced as part of "un mot pleinement accentué qui précède" and adds that this enclisis is disappearing in the 13th century. De Kok (1985:205), in discussing the rules necessary to account for enclisis, leaves open the question whether syntactic rules should directly generate structures like ##Jo + le ## dis ## or whether structures like ##Jo ## le + dis ## should be rebracketed as ##Jo + le ## dis ## in order for enclisis to take place.[4] Syntactically belonging to the verb, the object pronoun phonologically attaches to the preceding subject. Wanner (1987) presents a componential description of clitic elements using a framework based on a number of prosodic, syntactic and phonological parameters or dimensions. With respect to clitic attachment, Wanner (1987:473-479) makes a distinction between phonological and syntactical cliticization. For him, too, a clitic element can be syntactically grouped with a following word, but phonologically attached to a preceding word.

Recent research on prosodic phonology has led to the development of a number of theories which postulate a level of representation not necessarily isomorphic with syntactic structure and mediating between the phonology and syntactic components of a grammar. In Nespor and Vogel (1986), a constituent is proposed which mediates between the phonological word and the phonological phrase and which, at first sight, seems to be the ideal candidate for defining the prosodic group comprised of host and clitic: the clitic group. The construction of the clitic group (C) gathers together a host and its clitics according to the algorithm in (3).

(3) CLITIC GROUP FORMATION

I C domain

The domain of C consists of a W (Phonological Word) containing an independent (i.e. a nonclitic) word plus any adjacent W's containing

a. a DCL, or

b. a CL such that there is no possible host with which it shares more category memberships.

II C construction

Join into an n-ary branching C all W's included in a string delimited by the definition of the domain of C

Let us briefly clarify the algorithm in (3). Nespor and Vogel make a distinction between a DCL (directional clitic) and a CL (clitic). For certain clitics the phonological dependency on an element to the left or to the right is an independent property of the clitic itself and does not depend on the number of category memberships it shares with surrounding hosts. For instance, in Modern Greek, possessives (cf. Nespor and Vogel (1986:153-154) are always incorporated leftward, as illustrated in (4).

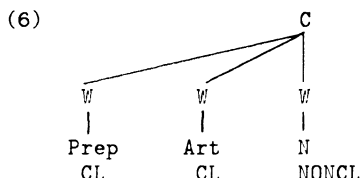
(4) [to prósfatò mu] C [árθro] C
'my recent article'

[to iposiniðitá mu] C [esθímata] C
'my unconscious feelings'

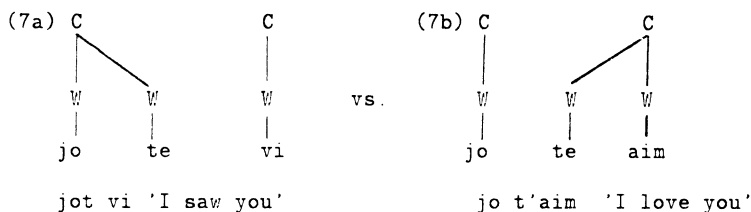
Although the possessives share the larger number of category memberships with the following noun, they are not incorporated rightward, but leftward as can be concluded from the fact that they cause stress readjustment on the adjectives. Clitics such as the possessives in Greek are called directional clitics (DCL) as opposed to clitics (CL) that may be either proclitic or enclitic, such as the Greek personal pronouns, as illustrated in (5).

- (5) a) [o aléksandros] C [mu to éðose] C
 'Alexandros gave it to me'
- b) [dóse mu to] C [amésos] C
 'Give it to me immediately'

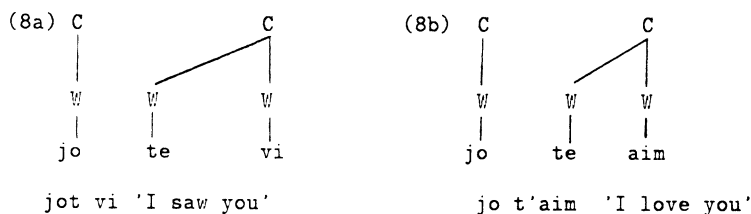
In (5a), the pronouns *mou* and *to* are proclitics, because they do not trigger stress readjustment on the preceding noun. In (5b), on the other hand, the pronouns are enclitic as can be inferred from the stress readjustment which they cause in the preceding verb. Returning now to Old French, we conclude that articles and object pronouns are not directional clitics (DCL), but rather ordinary clitics (CL), given the fact that they can be phonologically dependent on an element to the right or to the left. If we now recall the environments in (2a) and (2b) above, we can identify the domain for application of proclisis and enclisis for the context (2a) as the clitic group if it is assumed that prepositions are clitics. On this assumption, the preposition and article are considered to be clitic elements that together with the following noun constitute a C domain according to the definitions in (3) and illustrated in (6).



Within the domain illustrated in (6), the processes of proclisis and enclisis take place depending on whether or not the following noun starts with a vowel. However, if we now look at the forms in (1b) and the contexts in (2b), the C-domain account encounters a problem in correctly providing a domain for enclisis. This becomes clear if we consider such forms as *jot* and *jol* in, for instance, *jot vi* 'I saw (perf.) you' and *jol dis* 'I said (perf.) it.' The problem resides in the fact that *jo* is not a clitic. This conclusion is based on the following facts. First, *jo* can be separated from the verb, as in, for instance, *Jo del mien ferai ma volonte* 'I will do my will with mine' (cf. Einhorn (1974) and Ashby (1977)). Second, *jo* never lost its vowel before a vowel-initial verb (cf. Rheinfelder, 1967:131), which we would expect if it were a clitic. Third, the subject pronoun could occur in complete isolation (cf. Zwicky (1985)). In sum, the subject pronoun in these cases is not a clitic, but an independent word. Given that the object pronoun in these forms is the only clitic element, it should, according to the definitions in (3), be attached to the independent word with which it shares more category memberships. Now, in Old French, the object pronoun in a sequence *jo* + object pronoun + verb was phonologically attached (proclisis) to the verb, if the verb was vowel-initial, but to the subject (enclisis) if the verb was consonant-initial. Hence, what we seem to need is a distribution of clitic groups such as the one given in (7).



However, the C-construction definition given in (3) will yield for both (7a) and (7b) the same C-domain division, as illustrated in (8).



Given the definition for Clitic group formation in (3), the distribution of clitic groups as in (7) is impossible, simply because direction of cliticization in Old French is not governed by the number of category memberships a clitic shares with the surrounding hosts. It should be noticed also, that, because *jo* is not a clitic element, it is not possible either to have one single clitic group consisting of *jo* + object pronoun + verb, within which enclisis and proclisis would apply depending on the nature of the initial segment of the verb. In conclusion, then, the clitic group as defined in Nespor and Vogel (1986) can serve as the domain of application of proclisis and enclisis in the context (2a). It can also serve as the domain of application of proclisis in the context (2b), as illustrated in (8b), but fails to account for enclisis in the context (2b).

In this section we have demonstrated that the domain for application of enclisis in the context (2b) cannot be the clitic group. In the next section, we will discuss Selkirk's (1986) and Selkirk and Shen's (1990) theory of prosodic structure and show that the Prosodic Word defines the proper domain for proclisis and enclisis in all of the contexts in (2).

3. Enclisis, proclisis and the Prosodic Word

In Selkirk (1986) and Selkirk and Shen (1990) a theory of prosodic structure is presented in which the construction of prosodic constituents is based on the ends of syntactic constituents. This so-called 'end-based' theory of phonology-syntax mapping allows for the construction of two prosodic constituents: the Prosodic Word and the Major Phrase. In this section we will examine whether this end-based theory can provide the appropriate domain for the application of Old French proclisis and enclisis.

In the end-based theory the relation between syntactic structure and prosodic structure is defined by a mapping of syntactic structure to prosodic structure according to the definitions in (9) (cf. Selkirk and Shen (1990:319)).

Each language specifies whether it uses the right or the left edge of syntactic categories in the syntax-phonology mapping. According to (9) the right or left edges of syntactic constituents coincide with the edges of prosodic constituents. The domain of a

(9) The Syntax-Phonology Mapping

For each category C_n of the prosodic structure of a language there is a two-part parameter of the form

$$C_n : \{ \text{RIGHT/LEFT}; X_m \}$$

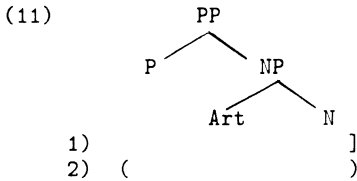
Where X_m is a category type in the X-bar hierarchy

prosodic constituent can then be characterized as the span between two edges imposed by (9). The end-based theory allows for the construction of the constituents Prosodic Word (henceforth PW) and Major Phrase (henceforth MAP) according to the definitions in (10).

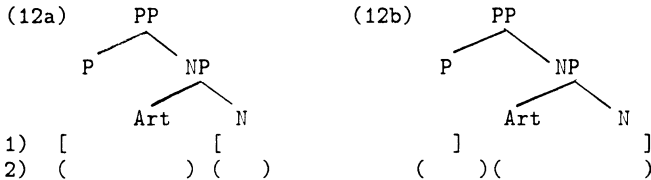
$$(10a) \text{ Prosodic Word (PW)} : [\text{RIGHT/LEFT} ; X_0]$$

$$(10b) \text{ Major Phrase (MAP)} : [\text{RIGHT/LEFT} ; X_{\max}]$$

The environment for proclisis and enclisis in (2a) can be characterized as the PW, if the category P is not included as an X_0 for the PW construction rule (10a) and if the edge parameter is set to right, as illustrated in (11).[5]

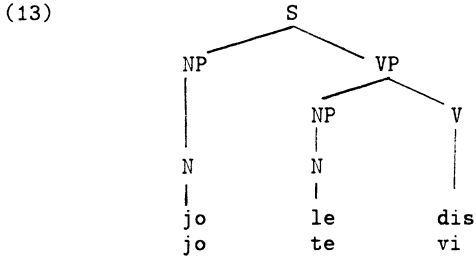


On the other hand, if the category P can count as an X_0 for PW construction, then, depending on the parameter setting RIGHT/LEFT, a PP can be divided in PW's as in (12a) or (12b).

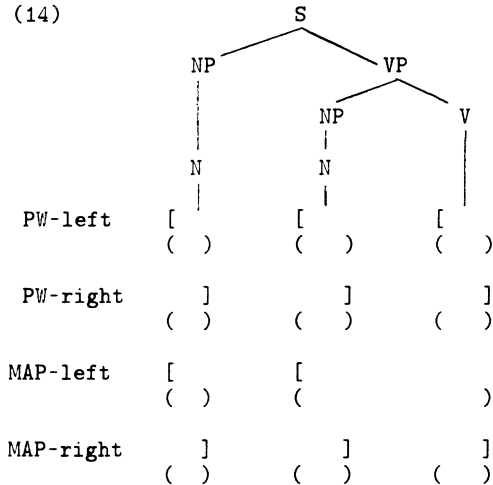


In (12), the first line (1) illustrates the location of left (12a) and right (12b) edges of constituents of the type X_0 in syntactic structure. The second line (2) in (12) illustrates the syntax-phonology mapping, that is, the construction of PW's. Until now, we have tacitly assumed that proclisis and enclisis took place within one and the same prosodic domain. However, the division of a PP in PW's as in (12) makes it possible to allow enclisis and proclisis to have separate domains.[6] Besides having two different domains, one for enclisis (12a) and another one for proclisis (12b), the structures in (12) raise an important problem. Should it in principle be allowed for a language to use at the same time right and left edges for the same level of PW construction contrary to the Syntax-Phonology Mapping algorithm in (9)? The answer must probably be negative and, therefore, we will assume (11) to be the proper domain within which proclisis and enclisis applied in the context informally defined in (2a).

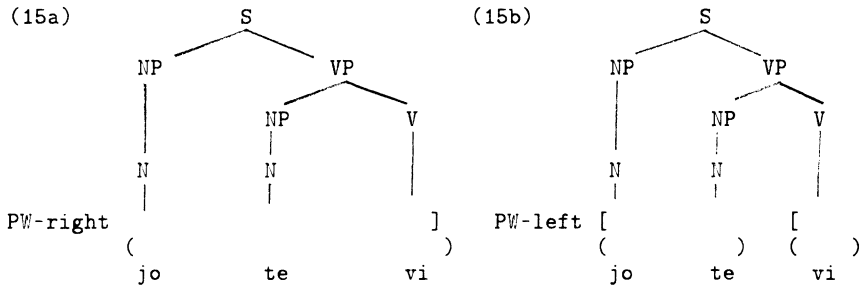
Let us now return to the cases of the preceding section which were demonstrated to be problematic for a C-domain account, that is, cases such as *jot vi* 'I saw you' or *jot dis* 'I say it.' The syntactic structure of these forms is given in (13).



In (14) we have illustrated the prosodic constituents that are possible as a result of mapping the syntactic structure (13) to prosodic structure.



It is clear from (14) that the parameter setting left/right for the PW construction does not yield different prosodic constituents. Furthermore, it seems that neither the PW nor the MAP can serve as a domain for enclisis, given that the subject pronoun and the object pronoun are in different prosodic domains in all of the possible prosodic constituent types of (14). It seems that in the end-based theory the subject-NP always has to be separated from the object-NP. Selkirk and Shen (1990:331) state that "the left edge of a VP will require induce a MAP break between the subject and any VP-internal material that follows." However, with respect to the construction of prosodic constituents Selkirk and Shen (1990) allow to make a difference between lexical and functional X0 and Xmax. If we now consider subject pronouns such as *jo*, although they are not clitic elements, to be functional and not lexical instances of X0, then we can assume that they are grouped together with the object pronoun (which can be considered a functional NP too) and the verb in one prosodic domain. In (15), we have illustrated the prosodic constituents that are possible depending on the parameter setting 'Right' or 'Left.'



In (15), we have considered pronouns such as *jo* and *te* to be functional and not lexical NP's. The question might arise whether object pronouns such as *te* should be regarded as functional NP's or, perhaps, as not even NP's at all. We will not deal with the exact nature of the object pronoun here, because, whether it is considered to be a functional NP or not an NP at all, does not influence the construction of prosodic domains.

Now, in order to allow enclisis and proclisis to apply within one and the same domain we must choose for the structure (15a). Hence, for Old French, we assume that the syntax-phonology mapping rule constructing PW's has the parameter settings 'Right' and 'Lex0,' as in (16).

(16) Old French Prosodic Word rule

Prosodic Word : { Right, Lex0 }

For the contexts in (2a) and (2b) this will result in constructing PW's as in (11) and (15a).[7] The domain for enclisis and proclisis in all the environments listed in (2) can now be identified as the PW.

In this section, we have discussed Selkirk's (1986) and Selkirk's and Shen's (1990) end-based theory of prosodic structure. We have shown that the domain for proclisis and enclisis in the environments in (2) above can be identified as the PW according to their theory.

4. Summary

In this paper we have discussed the domain of application of proclisis and enclisis in Old French. In section 1, we have presented the main facts and next, in section 2, Nespor and Vogel's (1986) clitic group has been discussed as a possible candidate for the domain of application of these processes. It has been argued that the clitic group account encounters problems in providing a domain for the application of enclisis in the contexts in (2b). After that, in section 3, we have discussed the end-based theory proposed by Selkirk (1986) and Selkirk and Shen (1990). It has been demonstrated that by assuming a parameter setting 'Right' and 'Lex0' for the PW construction rule, the domain of proclisis and enclisis in both the contexts (2a) and (2b) can be identified as the PW. In sum, we have provided some empirical support for the end-based theory and we have demonstrated that a description of the Old French proclisis and enclisis facts does not require the clitic group as a constituent of prosodic structure.

Notes

- [1] This paper has profited from discussions with Leo Wetzels and Willebrord Sluyters. I am also indebted to an anonymous LIN-reviewer for useful comments. Furthermore, I wish to thank Pascale Francort for correcting my English.
- [2] In the evolution from Old French to Middle French, the possibility of encliticizing in the contexts (2b) disappeared. In Modern French, enclisis is still operative in the contexts (2a). Zwicky (1987) argues that enclisis in these cases is syntactified. In Modern French, forms such as *au*, *aux*, *du* and *des* (historical remnants of the forms in (1a)) can be analyzed along the lines of Zwicky (1987) or as precompiled phrasal allomorphy along the lines of Hayes' (1990) Precompiled Phrasal Phonology.
- [3] Proclisis or elision of the article *li* was optional before a vowel-initial noun, but only in the singular. Hence, *li amis* or *l'amis* 'friend (nom. sg.)', but *li ami* 'friends (nom. pl.)'.
- [4] De Kok (1985) uses two kinds of boundaries: strong ones (##) and weak ones (+) and assumes that cliticization only takes place across weak boundaries.
- [5] The exclusion of P as an X0 can be obtained by replacing X0 by Lex0 in the Prosodic Word construction rule, where Lex0 stands for a word belonging to a lexical category (that is, N, V or A) (cf. Selkirk and Shen (1990:320)).
- [6] The parameter setting [RIGHT/LEFT] would then have to be made dependent on the nature of the initial segment of the N, [RIGHT] taking priority over [LEFT].
- [7] The structure (15b), quite interestingly, might reflect the PW-construction rule of an earlier period of the language in which only enclisis occurred. The shift from 'Left' to 'Right' would then have occurred somewhere in Gallo-Romance and might be held responsible for, among other things, the disappearance of enclisis and the cliticization of subject pronouns in the evolution from Old to Middle French.

References

- ASHBY, W.
1977 *Clitic Inflection in French: an historical perspective*,
Amsterdam:Rodopi.
- DE KOK, A.
1985 *La place du pronom personnel régime en français*,
Amsterdam:Rodopi.
- EINHORN, E.
1974 *Old French*, Cambridge: Cambridge University Press.
- HAYES, B.
1990 Precompiled Phrasal Phonology, in S. Inkelas and D. Zec (eds.)
The Phonology-Syntax Connection, Chicago: The University of
Chicago Press.
- NESPOR, M. and I. VOGEL
1986 *Prosodic Phonology*, Dordrecht: Foris Publications.

- POPE, M.
 1956 *From Latin to Old French*, Manchester: Manchester University Press.
- RHEINFELDER, M.
 1967 *Altfranzösische Grammatik*, Munich: Max Hueber Verlag.
- SELKIRK, E.
 1986 On Derived Domains in Sentence Phonology, in *Phonology Yearbook* 3, 371-405.
- SELKIRK, E. and T. SHEN
 1990 Prosodic Domains in Shanghai Chinese, in S. Inkelas and D. Zec (eds.) *The Phonology-Syntax Connection*, Chicago: The University of Chicago Press.
- WANNER, D.
 1987 *The Development of Romance Clitic Pronouns*, Berlin: Mouton de Gruyter.
- ZWICKY, A.
 1985 Clitics and Particles, in *Language* 61-2, 283-306.
- ZWICKY, A.
 1987 French prepositions: no peeking, in *Phonology Yearbook* 4, 211-227.