

## **ObjectCliticsandMarkedMorphology**

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This paper examines the nature and distribution of so-called “clitic” pronouns in European Portuguese (henceforth EP) with a view to shedding some light on the nature of the relation between syntactic structure and its morphological expression. It is argued that both enclitic and proclitic pronouns are generated in the morphology, but that there is a clear difference in status between preverbal and postverbal attachment. We suggest that this difference can be captured if affixation-realisation and affixation-placement are regarded as separate processes. Turning to the set of syntactic contexts governing procliticisation, we examine the apparently unrelated syntactic configurations, and formulate a proposal about how they might select preverbal attachment.

## **1 Introduction**

Reviewing some of the phonological, morphological, lexical and syntactic diagnostics previously employed for other Romance languages (Miller 1992, Miller & Sag 1997, Monachesi 1999), this paper argues that object pronouns in EP should be analysed as inflectional affixes. An affixal status is strongly supported by the internal properties of the pronominal cluster and by the nature of the verb-enclitic unit. Previous morphological treatments of Romance cliticisation however would not adequately account for the EP data in its entirety. As pointed out by Crysmann (1997), preverbal clitics in EP can have wide scope over two conjoined VPs and they do not have to be strictly adjoined to the verb; in addition, preverbal/postverbal placement is not determined, as in French and Italian, by the finiteness properties of the verb, but by a set of syntactic elements in preverbal position.

Based on this evidence, Crysmann (1997, 2001) offers a very meticulous analysis within HPSG which treats EP pronominals as syntactically transparent affixes, distinct from their Romance counterparts. Extending Kathol's (1995) treatment of German separable particle verbs, object pronouns are analysed as “liberated” affixes which introduce an independent domain object in the syntax (unlike typical affixes which would share the domain object of their base). Although this analysis derives all the data, it does so at considerable cost. First, by proposing a linearisation-based treatment for both preverbal and postverbal clitics, this account fails to capture the fact that enclitics behave like word-internal suffixes and that they are just as cohering with their host in EP as in the other Romance languages. It is therefore not clear why the verb-enclitic combinations should be

analysed through mechanisms previously employed to deal with word order effects. Similarly, the linearisation of proclitics in EP is a very local phenomenon, since only a restricted number of  $X^0$  elements can intervene between the cluster and the verb. This shows that proclitics are far less mobile than German separable particles. The locality condition imposed on preverbal clusters, then, seems to suggest that the motivation for ‘liberating’ the proclitic cluster from the verb is effectively rather weak.

A further problematic aspect of the analysis is the categorial label attached to the cluster. More precisely, Crysmann classifies object pronouns as a nominal category (i.e. with the HEAD value *noun*). It is however far from obvious that inflectional affixes should be represented in this manner, given that categorial information is typically associated to word-level units. This, of course, seriously challenges the idea that the EP clusters should have the ability to introduce its own domain object.

In this paper, the “untypical” properties which have motivated Crysmann’s analysis are instead derived by allowing pronominal inflection to attach non-uniformly to their host within the morphological component. As to the syntactic contexts, we account for the morphology-syntax interaction by assigning a common functional feature to these contexts, thus permitting the syntax to select the appropriate pronominal form. In this study, we adopt the realisational theory of Paradigm-Function Morphology (Stump 2001) in combination with Lexical-Functional Grammar (Bresnan & Kaplan 1982, Bresnan 2001).

The paper is structured as follows. We begin by presenting evidence supporting the view that sequences of clitic pronouns constitute morphological units, in section 2. Section 3 focuses on the enclitic cluster and shows that it is in morphological construction with the verb. In section 4, we address the status of the proclitic and its relation to the host. Having argued that both preverbal and postverbal pronouns are morphological elements, section 5 provides an account of their distributional differences.

## **2 The clitic cluster**

In this section we show that when combinations of clitic pronouns occur they combine morphologically to form a clitic cluster. This is an important observation, because it indicates that an analysis which combines the clitic pronouns together into a cluster in the syntactic component is likely to be less than optimal. The examples in (1) exemplify typical combinations of clitic pronouns:

- (1) a. O aluno apresentou-se-me como sendo poeta.  
 the student introduced-REFL-1.S.DAT as being poet  
 “The student introduced himself to me as a poet.”
- b. A Joana deu-no-lo em casa.  
 the Joana gave-1.PL.DAT-3.S.M.ACC in home  
 “Joana gave it to us at home.”

Note that there is a fixed and invariant order for combinations of clitic pronouns, such that reflexive pronouns precede dative pronouns, which precede accusative pronouns.

Moreover, the cluster exhibits the sort of morphophonological idiosyncrasy typical of affixation. For example, we find portmanteau clusters, that is, combinations of pronouns which are expressed by one undecomposable realisation. The pronominal form *mo*, for example, expresses both 1.DAT and 3.M.S.ACC, and *lha* expresses both 3.DAT and 3.F.PL.ACC. A second piece of evidence comes from the existence of syncretism, typical of morphological paradigms. Thus the form *lho* is the exponent of both the combination 3.S.DAT and 3.M.S.ACC and the combination 3.PL.DAT and 3.M.S.ACC, while *lhos* expresses both 3.S.DAT, 3.M.PL.ACC and 3.PL.DAT, 3.M.PL.ACC. Against typical of morphological constructions, there is evidence of cluster -internal allomorphy: the form *\*nos-o* (1.PL.DAT, 3.M.S.ACC) is ill-formed and instead we find *no-lo* and similarly the form *\*vos-as* (2.PL.DAT, 3.F.PL.ACC) is ill-formed and instead expressed as *vo-las*. Furthermore, these idiosyncrasies are entirely independent of the preverbal/postverbal placement of the cluster:

- (2) a. O Paulo deu-no-lo.  
 the Paulo gave-2.PL.DAT-3.M.S.ACC  
 “Paulo gave it to us.”
- b. O Paulo não no-lo deu.  
 the Paulo NEG 2.PL.DAT-3.S.M.ACC-gave  
 “Paulo didn’t give it to us.”

The fact that the form of the clitic pronouns are the same irrespective of their placement with respect to the verbs suggests that the phonological form of proclitic and enclitic pronouns is defined by the same set of ordered realisation rules which assign specific exponence to each pronoun (cf. Miller and Sag 1997, for French), and that an independent set of linearisation rules determines their linear ordering with respect to the host (cf. Spencer 2001 for Bulgarian).

Luís(2001)providesananalysisofthecliticclusteralongtheselinesinParadigm FunctionMorphology,derivingtheinternalstructureoftheclusterasacomposedunit throughfunc tioncomposition(Stump1992,2001).Theoperationoffunctioncomposition inPFMprovidesaconvenienttooltocapturetheinvariantorderwithinthecluster,for noticethatifexponentswereinsteadattachedcyclicallytoananchorpoint(i.e.theverb) theclusterprecedingandfollowingthehostwouldbemirrorimagesofeachother.Through functioncomposition,layeredruleapplicationisavoidedandthecombinationofpronouns iseffectivelytreatedasacluster:

(3)

Exponence	For $\sigma - \{(\text{Refl}, \text{Acc}, 3\text{Sg})(\text{Dat}, 3\text{Sg})\} \Rightarrow$
Rules	$\text{PF}(\sigma, X) = \text{def}(\text{RI} \quad \text{oRII})(X) \Rightarrow$ $\{[\text{se-lhe}], X\}$
Linearisation	a. Proclitic -LR: $\langle [\text{se -lhe}], X \rangle$ , if certain conditions hold (see below)
Rules	b. Enclitic -LR: $\langle X, [\text{se -lhe}] \rangle$ , elsewhere

The approach (using rules which are combined by function composition) also has the effect of assigning specific exponence to each pronoun, which both maintains a distinction between transparent sequences of pronouns and opaque portmanteau clusters and captures cluster internal regularities. In the following sections, we go on to consider the relationship between the clitic (or clitic cluster) and the verb itself.

### 3 Enclitics are in morphological construction with the verb

The enclitic -host combination passes a number of standard tests for affixation which suggest that the enclitic pronoun (or pronominal cluster) is affixed to the verb in the morphology (Spencer 1992, Crysmann 1997). First, there is evidence that the clitic triggers causes stem allomorphy. The following examples show that 3.ACC for m trigger morphophonological alternations on the verb and undergo allomorphic variation themselves when the verb ends in *s*, *z* or *r*:

- (4) a. Levamo-la. (\*levamos -a)  
2.P-take-3.S.F.ACC  
“We take her.”

b. Quero fazê-lo. (\*fazer -o)

1.S-want do-3.S.M.ACC

“I want to do it.”

These alternations are restricted to verb-clitic combinations or clitic-clitic sequences and must therefore be regarded as a case of morphologically conditioned allomorphy. Second, the clitic shows an interaction with other affixes in that it is differentially ordered with respect to tense/agreement affixes. In particular, although it is normally string final, the pronominal clitic (cluster) occurs before the tense/agreement affix in the future and conditional (for further discussion and analysis see Luís & Spencer (forthcoming)):

(5) a. Vendê-lo-emos. (\*vender -o-emos)

2.P-feel-3.S.M.ACC-2.P.FUT

“We will sell it.”

b. Dar-no-lo-iam. (\*dariam -no-lo)

3.P-give-1.P.DAT-3.S.M.ACC-COND

“They would give it to us.”

Third, the clitic participate in lexeme formation which indicates that the output of the cliticisation process may be a new lexical item. This is illustrated by the following example where the verb *queixar-se* means ‘complain’, and cannot exist without the reflexive pronoun:

(6) A criança queixou-se da antipatia dos professores.

the child complained-3.REFL about-the unfriendliness of -the teachers

“The child complained about the unfriendliness of the teachers.”

Finally, the enclitic exhibits a high degree of selectivity with regard to its host, since it attaches only to verbs. We conclude on the basis of these data that the enclitic cluster, or rather, postverbal affix cluster, attaches morphologically to the verb stem.

#### 4 The status of proclitics

The status of proclitics, or more particularly, the proclitic-host combination, is potentially more problematic, for this appears to exhibit a number of properties more characteristic of syntactic elements.

We begin by noting that the proclitic-host combination shares a number of properties with preverbal object cliticisation in other Romance languages, which is taken to be a morphological process. As in other Romance languages with both, the enclitic and

proclitic variants are homophonous. Like their Romance counterparts and the EPenclitics, the proclitics select verbal host. (7) shows that proclitics in EP also participate in lexeme formation:

- (7) A criança não se queixou da antipatia dos professores.  
 the child not 3.REFL complained about-the unfriendliness of -the teachers  
 “The child didn’t complain about the unfriendliness of the teachers.”

Again like their counterparts in other Romance languages, they have scope over semantically related coordinated V’s:

- (8) Todos sabem que a Maria o leu e releu.  
 all know that the Maria 3.S.M.ACC read and reread  
 “Everyone knows that Maria read and reread it.”

Similarly, they do not trigger stem allomorphy. This is hardly surprising from a morphological point of view given that stem allomorphy is generally triggered by postverbal affixes. Thus far, then, we might conclude that the proclitic -verb combination is as morphological as its verb -enclitic counterpart. However there are several further aspects to consider.

#### 4.1 Interpolation

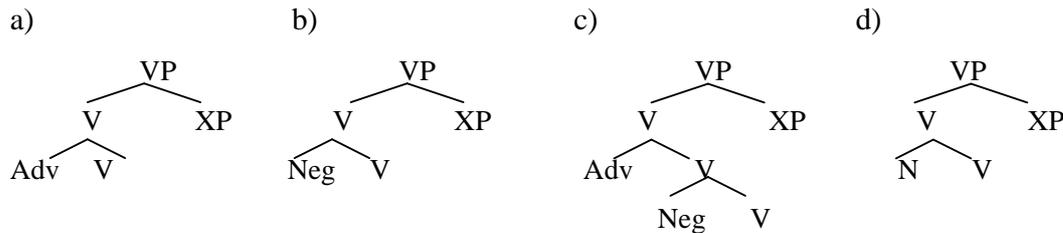
The first of these is the phenomenon known as interpolation -the ability of further elements to intervene between the proclitic and the verb. This is illustrated in (9), examples which respectively show a negative marker (9a), a temporal adverb followed by a negative marker (9b), and a subject pronominal (9c) between proclitic object and verb (Barbosa 1996):

- (9) a. Eu sei que ele o não visitou.  
 I know that he 3.S.M.ACC not visited  
 “I know that he did not visit him.”  
 b. Eu sei que ele o ainda não visitou.  
 I know that he 3.S.M.ACC yet not visited  
 “I know that he still has not visited him.”  
 c. Quantas vezes lhe eu disse isso?  
 how-many times 3.S.DAT I said that  
 “How many times did I say it to him!”

Although there are quite severe limits on what can be interpolated between the object cluster and verbal head, it is clear that these are syntactic words, and thus that the

interpolated elements and the verb forms as syntactically transparent construction. Since it is only  $X^0$  level elements which may intervene, we propose to analyse these elements as non-projecting words adjoining to  $V^0$ . Under this view, the combination of the verb and the interpolated elements constitutes a 'small'  $X^0$  construction which dominates only zero-level categories (Sadler & Arnold 1994, Sadler 1997, Sells 1998, Abeillé & Godard 2000, Toivonen 2001)<sup>1</sup>:

(10)



To summarise so far, we appear to have a somewhat mixed picture concerning the proclitic-verb combination. On the one hand, there are a number of points of similarity with the enclitic-verb combination (including participation in lexeme formation) which speak in favour of morphological attachment. On the other hand, the interpolation of what is clearly syntactic material (if limited to  $X^0$  constructions) between proclitic and verb constitutes an argument in favour of syntactic attachment of the proclitic (cluster) to its host. In the following subsection we discuss the relation between encliticisation/procliticisation and coordination before returning to the analysis of proclitic attachment in the subsequent section.

#### 4.2 Coordination

If enclitics combine with the host verb morphologically, but syntactic elements may intervene between proclitics and the verb, there is a clear mismatch between these two sorts of pronouns, despite their many shared characteristics. Data on coordination provides further evidence of a difference between procliticisation and encliticisation in EP. With

<sup>1</sup>Phrasal constituents can also appear before the verb, but they must precede the proclitic, as shown below:

- a. Euseiquea Maria [aindanasemanapassada] tetelefonou.  
I know that the Maria [already in -the last week] 2.S.ACC phoned  
"I know that Maria has already phoned you last week."
- b. \*Euseiquea Mariate [aindanasemanapassada] telefonou.

synthetic verb forms, proclitics may take scope over coordinated VPs (11a, 12a) but it is also possible to repeat the same proclitic before the second conjunct (11b, 12b):

- (11) a. Apenas a minha mãe me ajudou e incentivou.  
 only the my mother 1.S.ACC helped and encouraged  
 “Only my mother helped me and encouraged me.”  
 b. Apenas a minha mãe me ajudou e me incentivou.
- (12) a. Acho que lhes leram uma história e deram um livro.  
 1.S-think that 3.PL.DAT read a story and gave a book  
 “I think that they read the story and gave them a book.”  
 b. Acho que lhes leram uma história e lhes deram um livro.

In analytic, auxiliated constructions the proclitic normally precedes the auxiliary verb, and takes scope over both conjuncts, as in (13), where the coordination takes place in the complement of the auxiliary:

- (13) a. Acho que lhes tinham lido uma história e dei um livro.  
 1.S-think that 3.PL.DAT had read a story and given a book  
 “I think that they had read the story and given them a book.”

Alternatively, the auxiliary can also be repeated on each conjunct:

- (14) a. Acho que lhes tinham lido uma história e tinham dado um livro.  
 b. Acho que lhes tinham lido uma história e lhes tinham dado um livro.

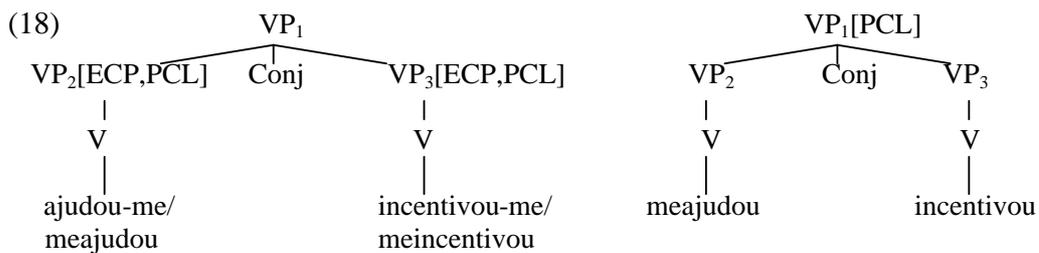
Coordination structures involving enclitic pronouns differ in one crucial respect: the enclitic pronoun cannot appear on just one verb with scope over the coordinate structure, but must be repeated on each conjunct:

- (15) a. A minha mãe ajudou-me e incentivou-me.  
 the my mother helped-1.S.ACC and encouraged-1.S.ACC  
 “My mother helped me and encouraged me.”  
 b. \*A minha mãe ajudou -me e incentivou.  
 c. \*A minha mãe ajudou e incentivou -me.
- (16) a. Leram-lhes uma história e deram-lhes um livro.  
 read-3.PL.DAT a story and gave-3.PL.DAT a book  
 “They read the story and gave them a book.”  
 b. \*Leram-lhes uma história e deram um livro.  
 c. \*Leram uma história e deram -lhes um livro.

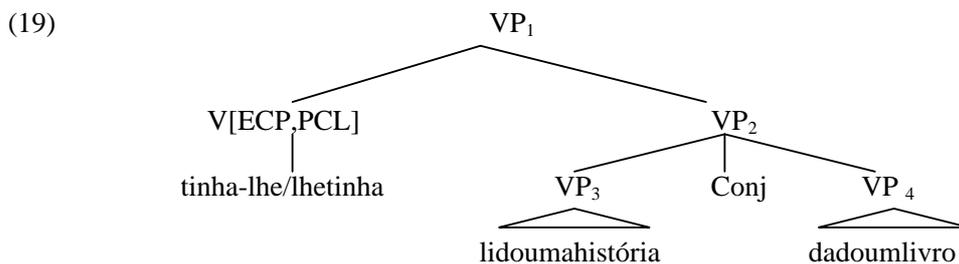
With analytic constructions, the enclitic attaches to the auxiliary taking scope over the coordinated VPs. It is also possible to coordinate auxiliary VPs, in which case an enclitic attaches to each finite auxiliary:

- (17) a. Ele tinha-lhe lido uma história e cantou uma canção.  
 he had-3.S.DAT read a story and sang a song  
 “He had read him a story and sang him a song.”  
 b. \*Ele tinha -lhe lido uma história e tinha cantou uma canção.  
 c. Ele tinha -lhe lido uma história e tinha -lhe cantou uma canção.

The striking issue about the coordination facts is that a proclitic associated with the first verb of a coordination of synthetic constructions may take scope over both conjuncts while this is not possible for an enclitic associated with the first verb. We may represent the scoped difference for procliticisation and encliticisation schematically as in the following trees, where [PCL] and [ECL] represent the domain of the syntactic effectorscope of a clitic pronoun:



For cliticisation to the auxiliary verb it is expected that there is no difference, as when the auxiliary verb itself is outside and takes scope over the coordinate structure itself. This is shown schematically below:



The puzzle, then, is that though there is clear evidence both that the cluster is formed in the morphology and that it is attached to the verb in the morphology, the domain of placement of the exponents appear to be syntactic for prefixal pronouns in EP.

This bears a significant similarity to cases of wide scope affixation discussed in the literature. For example, as is well known, certain affixes can take wide scope over coordinate structures in Turkish, as illustrated below:

- (20) [k<sup>i</sup>edi ve k<sup>i</sup>øpek<sup>i</sup>]-i-er-im-i (Turkish)  
 cat and dog P-1S.POSS-ACC  
 “my cats and dogs (acc)” (Orgun 1996)
- (21) [hastane-ye gid-iyor, o-nu gör-üyor] -sunuz (Turkish)  
 [hospital-DAT go-PROG 3SG-ACC see-PROG] -2PL  
 “You all are going to the hospital and seeing him/her” (Yu & Good 2000)

Similarly, English Possessive *s* may take wide scope:

- (22) The boys and the girls' books.  
 (23) John, Mary and Ivan's opinion (Halpern 1995)

and a similar phenomenon is found with morphological case markers in Mari:

- (24) puškuðo ða joltaš-lan  
 neighbour and friend -DAT
- (25) puškuðê-lan ða joltaš-lan  
 neighbour-DAT and friend-DAT  
 “to the neighbour and friend” (Luutonen 1997)

#### 4.3 Proclitics are not syntactic elements

Although the domain of placement of the proclitic (cluster) is syntactic, it is clear that the proclitic (cluster) itself is not a syntactic terminal. There are several pieces of evidence for this. First, unlike full pronouns, proclitics cannot themselves be coordinated:

- (26) a ti e a mim  
 “to you and to me”
- (27) ele e ela  
 “he and she”
- (28) \*te e me  
 2.S.DAT and 1.S.DAT  
 “you and me (dat)”

Second, unlike full pronouns, proclitics cannot be modified:

- (29) Até ele sabe a resposta.  
even he knows the answer  
“Even he knows the answer.”
- (30) Até eu sei a resposta.  
even I know the answer  
“Even I know the answer.”
- (31) \*Até lhe podias dar o presente.  
even 3.S.Dat could.2S give the present  
“Event to him you could give the present.”

Third, a proclitic cannot be topicalised:

- (32) Amim, já o Pedro não me engana mais.  
tome already the Pedro not 1.S.Acc deceive anymore  
“Pedro won't deceive ME anymore.”
- (33) \*me, já o Pedro não engana mais  
1.S.DAT already the Pedro not deceive anymore  
“Pedro won't deceive ME anymore.”

Finally, since we have established that the proclitic cluster has affixal status (see section 2. above), and thus, is a morphological object, we conclude that it cannot be represented as an independent terminal element.

## 5 The Morpho -syntactic Interface and Proclitic Contexts

To summarise so far, we have provided evidence that pronominal object clitics in EP are in fact morphological objects. We have argued that enclitics and enclitic clusters are simply verbal suffixes of the familiar sort. In particular, in terms of placement, they attach to verbal stems. Proclitics (and proclitic clusters), on the other hand, are really “phrasal prefixes”: these forms generated by the morphology are special in their linearisation properties. The relevant domain for their placement is the VP domain, and within this they are linearised at the left edge of a syntactic verbal node. This proposal essentially cashes out an insight of Anderson (1992) which takes clitics in general to be phrasal affixes.

What are the consequences of viewing EP pronominal clitics as phrasal prefixes?

The most important consequence is that such an analysis implies a somewhat more complicated interface between the morphology and the (external, structural) syntax than

that commonly assumed. In particular, we require the domains of morphology and syntax to overlap in a manner which is certainly challenging for the Principle of Lexical Integrity as normally understood (for insightful discussion of the role of, and problems with, this principle see Ackerman and Lesourd (1997) and Ackerman and Webelhuth (1998)).

In the following section we first outline a new approach to the generation and placement of phrasal prefixes using a realizational model of morphology (Stump 2001) and Lexical Functional Grammar (Bresnan & Kaplan 1982, Bresnan 2001). We then go on to discuss the triggering contexts.

### 5.1 Interfacing Morphology and Syntax

We now show how the unequal status of pronominals is formalisable in PFM with some modest extensions. We assume that the morphology and the morphology-syntax interface involves at least four distinct aspects. Within the morphology proper we must distinguish between **morphological function**, expressed as a bundle of morphological form-features and **morphological realisation** that is the forms of exponence, the actual (phonological) realisation of bundles of form-features. Additionally, we distinguish **placement**, that is, where exponents linearise, from the generation of the exponents themselves. The following shows some sets of form-features, together with their exponents<sup>2</sup> (34) and placement (35):

(34)

M-Features	{ Acc, 3, S, M }	{ Acc, 3, PL, M }	{ Dat, 3, PL }	{ Dat, 1, PL }
M-Form	/o/	/os/	/lhes/	/nos/

(35)

Placement Rules:	Preverbal LR: <o -[VP, V]>
	Postverbal LR: <Vstem -o>

The placement rules in (35) define the anchor point for the pronominal cluster. In the case of encliticisation, the cluster attaches to the verbal stem, and in the case of procliticisation the linearisation rule refers to another left-daughter pair. Finally, since morphological functions convey syntactic information, there is a mapping between morphological (or

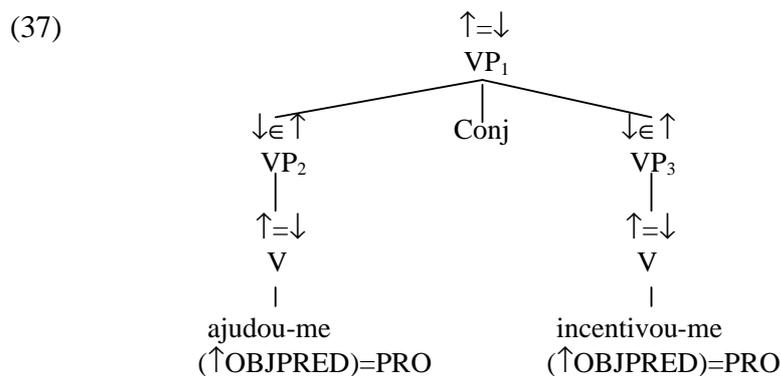
<sup>2</sup> These examples are presented in tabular form purely for convenience. We should stress that PFM consists of ordered sets of realisation rules and there is nothing that corresponds to lexical entries for individual affixes.

features) and syntactic function (or f-structure features). The latter, then, is the (abstract) syntax expressed by morphological forms, mediated by morphological functions. The mapping from morphological features to syntactic features associates the f-structure information in (36a) with { Acc, 3, S, M } and that in (36b) with { Acc, S, PL, M }:

- (36) a)  $(\uparrow\text{OBJPRED})=\text{PRO}$                       (b)  $(\uparrow\text{OBJPRED})=\text{PRO}$   
 $(\uparrow\text{OBJPER})=3$                                        $(\uparrow\text{OBJPER})=3$   
 $(\uparrow\text{OBJNUM})=S$                                        $(\uparrow\text{OBJNUM})=\text{PL}$   
 $(\uparrow\text{OBJGEN})=M$                                        $(\uparrow\text{OBJGEN})=M$

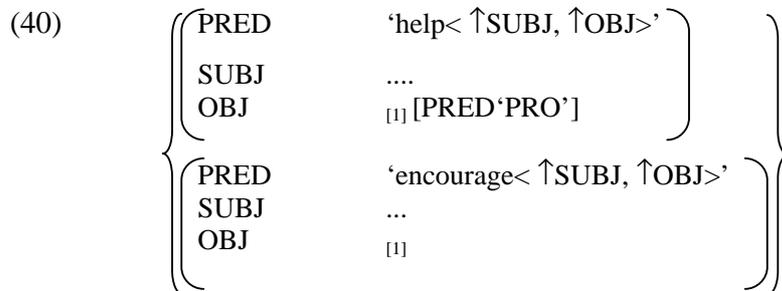
The syntactic information is associated with the verb form, for enclitics, and it is associated freely with either the V or the VP node in the case of proclitics. That is, we propose that the placement rules themselves are crucial in determining which element the syntactic (f-structure) information is associated with.

To illustrate the placement and the syntactic specification, we return to the case of the coordinate structure. In LFG coordinate structures are treated as sets of f-structure. Information defined over the set itself is distributed into all the members of the set, while information defined only over a member of the set does not distribute in this way. This means, for example, that the SUBJ distributes in a case of VP coordinations such as *John sold francs and bought rupees* (Kaplan & Maxwell III 1988, Dalrymple & Kaplan 2001). As mentioned above, for the enclitic case, the affix is realised at the level of the V stem, and thus the syntactic information (represented here for convenience simply as  $(\uparrow\text{OBJPRED})=\text{PRO}$ ) is associated with the word form, ensuring that a pronominal suffix to the verb in the first conjunct contributes information only to the first conjunct (that is, does not distribute into the second, whereas a second pronominal affix would be required -see (15)):





In (39a), where the *f*-annotation appears on the VP node, the proclitic takes wide scope, and distributes into, each conjunct, as in (40). On the other hand, (39b), defines the *f*-structure represented in (38) above.



### 5.2 Proclitic Contexts

The default linearisation of object pronominal affixes in EP is postverbal (that is, as suffixes). As illustrated below, they immediately follow finite and non-finite lexical verbs :

- (41) a. O João deu-lhe o anel.  
the João gave-3.S.DAT the ring  
“João gave him/her the ring.”
- b. Tu compra-lo.  
2.S buy-3.S.M.ACC  
“You buy it.”

However when certain triggers appear preverbally, within the same clause, the pronominals also appear pre-verbally. The proclitic triggers include clausal negation (42a), certain aspectual adverbs (42b), *wh*-phrases (42c), focused phrases (42d), some quantifiers (42e), and sentential complementisers (42f), as shown in the examples below:

- (42) a. As crianças não lhes mostraram os presentes.  
the children not 3.P.DAT show the presents  
“The children didn’t show them their presents.”
- b. As crianças até o viram em casa.  
the children even 1.S.M.ACC see at home  
“The children even saw him at home.”
- c. Quantos livros nos compraste?  
how many books 2.P.DAT show  
“How many books did you buy us?”

- d. Dele se sabe pouco.  
of-him 3.REFLknow little  
“Very little it is that one knows about him.”
- e. Todos os adultos as esconderam meticulosamente.  
all the adults 3.P.F.AC hide meticulously  
“All adults hid them away meticulously.”
- f. O João sabe que os livros se vendem bem.  
the John knows that the books 3.REFL sell well  
“John knows that the books sell well.”

Proclitic placement is determined by the set of syntactic contexts, as shown above, but finding a common denominator for these contexts has proved problematic. Syntactic analyses have generally tried to identify configurational similarities by assuming most proclitic triggers of functional nodes within CP and/or (b) by using specific functional projections such as NegP and FocP to accommodate the effects of the negation marker and the preposed focus respectively (Madeira 1993), however there is little independent motivation for many of these assumptions. While a restricted subset of these constructions does seem to constitute natural classes (e.g. downward monotone quantifiers; see Crysmann (2001) for some insightful discussion of these cases), it is not plausible to try to extend these natural classes to encompass all proclitic triggers. In particular, although discourse informational effects are argued to be the main force driving object pronoun placement in EP (McConvell 1996), extending this to subordinating complementisers and conjunctions seems problematic. In our view, then, there is no functional, configurational or semantic/discourse explanation in the synchronic grammar for procliticisation in EP, and prefixal linearisation is a morphological reflex of an abstract syntactic feature, common to the set of syntactic construction types in (42). We suggest that the semantic core of this abstract syntax concerns the discourse notion ‘Non-Neutral’ and that the set of constructions is in the course of grammaticisation.

Formally, our proposal is to capture this by positing an abstract syntactic feature ( $\uparrow$ TYPE)=NON-NEUTRAL associated with the construction types which give rise to phrasal prefixation<sup>4</sup>. So for example, the structure for a negative clause such as (43)

<sup>4</sup> See Sells (2001) for extensive motivation of an abstract syntactic feature, TYPE=V2, which plays a similar role in selecting ‘special’ morphology in Swedish.

contains the (abstract syntactic) information  $TYPE=NON$  -NEUTRAL, which in turn requires the use of phrasal prefixation for pronominal objects:

- (43) O João não me deu o livro.  
 the João not 1.S.DAT gave the book  
 “João didn't give me the book.”

- (44)  $\left( \begin{array}{ll} \text{PRED} & \text{'give} \langle (\uparrow \text{SUBJ}) (\uparrow \text{OBJ}) (\uparrow \text{OBJ2}) \rangle \text{'}$   
 $\text{POL} & \text{NEG}$   
 $\text{TYPE} & \text{NON-NEUTRAL}$   
 $\dots$

The idea is that the “special” morphology is selected by placing the placement rules within the morphology proper in correspondence with the abstract syntactic information  $TYPE=NON$ -NEUTRAL, perhaps by means of a mapping constraint along the following lines <sup>5</sup>:

- (45) Proclitic-LR iff  $(\uparrow \text{TYPE}) = \text{NON-NEUTRAL}$

Under this view, then, preverbal placement is regarded as a case of marked morphology, i.e. the morphological expression of specific syntactic information. The idea that inflectional morphology may sometimes be just a marker for specific syntactic contexts is supported by cross-linguistic evidence from Somali. In this language, the restrictive and extensive conjugation paradigms are equivalent in all respects, except that the former is generally selected by clauses containing a subject focus (Lecarme 1991).

Finally, when two or more syntactic contexts trigger the same morphological alternation, they do not necessarily form a natural class. This observation is not only true for proclitic triggers in EP (cf. 41), but also for unrelated languages, such as Udi (Harris 2000, Crysmann 2000), Mudburra and Gurindji (McConvell 1996), where intriguingly similar syntactic constructions determine whether pronouns are replaced preverbally or postverbally. The fact that most of these contexts do not bear any clear relation with each other suggests that placement alternations constitute grammaticalised distinctions. As this paper has shown, the architecture of LFG permits a simple and intuitive analysis of the morphology-syntax interaction by assigning a common functional feature to marked constructions and by investing these contexts with the ability to select the relevant verb form.

<sup>5</sup> This is a rather simplified statement of the constraint. Of course, the Proclitic -LR is only applicable if the m-feature set contains object features.

## 6. Conclusion

In this study, we examined the conflicting morphosyntactic properties of preverbal pronouns in EP and argued that they offer serious problems to both purely syntactic and purely morphological analyses. Proclitics can neither be represented as independent syntactic elements nor can they be derived as typical head inflections, however cluster internal properties have clearly indicated that preverbal pronouns should be generated in the morphology. Using insights from previous work on phrasal affixation (Anderson 1992) and edge inflection (Halpern 1995), we argued that the distribution of preverbal pronouns strongly supports phrasal status. As such, the differences between preverbal pronouns in EP and Romance are captured quite simply by refining the standard assumptions about clitic placement, thus treating proclitics as phrasal inflections.

### References:

- Abeillé and D. Godard. 2000. French Word Order and Lexical Weight. The Nature and Function of Syntactic Categories, ed. by R. Borsley. San Diego: Academic Press.
- Ackerman, F. and P. Lesourd. 1997. Towards a lexical representation of phrasal predicates. Complex Predicates, ed. by A. Alsina et al. Stanford: CSLI.
- Ackerman, F. and G. Webelhuth. 1998. A Theory of Complex Predicates. Stanford: CSLI.
- Anderson, S. 1992. A-Morphous Morphology. Cambridge: CUP.
- Barbosa, P. 1996. Clitic placement in European Portuguese and the position of subjects. Approaching Second: Second Position Clitics and Related Phenomena, ed. by A. Halpern and A. Zwicky. Stanford: CSLI.
- Bresnan, J. 2001. Lexical Functional Syntax. Oxford: Blackwell.
- Crysmann, B. 1997. Cliticization in European Portuguese using parallel morpho-syntactic constraints. Proceedings of LFG97, ed. by M. Butt and T. King. CSLI: Stanford.
- Crysmann, B. 2000. On the Placement and Morphology of Udi Subject Agreement. Proceedings of HPSG2000, ed. by M. Butt and T. King. Stanford: CSLI.
- Crysmann, B. 2001. Clitics and Coordination in Linear Structure. Clitics in Phonology, Morphology and Syntax, ed. by B. Gerlache et al. Amsterdam: John Benjamins.
- Dalrymple, M. and Ron Kaplan. 2001. Feature Indeterminacy and Feature Resolution in Description Based Syntax. Language 74:4, 759-798.

- Halpern, A. 1995. *On the Placement and Morphology of Clitics*, Stanford, CA: CSLI.
- Harris, A. 2000. Where in the word is the Udiclitic? *Language* 76:3.
- Kaplan, R. M. and J. Bresnan. 1982. *Lexical Functional Grammar: a Formal System for Grammatical Representation*. *The Mental Representation of Grammatical Relations*, ed. by J. Bresnan. Cambridge, Mass: MIT Press.
- Kaplan, R. and John T. Maxwell III. 1988. *Constituent Coordination in Lexical-Functional Grammar*. *Proceedings of COLING '88*, Budapest.
- Kathol, A. 1995. *Linearization-based German syntax*. PhD. thesis, Ohio State University.
- Lecarme, J. 1991. Focus in Somali: Syntax and interpretation. *Linguistique Africaine* 7, 275-309.
- Luís, A. 2001. *An inflectional derivation of clitic clusters*. Paper presented at the Autumn Meeting of the Linguistics Association of Great Britain, University of Reading.
- Luís, A. and A. Spencer. (forthcoming). *A Paradigm-Function account of 'mesoclitis' in European Portuguese*. *Yearbook of Morphology*. Dordrecht: Kluwer.
- Madeira. 1993. Clitic-second in European Portuguese. *Probus* 5, 154-175.
- McConvell, P. 1996. *The Functions of Split-Wackernagel Clitic Systems: Pronominal Clitics in the Ngumpin Languages (Pama-Nyungan family, Northern Australia)*. *Approaching Second: Second Position Clitics and Related Phenomena*, ed. by A. Halpern and A. Zwicky. Stanford: CSLI
- Miller, P. 1992. *Clitics and Constituents in Phrase Structure Grammar*. New York: Garland.
- Miller, P. and I. Sag. 1997. French clitic movement without clitics or movement. *Natural Language and Linguistic Theory* 15:3, 573-639.
- Monachesi, P. 1999. *A lexical approach to Italian cliticization*. Stanford: CSLI Publications.
- Orgun, O. 1996. *Sign-Based Morphology and Phonology*. Unpublished PhD thesis, University of California, Berkeley.
- Sadler, L. and D. Arnold. 1994. *Prenominal adjectives and the phrasal/lexical distinction*. *Journal of Linguistics* 30, 187-226.
- Sadler, L. 1997. *Clitics and the structure-function mapping*. *Proceedings of the LFG97*, ed. by M. Butt and T. King. Stanford: CSLI Publications.
- Sells, P. 1998. *Scandinavian Clause Structure and Object Shift*. *Proceedings of the LFG98 Conference*, ed. by M. Butt and T. King. Stanford: CSLI Publications.

- Sells, P. to appear. Syntactic Information and its Morphological Expression. *Projecting Morphology*, ed. by L. Sadler and A. Spencer.
- Slovacchia, M. et al. 1995. Aspects of Discourse Configurability in Somali. *Discourse Configurational Languages*, ed. by K. Kiss. New York: OUP.
- Spencer, A. 1992. *Morphological Theory*. Oxford: Blackwell.
- Spencer, A. 2001. Verbal Clitics in Bulgarian. *Clitics in Phonology, Morphology and Syntax*, ed. by B. Gerlach et al. Amsterdam: John Benjamins.
- Stump, G. 1992. Position classes and morphological theory. *Yearbook of Morphology*, ed. by G. Booij et al. Dordrecht: Kluwer, 129-180.
- Stump, G. 2001. *Inflectional Morphology*. Cambridge: CUP.
- Toivonen, I. 2001. The Phrase Structure of Non-Projecting words. PhD thesis, Stanford University, CA.
- Yu, A. C. and J. Good. 2000. Morphosyntax of Two Turkish Subject Pronominal Paradigms. *Proceedings of the North East Linguistic Society 30*, ed. by M. Hirotsu, A. Coetzee, N. Hall and J. Kim, 759-773.