Second Position Clitic Pronouns in
Old Spanish and Categorial
Grammar

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Unlike their counterparts in modern Spanish (MSp, henceforth), nontonic object pronouns in Old Spanish (OSp, henceforth) \(^1\) are phonologically enclitic, and they require an element to their left commonly known as the EXORDIUM (cf. Wackernagel 1982). The left element may be the pronoun's verbal head, as in (1) below, but it does not need to be; a variety of nonverbal expressions can serve as the left element for the clitic pronoun, as illustrated in (2–5)\(^2\), where the clitic pronoun appears preverbally.

\(^1\) In OSp as well as MSp, nontonic object pronouns are customarily classified into three paradigms: (A) accusative, (B) dative, and (C) reflexive. The three sets are basically the same in both stages except for the second person plural form, which is as in MSp; it is vos in OSp. In this paper, I will be dealing primarily with accusative and dative clitic pronouns.

\(^2\) Clitic pronouns are shown in capital letters for clarity. Also, the symbol = is used to indicate the phonological liaison between the clitic pronoun and its host word.

Earlier versions of this paper were presented at the Linguistic Symposium on Romance Linguistics in El Paso, Texas, March 1992, and the Workshop on the Second Position Clitics at the Ohio State University, July 1993. I would like to thank Aaron Halpern, Manfred Križka, Dick Oehrle, Susan Steele, and Arnold Zwicky for their extremely helpful comments and suggestions on earlier versions. Thanks are also due to Elisenda Grigsby, Naomi Lindstrom and Stephen Raulston for their help in the preparation of this manuscript. All errors are, however, mine. Finally, I am grateful to Josep M. Fontana and Dieter Wanner, who kindly made their work on OSp clitics available to me. This research was partially supported by the University of Texas at Austin summer research award granted in 1992.
In these examples, the pronoun appears in the apocopated form -l instead of in its full forms le or lo.³ This gives evidence that OSP non-locative pronouns phonologically attach to the word that precedes them, and not to the verb that follows them. Looking at the examples given above, OSP clitic pronouns seem to conform to the famous Wackernagel’s Law: Nontonic pronouns and particles appear as the second word of a sentence (cf. Wackernagel 1892). However, this is not always the case, since the left element can also be comprised of a phrasal expression, as in (6) and (7) below.⁴ In these instances, the clitic pronoun phonologically attaches to the rightmost word of the left element.

³In OSP, clitic pronouns ending in -e, or -o, i.e., me (1sg), te (2sg), le (dat, 3sg), lo (acc, 3sg) and se (refl), are subject to apocope. Orthographically, an apostrophe is used in some texts between the host and the apocopated pronoun as in (i); in others no apostrophe is used as in (ii).

⁴Halpern (1992) distinguishes two kinds of second position clitics: (A) 2W clitics, which appear as the second word of a clause, and (B) 2D clitics, which appear as the second daughter (constituent) of a clause. Clearly, OSP clitics pronouns are of the second type, since they do not exercise the option of appearing as the second word as in *una ferida=L dava.

In this example, the clitic pronoun appears in the apocopated form -l instead of in its full forms le or lo.⁵ This gives evidence that OSP non-tonic pronouns phonologically attach to the word that precedes them, and not to the verb that follows them. Looking at the examples given above, OSP clitic pronouns seem to conform to the famous Wackernagel’s Law: Nontonic pronouns and particles appear as the second word of a sentence (cf. Wackernagel 1892). However, this is not always the case, since the left element can also be comprised of a phrasal expression, as in (6) and (7) below.⁶ In these instances, the clitic pronoun phonologically attaches to the rightmost word of the left element.

⁵According to Wanner (1991), interpolation occurred most frequently in the late 13th century and all throughout the 14th century. It started to decline in the 15th century and disappeared completely in the 16th century.

⁶In my view, the difference between interpolation and clitic climbing lies solely in that the former involves nonverbal elements while the latter involves verbal elements. Clitic climbing is not considered to be an instance of interpolation in philosophy since the clitic is adjacent to a verb. As demonstrated in Rivero (1986), both interpolation and climbing are also possible with full NPs.

⁷Though clitic climbing is also observed in MSP, there are some fundamental differences in the two stages. See Wanner (1982) and Rivero (1991) for detailed discussions and analyses.
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(12) Et aesta pregunta que=ME [agora] fazaes, And to this question that=ME [now] you do que cosa son los angeles what thing are the angels
"And with regards to this question you ask me now, what thing are the angels"
(Cav. et Esc. 470, 9; Chenery 1905: 115)

(13) ca sy=LA [yo avn non] veo yo morre then if=HER [I still not] see I will die
"then if I still do not see her I will die"
(SME 494; Wanner: 1991: 345)

(14) non=LES [querén] tornar palabra not=THEM [they wanted] return word "they did not want to respond to them" (Cid 4)

Like their modern counterparts, clitic pronouns in OSp may also appear in clusters as in (15).

(15) (e ruégo=VOS=LO yo >>) que=GE8=LO digades.
(and I beg=YOU(pl)=IT that=HIM=IT you(pl) tell (and I beg you for it -) that you tell it to him (Cid 102)

The comparison of this example with (2) shows the parallel distribution of clitic clusters and single clitics. Clearly, the two clitics ge and lo here behave as a unit, and together they affix to the complementizer preceding them.

Recently, three researchers, namely, Rivero (1986 & 1991), Wanner (1991 and 1992), and Fontana (1993), have proposed analyses of clitic pronouns in OSp within the Government and Binding theory (GB theory, henceforth). In keeping with the theoretical assumptions made within this framework, they adopt multilevel analyses in order to account for the syntactic, semantic, and phonological properties of clitic pronouns in OSp. For instance, Rivero and Fontana derive strings like (10) as in (16); all the irrelevant details are omitted. LEVEL 1 represents the abstract structure where the object pronoun forms a syntactic constituent with its verbal head. MOVE-α extracts the pronoun from the VP and places it immediately to the right of the phonological host word by adjoining it to a neighboring node; a trace is left behind in the object position. The result is Level 2. Finally, the rule of cliticization maps Level 2 to Phonological Form by attaching the pronoun to the preceding word.

(16) SYNTAX - LEVEL 1: [si [non [acorria LOS]]]

MOVE-α

SYNTAX - LEVEL 2: [si [LOS_i [non [acorria t_i]]]]

Phonotization

PHONOLOGY: [si=LOS non acorria]

This paper proposes an analysis using flexible categorical grammar that includes functional composition and type-raising (harmonic) in addition to function/argument application. I postulate that all strings containing clitic pronouns are derived as in (17).

(17)

\[
\begin{array}{c}
\text{L.E.,} \\
W_1 \ldots W_n = \text{CL}^* \\
\end{array}
\]

\(W_1\ldots W_n = \text{CL}^*\)

\(\text{L.E.}\)

\(\text{W}_1 \ldots \text{W}_n = \text{CL}^*\)

\(\text{L.E.: left element, W: word, CL*: a single CL or a cluster of CLs}\)

In syntax, a CL* first combines with the left element, and the resulting expression combines with the expression to the right. After all the elements are concatenated, the CL* phonologically attaches to the rightmost word of the left element. Thus, (10) will be derived as in (18).

(18) SYNTAX: [[si LOS] [non acorria]]

Cliticization

PHONOLOGY: [si=LOS non acorria]

Here, the left element is comprised of only one word; thus, the clitic attaches to this element itself. My analysis differs crucially from GB analyses in that it requires no abstract syntactic level or movement metaphor. In categorial grammar, the interpretation can be obtained directly from the surface structure. As we shall see later, the clitic
pronoun is thematically linked to its verbal head, although these two elements need not combine directly.

In categorial grammar, every expression of a language is assigned to one or more categories in accordance with its syntactic and semantic properties, and two types of categories, i.e., atomic and functor categories, are commonly used for linguistic analyses. Each language contains a small finite set of atomic categories, and I assume that OSP includes, among others, categories like NP and PP as well as PR (p(osition)), defined as a set of expressions comprised of an inflected verb and its required complements. Functor categories are represented as X/Y or Y/X; they combine with Y to the right or left, respectively, and yield X. X and Y may represent atomic or functor categories. For instance, in OSP, inflected transitive verbs belong to CAT PR/NP since they can take an object NP to the right and yield a PR. Expressions are combined by functional application, schematized as X/Y Y → X, as well as functional composition, schematized as X/Y Y/Z → X/Z, both in the rightward version.

I assume that, like complement NPs, accusative (ACC, henceforth) or dative (DAT, henceforth) clitics in OSP instantiate verbal complements. However, unlike complement NPs, clitic pronouns unmarkedly appear in a preverbal position, preceded by a nonverbal element (cf. (2–5)). From this, I assign ACC and DAT clitics to type-raised functor categories of the form Z(X/Y), which take Z to the left and Y to the right, and yield X. Here, Z is the nonverbal left element for the clitic pronoun, Y is a verbal expression lacking the complement to be instantiated by the clitic pronoun, and X is a clausal expression comprised of Z, CL and Y. Using a polymorphic category, it is possible to generalize all the nonverbal expressions that can serve as the left element for the clitics. Thematically, clitic pronouns are interpreted as verbal complements just like full NPs.

The expression appearing to the right of the clitic pronoun may be headed by an element that is not the clitic’s governing verb (cf. (10–14)). The use of function composition allows non-constituent expressions like no acorria “he did not help” in (10) to assemble into a single expression, with which the clitic pronoun can combine by function/argument application.

Strings where the clitic pronoun appears postverbally are accounted for by applying harmonic type-raising, schematized as X → Y/(Y/X), to the verb, whose effect is similar to verb movement from I-to-C in GB analyses. As its category is shifted, the verb can combine with the clitic pronoun to its right by functional application.

Finally, clitic clusters are formed in the lexicon by functional com-

position, and they bear similar categories to those assigned to simple clitics.

Though my analysis may have certain affinities with the GB analyses, it has one advantage over them. It can explicate the syntactic distribution of clitic pronouns in OSP in terms of one general principle, as stated in (19).

(19) Clitic Pronouns in OSP occupy the second position within a syntactic domain D, i.e. [D Z CL* (Y)], where Z and Y are strings assigned to syntactic categories; CL* represents a single clitic or a cluster of clitics.

This paper is organized as follows. Section 1 outlines the theoretical framework adopted in this paper. Section 2 presents a partial description of the categorial lexicon of OSP, where we take certain expressions and assign them to appropriate categories. Section 3 proposes a categorial analysis of clitic pronouns in OSP. In this paper, I focus exclusively on the distribution of clitic pronouns in finite clauses. Section 4 discusses some consequences and implications of this study, and section 5 gives a description of the historical shift from OSP to MSP with regards to the properties of clitic pronouns. The appendix provides a summary of the grammar fragment of OSP proposed in this paper.

1 Theoretical Framework: Categorial Grammar

Different versions of categorial grammar have been used for linguistic analyses. Nevertheless, there is one common ground for all versions. Categorial grammar consists of two components: (a) a categorial lexicon, where every vocabulary of a language is associated with one or more categories, and (b) a set of reduction (syntactic) laws. The major difference among various versions lies in the types of reduction laws included. Below, I will describe the types of categories and reduction laws used in this paper.

1.1 Categories

Categories are thought to be indices for sets of expressions. The set of categories (CAT) that are to be included in a language are defined in terms of a small finite set of atomic categories (BASCAT) and a finite set of category-forming connectives (CONN) as in (20).

(20) CAT: Definition

a. BASCAT is a subset of CAT, and
b. if X, Y are members of CAT, and || is a member of CONN, then (X||Y) is a member of CAT.
Let us imagine a language whose BASCAT consists of the set \{A, B, C\}, and whose CONN consists of the set \{/, \} (right-division and left-division). Following (20), this language will include categories of the forms \(X/Y\) and \(Y \backslash X\) in addition to BASCAT. Here, \(X\) and \(Y\) may represent atomic categories; thus, \(A/B\), \(C/A\), \(C/B\), \(B\backslash A\), etc., are members of CAT. However, \(X\) and \(Y\) may also represent complex categories; thus, \((C/A)/B\), \((C/A)/(B\backslash A)\), etc., are also members of CAT. Theoretically, an infinite number of categories can be created for this language; however, the number of possible categories for a natural language is obviously finite.

Categories of the form \(X/Y\) or \(Y \backslash X\) are called functor categories, and expressions assigned to this type of category are thought to be functions from the set indexed by CAT \(Y\) (=domain) into the set indexed by CAT \(X\) (=range). In grammatical terms, the symbols \(X/Y\) and \(Y \backslash X\) mean that the combination of expressions that belong to these categories with expressions of CAT \(Y\) (=argument) yield expressions of CAT \(X\) (=result). The direction of the slash indicates whether the functor finds its argument to its right or its left; \(X/Y\) is rightward-looking and \(Y \backslash X\) is leftward-looking. In addition, I will use nondirectional functor categories represented as \(X/Y\) or \(Y \backslash X\). The functor/argument relation in categorial grammar is somewhat comparable to the head/complement relation in phrase structure grammar.

What kind of expressions belong to atomic categories and what kind to functor categories? Let us look at some examples from English. Traditionally, the set of atomic categories in English includes, among others, NP and S. Verbs that take a complement belong to functor categories. Consider any transitive verb in English. It takes an object NP to its right, and the result is an expression that takes a subject NP to its left to yield a sentence (disregarding tense, for the moment). Thus, the verb *love*, for instance, can be assigned to a syntactic category as in (21).

\[
\text{(21) love} \quad \text{(NP} \backslash \text{S)/NPobj)}
\]

The thematic interpretation of functor categories is represented in the lambda notation. (22) shows the interpretation of *love*.

\[
\text{(22) } \lambda v_1 \lambda v_2 [\text{love}(v_1)(v_2)]
\]

Here, \(v_1\) and \(v_2\) are variables each bound by a lambda operator, which correspond to the object NP and the subject NP, respectively.


12For the rest of the paper, the syntactic and the thematic representations are shown separately.
Functional composition, in contrast, combines two functor categories and yields a new functor category, as in (25) below, shown in rightward and leftward versions.

(25) Functional Composition (Abbreviated as “C”)

a. Rightward C

\[
\begin{align*}
X/Y: \lambda v_1[p(v_1)] & \quad Y/Z: \lambda v_2[q(v_2)] \\
C & \quad X/Z: \lambda v_2[\lambda v_1[p(v_1)](q(v_2))] \\
& \quad \rightarrow \lambda v_2[p(q(v_2))]^{13}
\end{align*}
\]

b. Leftward C

\[
\begin{align*}
Z\backslash Y: \lambda v_2[q(v_2)] & \quad Y\backslash X: \lambda v_1[p(v_1)] \\
C & \quad Z\backslash X: \lambda v_2[p(q(v_2))]
\end{align*}
\]

In the above rule schema, as the primary functor, X/Y or Y\X, combines with the subordinate functor, Y/Z or Z\Y respectively, the common element found as the domain of the former and as the range of the latter, Y, gets cross-canceled, and the result is a new functor category, X/Z or Z\X. To see the effect of Composition, compare (26) and (27), where a, b, and c stand for actual expressions, and X/Y, Y/Z and Z, respectively, are the categories assigned to them.

(26) \[
\begin{align*}
a & \quad [b \quad c] \\
X/Y & \quad Y/Z \quad Z
\end{align*}
\]

(27) \[
\begin{align*}
[a \quad b \quad c] & \quad X/Y \quad Y/Z \quad Z \\
A & \quad X/Z \quad C
\end{align*}
\]

For a grammar in which Application is the only combinatory rule, the string comprised of a, b, and c can only be constructed by first combining b and c and then adding a to this complex expression, as in (26). However, once Composition becomes available, the same string can be constructed by first combining a and b and then adding c to this complex expression, as in (27). Composition can combine two elements that do not form a traditional constituent, i.e., a and b; it can account for phenomena involving “extraction” in generative grammar without using movement.\(^{14}\)

13Here the first formula is reduced to the second formula by lambda conversion, where \(v_1\) is replaced by \((q(v_2))\).

14See Ades and Steedman (1992), Steedman (1985 and 1991), Dowty (1988), Jacobson (1990), Bayer (1991), and Oehrle (1991), among others, for illustrative examples of how Composition can offer an elegant analysis of certain extraction facts. See also Hoekema (1989) for arguments against Composition.

15The version of categorial grammar based on Lambek Calculus (cf. Lambek 1958) includes two other unary laws, division and associativity/swapping. See Moortgat (1988) and Oehrle (1991), among others, for the application of these two laws.

1.2.2 Unary Laws

In addition to the combinatory rules, the flexible categorial grammar used in this paper includes a unary law, type-raising. Its disharmonic variety is shown in (28).\(^{15}\)

(28) Type-Raising (Disharmonic-Abbreviated as “R”)

\[
\begin{align*}
X: a & \quad R \\
(Y/X)\backslash Y: \lambda v[v(a)]
\end{align*}
\]

To see the effect of type-raising, observe (29).

(29) \[
\begin{align*}
Y/X & \quad X \\
R & \quad (Y/X)\backslash Y \\
& \quad A
\end{align*}
\]

Type-raising takes the argument category and turns it into a functor category that takes the original functor as its argument. In this paper, I use a harmonic variety of type-raising, as formulated in (30).

(30) Type-Raising (Harmonic-Abbreviated as “Rh”)

\[
\begin{align*}
X: a & \quad Rh \\
Y/(Y/X): \lambda v[v(a)]
\end{align*}
\]

Observe the effect of the harmonic type-raising in (31).

(31) \[
\begin{align*}
X & \quad Y/X \\
Rh & \quad Y/(Y/X) \\
& \quad A
\end{align*}
\]

Different from the regular type-raising as in (29), the harmonic kind takes the argument category appearing on the opposite side of what the functor dictates and turns it into a functor category that takes the original functor as its argument. Unary laws like type-raising are used to resolve categorial incoherencies between two expressions. As we shall see, in the analysis of OSp given here, type-raising, unlike Application and Composition, is not a free syntactic rule: its application is restricted to certain syntactic categories.
2 The Categorial Lexicon in Old Spanish

In this section, I will present a partial description of the categorial lexicon in OSP by assigning verbs, clitic pronouns, and some other expressions to categories. First of all, I assume that OSP includes atomic categories such as N, NP, A, and PP. However, instead of the commonly used S, I use several "projections" or levels of the atomic category PR(oposition), i.e., PR, PR', PR" and PR‴. Let us first define CAT PR as in (32).

(32) CAT PR(oposition)

Expressions assigned to CAT PR must minimally contain the following elements:

a. a verb,
   
   b. required complement(s) of the verb,
   
   c. specification for [finite], and
   
   d. person/number (subject) value.

In brief, a PR(oposition) has an inflected verb and its required complement. I assume that verbs in the nonfinite forms, i.e., infinitive, gerundive, and imperative, are also inflected. I will specify different types of PRs by subscripts only when needed.

CAT PR' is defined as a set of constructions containing a PR and a negative word, as in (33); CAT PR" is defined as a set of constructions containing PR' (or PR, see (42) below) and a lexical subject, as in (34).

(33) [PR' NEG [PR ... ]]
(34) [PR" SUBJECT [PR' ... ]]

CAT PR‴ will be defined in section 3.3.1 below.

Inflected verbs take whatever complements for which they subcategorize, and the result is a PR; thus, they are assigned to various fractional categories of PR or PR itself, if intransitive. However, before we look at some examples, we need to settle one question: Should complement-taking verbs in OSP be assigned to directional or nondirectional functor categories? A phrasal complement in OSP can appear both in the postverbal and preverbal position as exemplified in (1) and (6) above, respectively. Rivero (1986 and 1991) postulates underlying free word-order for the verb and its complement, whereas Wanner (1991) and Fontana (1993) postulate underlying V0 order. I assume that the unmarked position for the phrasal (or clausal) complement in OSP is postverbal and I assign complement-taking verbs to rightward-looking functor categories. Thus, verbs are assigned to CAT PR, PR'/x, or (PR/x)/y, as shown in (35), where x and y represent the complement for which they subcategorize.

(35) a. morre "I will die"
   
   PR:  morre- (u{1sg})

b. acorrias "you(sg), helped"
   
   PR/ACC:  aacor- (acc)(u{2sg})

c. queríen "they wanted"
   
   PR/PRinf:  línf [quer- (inff)(u{3pl})]

   d. tornar "to return"
   
   (PR/DAT)/ACC:  ñace[dat](torn- (acc)(dat)(u{PN}))

ACC and DAT in (a) and (b) are abbreviations for accusative NPs and dative NPs, respectively. All these verb forms are inflected; in their thematic representations, there is a free variable, u, specified for person and number, representing their subject argument. OSP is a null-subject language, and the lexical subject is not always present in the finite clause. Following Steele's proposal (1989) for Luiseno, I postulate that the subject argument in Spanish is fully instantiated by the person/number value marked in the verbal inflection and the lexical subject. In the absence of the latter, the former partially instantiates the subject argument in the form of a free variable.

Turning to clitic pronouns, I assume that, like ACC and DAT NPs, ACC and DAT clitic pronouns instantiate the ACC and the DAT arguments of the verb, respectively. However, I will not assign clitic pronouns to CAT NP proper, since they take a different structural position from complement NPs. As discussed above, the unmarked

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17I assume, however, that the unmarked position for clitic pronouns is preverbal (see discussion below). Wanner and Fontana, in contrast, postulate that the underlying position for clitic pronouns is also postverbal.

18The person/number value for the nonfinite verb, as in (35d) above is unspecified, which I represent as (PN).

19The inflected verb should contain information on the temporal property; however, it will not be in the semantic representation for the sake of simplicity since it is not crucial.

20See (39) for the definition of the lexical subject. For the remainder of the paper, the subject argument will be ignored in the thematic representation of inflected verbs unless it is crucial. Thus, acorrias, for instance, would simply be represented as: aacor- (acc).  

21Fontana (1992) observes that unlike in MSp, clitic doubling (=existence of a lexical object and its coreferent clitic) is almost non-existent in OSP, and that a tonic pronoun can also instantiate the object argument by itself.

22Moreover, the syntactic distribution of clitic pronouns is much more restricted than that of complement NPs. In the first place, while preposed full NPs can appear in the clause initial position, clitic pronouns cannot. In the second place,
syntactic position for complement NPs is postverbal. I postulate that	he unmarked syntactic position for clitic pronouns is preverbal. In
order to capture the semantic similarity as well as the syntactic differ-
cence between clitic pronouns and complement NPs, let us assign the
former to type-raised categories of NP, analogous to NP complement
categories proposed by Steedman (1985). Starting with ACC clitics,
they can combine with verbs that take an ACC complement alone and
yield PRs. They can also combine with verbs that take an ACC and
one other complement; the resulting expressions take this extra com-
plement and yield PRs. Thus, ACC clitics can be assigned to the
polymorphic category as in (36), which contains the variable x.

(36) ACC Clitic Pronouns: Category Assignment

\[(PR/x)/(PR/ACC)\]  
\[\lambda v[v(x)] if x=\phi; otherwise \lambda v[\lambda v_1(v_1(a))(v_2)]\]

where i. The variable x ranges over types of comple-
ments compatible with an ACC argument, such as
DAT, LOC, PRinfl, etc.; x may be null;
ii. (a) is one of the items from the set containing
ACC clitics, i.e. me, te, lo, la, nos, vos, los, las.

DAT clitics can be assigned, as shown in (37) below, to a polymor-
phic category analogous to the one assigned to ACC clitics.

(37) DAT Clitic Pronouns: Category Assignment

\[(PR/x)/(PR/DAT)/x)\]
\[\lambda v[v(x)] if x=\phi; otherwise \lambda v[\lambda v_1(v_1(v_2))(a)]\]

A sentence may contain more elements than just a verb and its
complements, such as a negative word, a lexical subject, or an adver-
bial, as shown in (3), (5), and (4), respectively. Let us now see to what
categories these expressions belong. We have seen above that the
addition of a negative word to a PR yields a PR' (cf. (33)), and that the
addition of a lexical subject to a PR' yields a PR'' (cf. (34)). Thus, the
negative word and the lexical subject can be defined as functions from
PRnst into PRn, where n is 2 or 1. (38) shows the category assigned
to the negative word.

(38) Negative Word: PR'/PR: \lambda u[\lambda o(v)]

The lexical subject will be assigned to a similar functor category;
however, the thematic representation will be different. As we have
seen in (35) above, each inflected verb contains a free variable in its
thematic representation, partially instantiating the subject argument.
I assume that, as a lexical subject is incorporated into a string, it fully
instantiates the subject argument by replacing the free variable. Let
us define the lexical subject as in (39).

(39) Lexical Subject

PR'' [PR': \lambda u[\lambda a[v][a]]\] where u and a are compatible.

The subject pronoun yo "\textit{It}, for instance, will be thematically represen-
ted as \lambda u[\lambda u[v][y]]\. This lambda term simply means that as u
is replaced by a proposition containing a free variable (\textit{\textasciitilde}=u),
this variable is replaced by the lexical subject, yo. Naturally, this process
only takes place on the condition that the lexical subject and the variable
instantiates are compatible in feature-values. See (77) and (79) for the
derivation of (13), which contains a lexical subject.

Next, I assume that adverbials (which include adverbs, adverbal
phrases/clauses, and PPs with an adverbial function) are endocentric
functions\textsuperscript{27} from PRnst into PRnst, where 0 ≤ n ≤ 2. As shown in (40)
and (41), the value for n varies depending on the type of construc-
tion they modify, and the direction of the slash depends on where they
appear with respect to the expression they modify. The thematic rep-
resentation of adverbials is the same for all types.

\textsuperscript{23} a clitic pronoun cannot be separated from the verb when appearing in its right
environment of V, but a full object NP can.

\textsuperscript{24} This category assignation will later be modified. See (59) and (78) below.

\textsuperscript{25} I assume that clitic pronouns are assigned to type-raised categories in the lexicon;

\textsuperscript{26} these categories are not derived, lexically or syntactically, from NPs by applying the

\textsuperscript{27} second for ditransitive verbs. The thematic representations of the two sets of clitic

\textsuperscript{28} Note that the thematic category assigned to DAT clitics is slightly different from

\textsuperscript{29} Note that the syntactic category assigned to DAT clitics is slightly different from

\textsuperscript{30} Note that the syntactic category assigned to DAT clitics is slightly different from

\textsuperscript{31} There are two types of functor categories: Endocentric (endotypical) and exocen-

\textsuperscript{32} CAT PR/ACC (=transitive verb) is an example of an exocentric category.
As shown in (a), this string is derived by the successive use of Application. First, the verb combines with the ACC complement, and the DAT clitic combines with this complex expression. Subsequently, the adverb is added to the string. As shown in (b), the pronoun is thematically interpreted as the argument of the verb, though in syntax, their relationship is reversed.

There is one problem with the analysis presented in (43), i.e., we cannot block the derivation of strings where the clitic pronoun appears in the clause-initial position as shown in (44).

\[
\begin{array}{c}
\text{LE} \quad \text{HIM} \\
\text{LE} \quad \text{HIM} \\
\text{PR/PR'} \\
\text{PR/PR'} \\
\text{PR/PR'} \\
\end{array}
\]

3 Analysis

3.1 CLs in the Left Environment of V

3.1.1 Preliminary Analysis

Let us examine how strings with the CL appearing in the left environment of V can be constructed. Observe (43) for the derivation of (4).

\[
\begin{array}{c}
\text{Asy} \quad \text{LE} \\
\text{HIM} \\
\text{PR/PR'} \\
\text{PR/PR'} \\
\text{PR/PR'} \\
\end{array}
\]

As shown in (a), this string is derived by the successive use of Application. First, the verb combines with the ACC complement, and the DAT clitic combines with this complex expression. Subsequently, the adverb is added to the string. As shown in (b), the pronoun is thematically interpreted as the argument of the verb, though in syntax, their relationship is reversed.

There is one problem with the analysis presented in (43), i.e., we cannot block the derivation of strings where the clitic pronoun appears in the clause-initial position as shown in (44).

\[
\begin{array}{c}
\text{LE} \quad \text{HIM} \\
\text{PR/PR'} \\
\end{array}
\]

This string is categorically complete, i.e., a PR, yet it is ill-formed. How can strings like this be ruled out? Halpern (1992), dealing with second position clitics in various languages, argues that strings like this are well-formed syntactically but ill-formed prosodically, because the clitic, prosodically subcategorized as [=CL], lacks a host to which it can attach. Halpern proposes that, when such a situation arises, the clitic switches positions with the word immediately to the right (prosodic inversion). In OSp, strings like (44) cannot, however, be ruled out solely on prosodic grounds. As shown in (45), the same string will still be ill-formed even when there is a word, the coordinating conjunction et “and”, to the left of the clitic pronoun.

\[
\begin{array}{c}
\text{LE} \quad \text{HIM} \\
\end{array}
\]

One may argue that the coordinating conjunction et cannot (for whatever reason) serve as a phonological host for the clitic. However, this is incorrect since it can host a clitic, as shown in (46), when conjoining two subordinated clauses.

\[
\begin{array}{c}
\text{Si} \quad \text{bien} \quad \text{a} \quad \text{de} \quad \text{seer} \\
\text{quieres} \quad \text{prestar} \\
\end{array}
\]

In (46), there is an elliptical adverbial conjunction si after the coordinating conjunction. We can assume that si is present in the syntactic

---

28Alternatively, we can first combine the DAT clitic with the verb and add the ACC NP later.
structure but later deleted as a stylistic process. In (45), on the other hand, there is no elliptical element introducing the clause, and the clitic is in the clause initial position syntactically. Therefore, strings like (44) need to be ruled out on the syntactic grounds such that a clitic pronoun in OSp requires a syntactic left element. Naturally, one way to block strings like (44) is to encode the requirement for a left element in the subcategorization frame of clitics. This can be achieved by assigning clitics to functor categories of the form $Z/(X/Y)$, where $Z$ stands for the nonverbal left element for the clitic pronoun, $Y$ an expression missing the complement to be instantiated by the clitic pronoun, and $X$ a clausal expression comprised of $Z$, CL, and $Y$. For instance, DAT clitics will be assigned to $CAT Z/(X/((PR/DAT)/y))$. Let us now determine the values for $Z$ and $X$, and revise the categories assigned to clitic pronouns.

### 3.2 Nonverbal Left Element and Its Category Assignment

Ramsden (1963) lists 13 classes of expressions that can serve as the exordium, or left element, for the clitic. Excluding verbs, they can be reclassified into three major groups, as shown in (47).

(47) Nonverbal Left Element

(A) Type 1: “Head or Spec of CP” in GB terms
   a. complementizers
   b. Interrogatives
   c. relative pronouns/adverbs
   d. adverbial conjunctions

(B) Type 2: Constituents within the “IP” domain
   a. Negative word
   b. Lexical subject
   c. Adverbials
   d. Non-clausal preverbal complements of the verb, such as NPs and PPs

(C) Type 3: Coordinating Conjunctions

Left Element Type 1 comprises expressions which stand as the head or the Spec of CP in GB terms, as exemplified in (2)—repeated below—and (48)—(50).

(2) (rogó=L) qe=L perdonasse lo
   (he.begged=HIM) that=HIM he.forgive that
   que avie errado
   which he.had erred
   “(he begged him) to forgive him what he had erred” (Mil 232c)

(48) ¿Por qe=ME non recudes?
   for what=ME not you.answer
   “Why do you not answer me?” (Mil 293c)

(49) lo que=L conviene
   that which=HIM is.convenient
   “what is convenient to him” (Por 33)

(50) quando=L vieron assomar
   when=HIM they.saw appear
   “when they saw him appear” (Cid 83)

Let us begin with complementizers, introducing a new category $C$ (causal $PR$ (oposition), which is defined as a set of constructions comprised of a complementizer and a $PR$). Then, a complementizer as in (2) can be assigned to the functor category shown in (51) below.

(51) Complementizer $q(u)e$ “that” $CAT CPR/PR$

I assign Wh-questions to $CAT PR$ since they must contain a $PR$ and may contain a lexical subject. There are non-interrogative sentences that also belong to $CAT PR$ so Wh-questions will be marked with $[Q]$ to distinguish them from non-interrogative sentences. Then, the adverbial Wh-phrase in (48) will be assigned to the functor category as in (52).

(52) Interrogative $por$ qué “why” $CAT PR'[Q]/PR$

Relative pronouns take, to their right, a clausal expression that lacks a complement (but may contain a lexical subject), and an NP to their left; the result is an NP. The ACC relative pronoun, $que$, for example, is defined as in (53).

(53) Relative pronoun $que$ “which” $CAT (NP[NP]/(PR’)/ACC)$

Adverbial conjunctions take a $PR$ to the right, and another $PR$ to either side, and yield a $PR’$. Thus, they are assigned to the category as in (54).

(54) Adv. Conjunction $cuando$ “when” $CAT (PR' [PR'])/PR$

Looking at (51–54), we can conclude that the exordial expressions of Type 1 can all be generalized as $CAT W/(PR’)/x$, where $W$ ranges over $CPR$, $PR’[Q]$, NP, and $PR'/PR'$, and $x$ ranges over ACC or null.

Left Element Type 2 consists of expressions that are constituents within the “IP” domain in GB terms. As we have seen, the negative word and the lexical subject belong to $CAT PR’/PR$ and $CAT$

---

29 This means that a Wh-question can also stand as an argument to a complementizer, and as has been observed (cf. Plant 1982, Suñer 1991, etc.) this is correct for MSp. I assume that this is also correct for OSp.
PR''/PR', respectively, and adverials belong to CAT PR''/PR', where n is 1 or 2. To generalize, they belong to CAT W/PR'n, where W=PR'' or PR' and 0≤n≤2.

To what categories should we assign preverbal complement NPs and PPs, as in (6) and (7), respectively, repeated below?

(6) una ferida=L dava
    a wound=IT he.gave
    "he gave it a blow" (Cid 4)

(7) Por Dios de todos=LO terne
    as god of everybody=HIM I have
    "I will hold him god of everybody" (Auto 18)

Following the fixed word-order assumption, preverbal complements are considered to be fronted with respect to their verbal head; hence, they should bear categories different from those appearing postverbally. Following Steedman (1985) and Hoeksema (1989), let us assume that there is a syntactic rule, Complement Fronting, that assigns fronted complements to type-raised categories, as in (55) below. This rule is based on the harmonic Type-Raising as in (30) above.

(55) Complement Fronting
Z: a →((PR''/FR')/y)/((PR''/y)/Z):

λv[α](y) if y is null;

λv1λv2[λv1(v2)(a)] otherwise

where Z = NP or PP, and y may be null.

Hoeksema (1988) calls this type of rule TOPICALIZATION. It is unlikely that there is a discourse function associated with the preverbal complement in OSP. (cf. Fontana 1993). Nevertheless, I mark PR's containing a fronted complement with the feature [FR]. When serving as the left element for a clitic, the fronted complement must bear CAT PR''/(PR''/x), where x is NP or PP.

To summarize, nonverbal exordial expressions of Type 1 and 2 can be generalized as in (56).

(56) Left Element for a CL in OSP:
CAT W/(PR''/x)
where W = CPR, PR'', PR''/Q, PR''/[FR], PR', NP/np or PR''/PR', 0≤n≤2, x=NP, PP, or null.

Left Element Type 3 contains coordinating conjunctsions, as in (46) and (57).

(46) Si bien a de ser e=ME quieres prestar
    if well as of be and=ME you.want.to.lend
    "If it is fine and you want to lend me" (Mil 842a)

(57) si=S murio o=L matarón
    whether=HIMSELF he.died or=HIM they.killed
    "whether he died or they killed him" (Mil 842b)

As discussed earlier, the coordinating conjunctions in these sentences do not serve as the syntactic left element for the clitic. The fact that a clitic can never appear to the right of a coordinating conjunction if the latter conjoins two root clauses indicates that coordinating conjunctions such as e(t) "and" and o "or" cannot serve as the syntactic left element. Steedman (1985) and Oehrle (1991) handle coordinating conjunction syncategorematically, i.e., without assigning them to any category. Steedman (1985), for instance, formulates the rule of coordination as in (58) below:

(58) X+ CONJ X →X^30
(Where X is any category; "+" means one or more;
CONJ stands for conjunctions like and.)

In other words, coordinate conjunctions do not belong to the general category W/(PR''/x) as in (56), and this is exactly the correct result.

In conclusion, any nonverbal expression that can stand as the syntactic left element for the clitic in OSP belongs to the generalized category shown in (56) above.

3.2.1 Categories for CLs Revisited
With the left element assigned to a generalized category, ACC and DAT clitics can be newly assigned to the categories in (59a) and (b), respectively.

(59) Clitic Pronouns: Category Assignment (Revised)^31
a. ACC Clitics
(W/(PR''/x))\(W/((PR/x)/ACC)):
λv1λv2[v1(v2(a))] if x ≠ φ;
otherwise λv1λv2[v1(λv2[(v2(a))(v3)])]

b. DAT Clitics
(W/(PR''/x))\(W/((PR/DAT/x)): λv1λv2[v1(v2(a))] if x ≠ φ;
otherwise λv1λv2[v1(λv2[v2(v3)(v3)])]

Where W = PR', PR'', CPR, NP|NP, or PR''/PR'', 0≤n≤2;
x=NP, PP, or null.

^31It is possible to assign coordinating conjunctions to a polymorphic category like (λ\(y\)/y). Then coordinating conjunctions linking two clauses would be assigned to (PR''/PR''). Thus, they would also belong to the generalized CAT W/(PR''/x), where W=PR''/PR'. However, this analysis would make the wrong prediction. Thus, the data from OSP gives additional support to a syncategorematic treatment of coordinating conjunctions proposed by Steedman (1985) and Oehrle (1991).
These categories indicate that clitic pronouns appear second to an expression of CAT W/(PR''/x) within a construction of CAT W. In other words, these categories directly capture the fact that clitic pronouns in OSP are indeed second position clitics, as stated in (60).

(60) [X CL ...] where X is the first constituent of D;
      D is PR', PR'', CPR, NP, NP, or PR''/PR''.

With the revised category for DAT clitics as in (59b) above, (4) will be derived as in (61).

(61) a.

<table>
<thead>
<tr>
<th>PR'/PR'</th>
<th>(W/(PR''/x))(W/((PR/DAT)/x))</th>
<th>PR/DAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[Asi LE]</td>
<td>dizia verdad]</td>
</tr>
</tbody>
</table>

PR'/PR'/(PR/DAT) = A1 (W=PR', n=1, x=φ)

PR' = A2

b. A1: λu1,λu2[ν1(LE)]\[λu3[asi(ν3)]]

   → λu2[λu3[asi(ν3)](v2(a))]

   → λu2[asi(ν2(LE))]

A2: λu2[asi(ν2(LE))]|λdaf\[dizia(verbatim)(dat)]

   → asi\[daf\[dizia(verbatim)(dat)](LE)]

   → asi\[dizia(verbatim)(LE)]

As shown in (a), the clitic first combines with the left element by Application, where W is interpreted as PR' and x as null. The resulting expression combines with the expression to the right by Application, yielding a PR'. The clitic pronoun is thematically construed as the argument of the verb, as shown in (b), although it does not combine directly with the verb.

3.3 CLIs in the Right Environment of V

3.3.1 Analysis

Let us now look at how strings with the clitic pronoun appearing to the right of V are constructed. First observe (62), part of (1).

Incidentally, the newly assigned categories can be derived by applying a certain variety of the unary law DIVISION (61c in Moortgat 1988) to the type-raised categories to which clitic pronouns are originally assigned in (36) and (37) above. Observe (i) below, which derives the category for DAT clitics.

(i) (PR/x)/(PR/DAT/x): λu1,λu2[v1(v2)\(a)]

DIVISION

(W/(PR/x))\(W/((PR/DAT)/x)):

λu3,λu4[v2(λu2[v1(ν2)\(a)])]

However, I assume that clitic pronouns are assigned to categories as in (59) in the lexicon, and that these categories are not derived by a syntactic rule based on division, as in (i).

(62) dio LE
      he.gave
      (PR/DAT)/ACC
      (W/(PR''/x))\(W/((PR/DAT)/x))

(63) Verb Raising (Abbreviated as “VR”)

   a. (PR/x)/y: λu1,λu2[v1(ν1)]\(ν2)
      → (PR''/z)/((PR/z)/((PR/x)/y))

   b. λu[v(ν)] if x and y are null;

   λu1(ν1[p(ν1)]) if one of x or y is null;

   otherwise λu2(ν2[p(ν2)])

Note that the range of the type-raised category is CAT PR''/z, where z may be null. CAT PR'' is another projection of PROPOSITIONS, which I define as a set of constructions that contain a PR but cannot be an argument to a complementizer (or any other functor categories taking a PR, where n≤2). With the verb raising rule, the verb and the clitic in (62) can combine as in (64), as the variable W is interpreted as null.33

33This rule should apply to intrasitive verbs as well as transitive and ditransitive verbs, since it should also account for instances in which a reflexive clitic is affixed to an intrasitive verb as in (i).

(i) tornaron=SE a Sevilla
    they.returned=refl.3 to Sevilla

The variable W is not always allowed to be interpreted as null, and one such instance is when the clitic stands in the clause initial position, as shown in (i). Observe that this ill-formed string can be derived if W can be interpreted as null.

(i) *LE
    (PR/DAT)/ACC
    A

A

(W=φ, x=ACC)

In order to allow the derivation in (64) but to rule out the one above, we need to specify when W can take the null value and when it cannot. The difference between (64) and (i) is that the clitic pronoun in the former case acts as the argument to another expression, whereas the clitic pronoun in the latter case acts as a functor.
3.3.2 Lexical Subject and Clitic Position

In (64), we saw that a string of the structure [V=CL] belongs to CAT PR"/x. This means that [V=CL ...] should not be able to stand as the argument to expressions that belong to CAT W/(PR^n/x) where n ≤ 2. In other words, the linearization in (66) should be ill-formed.

(66) *[... X V=CL ...] where X is a negative word, a lexical subject, an adverbial, a complementizer, a Wh-phrase, a relative pronoun, or an adverbial conjunction.

This prediction is correct except for the lexical subject and sentential adverbials. As observed by Wanner (1992), the lexical subject, for instance, can appear in the position of X in (66), as in (67).

(67) Et el dijo=L que=L parescía
    and he said=HIM that=HIM it seemed
    que dizian=que razón
    that they were saying reason
    “And he told him that it seemed to him
    that they were right” (Luc 15:8-9)

Sentences like this cannot be derived in the analysis presented thus far, since the lexical subject cannot take [V=CL ...] as its argument, as shown in (68). The lexical subject requires a PR' or a PR as its argument, but [V=CL ...] belongs to CAT PR".

(68) el [dijo=L ...]
    PR"/PR'
    PR"

One solution to this problem is to assign the lexical subject to CAT PR"/PR" in addition to CAT PR"/PR'. (67) can then be derived successfully as in (69).

(69) [el [dijo=L ...]]
    PR"/PR"/PR"
    A

The question that arises here is: What may be the difference between the lexical subject assigned to CAT PR"/PR' and one assigned to CAT PR"/PR"? Wanner (1992) studies whether the two clitic linearization possibilities, i.e. [subj CL V] and [subj V CL], are linked to certain discourse factors. He concludes, however, that a “dynamically charged subject NP” (=topic) is allowed with both [V CL] and [CL V] linearizations. Thus, to answer the question posed above, the two categories associated with the lexical subject are not in direct correlation with
discourse features such as \([±\text{topic}]\). Therefore, I simply assume that the lexical subject has two syntactic subcategorization frames associated with it. The sentential adverbials, which behave like the lexical subject with respect to the clitic linearization, can be treated in an analogous way. They will be assigned to \(\text{CAT PR''/PR''} \) as well as to \(\text{CAT PR''/PR''} \).

### 3.4 Interpolation and Clitic Climbing

We will now turn to strings with interpolation and clitic climbing as in (13) and (14), respectively, repeated below for clarity.

(13) ca sy=LA [yo avn non] veo yo morre then if=HER [I still not] see I will die "then if I still do not see her I will die" (SME 494; Wanner 1991:345)

(14) non=LES [querién] tornar palabra not=THEM [they.wanted] return word "they did not want to respond to them." (Cid 4)

Both interpolation and clitic climbing deal with the "extraction" of clitic pronouns from VP. In a monostral analysis, however, we must be able to account for their distribution without movement. One way to achieve this is to use Composition, as shown in (70) with (14).

---

34 Halpern (1992) observes that Old French also allows [sub] V CL and [sub] CL V linearizations, but the former is permitted only when the lexical subject is "heavy" and requires a prosodic break after it. In OSp, however, the heaviness of the lexical subject does not seem to be relevant. In (67), the lexical subject is quite short, i.e. el "he", yet the clitic is attached to the right of V. Also, as can be observed in (i) and (ii) below, both linearizations are permitted with a subject of the same heaviness.

(i) E el conde=LE groge que=L dixiese que and the count=HIM begged=that=him he.tells that.commo fuera aquello. how was that "And the count begged him to tell him how that matter was." (Luc 13)

(ii) Et el moço dixo=L que segund el and the boy told=HIM that according to him cuydava que dizian verdat. he.understood that they.said truth "And the servant told him that he understood that they were telling the truth." (Luc 15)

---

35 Wanner (1991, 1992) claims that the two linearization possibilities, i.e., [sub] CL V and [sub] V CL, are simply stylistic variations, and that the latter is derived by a stylistic rule (Subject Induced Enclisis) from the unmarked former, which moves the CL to the right of V in PF.
One solution to the problem at issue is to prohibit Composition from applying across a finite clause, i.e., C2 in (71), thus, *X/Y Y/Z → X/Z when Y is CPR. However, this solution is not desirable, since there are cases, as in (72) below (underlined), where this composition must take place.

(72) Este es el mensaje que me mandó y que quería que les pasara. "This is the message that he sent me and that he wanted me to pass to them"

Clearly, the impossibility of extraction out of a finite clause is a condition particular to clitic pronouns and fronted complements, and not for all types of extraction. A Wh-phrase, for instance, can be extracted out of a finite clause, as shown in (73) below.

(73) ¿A quién quería que tornara palabra?
"To whom did you want him to respond?"

Therefore, I assume that Composition can freely derive strings like (71) in OSP, but they are ruled out by a well-formedness condition (roughly) stated as in (74) below, an analog of Principle A of Binding Condition in GB Theory.

(74) Well-formedness Condition
An expression that belongs to a type-raised category of NP or PP but whose range is not PR''[Q] cannot be separated from its verbal head by a "node" bearing CAT CPR/x.

With this condition, (70) will be well-formed since there is no intervening CPR/x between the clitic and its verbal head, as shown in (75) below; (71) will be ill-formed since there is an intervening CPR/x between the clitic and its verbal head, as shown in (76) below.

(75) [PR no LES [PR/DAT querien [PRM/DAT dezir verdat]]]
(76) *[PR no LES [PR/DAT querien [CPR/DAT que [PR/DAT digades verdat]]]]

Strings with interpolation will be constructed in an analogous way. First observe (77).

As shown in (77a,ii), the successive use of Composition allows the expressions on the right of the clitic to assemble into a complex expression. The combination of the adverbial conjunction and the clitic, [sy LA ], should be able to take this complex expression by Application and yield (14). However, there is one minor problem. The string [sy LA ] looks for CAT PR/ACC to the right, but the string [ yo aun no veo ] belongs to CAT PR''/ACC. This problem can be resolved easily by making a minor modification to the syntactic category assigned to clitic pronouns, as shown in (78), using ACC clitics as an example.

(78) ACC Clitic Pronouns (final)
(W/PR''/x),(W/((PR''/x)/ACC)) where 0≤m≤2 and 0≤n≤2.

By modifying the right environment from (PR/x)/ACC to (PR''/x)/ACC, an ACC clitic can appear to the left of a string headed by a verb (=PR), by a negative word (=PR'), an adverbial (=PR'), or a lexical subject (=PR''). (79) shows the derivation of the whole subordinate clause in (14).
3.5 Clitic Clusters

Following Simpson and Withgott (1986), I assume that clitic clusters are formed in the lexicon and not in syntax. In my analysis, they are formed by a rule based on Composition, as in (80).

(80) Rule of Clitic Cluster Formation
[CL]Z\Y [CL]Y\X → [CL+CL]Z\X

This rule places two CLs, CL being single or complex, into a sequence. However, it only dictates which two types of CLs can combine to form a cluster. It does not determine the linear order in which two clitics that are categorially compatible can be placed. Nor can the rule in (80) determine whether a certain combination of clitic forms, say te you (sg)" and me “me”, is possible for the DAT plus ACC combination. I assume that these properties will be stated as the constraints on the rule in (80), and they are largely language/dialect particular.37

Here, I will not elaborate on what these constraints will look like for

37For example, the rule in (80) predicts that both DAT+ACC and ACC+DAT are possible, as shown in (i) and (ii):

(i)  

<table>
<thead>
<tr>
<th>[DAT]</th>
<th>[ACC]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(V/(PR^{i}/s))(V/(PR^{b}/DAT)/s)</td>
<td>(W/(PR^{m}/s))(W/(PR^{n}/s)/ACC)</td>
</tr>
</tbody>
</table>

C (V=W, x=φ, y=DAT, k=m)

(ii)  

<table>
<thead>
<tr>
<th>[ACC]</th>
<th>[DAT]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(W/(PR^{i}/s))(V/(PR^{b}/DAT)/s)</td>
<td>(W/(PR^{m}/y))(W/(PR^{n}/y)/ACC)</td>
</tr>
</tbody>
</table>

C (V=W, x=φ, y=ACC, k=m)

Both orders are observed in different Romance languages and dialects (modern and Old).
bines with the verb by Application, yielding a CPR. As shown in (b), the DAT and ACC clitics are construed as the arguments of the verb.

4 Consequences and Implications

Above, we have demonstrated that the syntactic as well as semantic properties of clitic pronouns in OSp can be accounted for adequately without postulating an abstract syntactic structure or movement metaphor that maps it to the corresponding surface structure; neither are empty categories necessary. In this section, I will summarize the analysis briefly and discuss certain results by contrasting it with three GB analyses.

Clitic pronouns in OSp, although they instantiate verbal complements, differ from complement NPs in that they unmarkedly appear in the preverbal position preceded by a nonverbal left element. In order to capture their semantic and syntactic properties, I assigned clitic pronouns in OSp to type-raised categories of NP that require an element to their left. They bear categories of the form \( Z/(X/Y) \), where \( Z \) is the nonverbal left element, \( Y \) is a verbal expression missing the complement to be instantiated by the clitic pronoun, and \( X \) is a clausal expression comprised of \( Z, CL, \) and \( Y \). I postulated that clitic clusters are formed in the lexicon by a rule based on Composition; they are also assigned to categories of the form \( Z/(X/Y) \). When the CL (a single clitic or a cluster of clitics) appears in the unmarked position, i.e. preverbally, it combines with \( Z \) to the left, \( Y \) to the right, and yields \( X \). When the CL appears in the marked position, i.e. postverbally, a harmonic variety of Type-Raising applies to the verb, changing its category in such a way that the verb can combine with the CL to the right by Application. Interpolation and clitic climbing are accounted for by constructing the non-constituent expression appearing to the right of the CL by Composition, and later combining the CL with this complex expression by Application.

The categorial analysis proposed in this paper has certain advantages over the multistratal analyses proposed within the GB framework. In the first place, my analysis explicitly captures the fact that clitic pronouns differ from complement NPs in their syntactic behaviors in spite of their semantic similarity to complement NPs. In Rivero (1986 and 1991) and Fontana (1993), clitic pronouns and phrasal complements bear the same syntactic category, i.e. NP. The former, in particular, claims that in syntax, nontonic pronouns are indistinguishable from full NPs since they are clitics only in phonology. The question, then, is why nontonic pronouns cannot appear in certain syntactic positions in which complement NPs can, such as the clause initial position.

Unable to answer this question, Rivero is forced to propose a negative filter as in (83) below, which is a GB restatement of Wackernagel’s Law or Tobler-Mussafia Law as studied in detail in Wanner (1991).

(83) Non-tonic pronouns cannot be initial in the minimal \( S'(=CP) \) that contains them. (Rivero 1986: 785)

As Wanner points out, Rivero’s solution is undesirable, since this filter is syntactic in nature, yet depends on certain prosodic information not available in syntax. In my analysis, the nontonic pronouns and complement NPs are assigned to different syntactic categories. Complement NPs belong to CAT NP or a type-raised category of the form \( X/Y \), whereas clitic pronouns belong to type-raised categories of the form \( Z/(X/Y) \). The impossibility of a CL appearing in the clause initial position, for instance, can be directly attributed to its syntactic property; no negative filter as in (83) is necessary.

The second advantage of my analysis is that it can generalize the syntactic distribution of clitic pronouns, as shown in (84).

(84) Clitic Pronouns in OSp occupy the second position within some syntactic domain D, i.e.

\[ \{ X \, CL^n \, Y \}, \text{where:} \]

\( X \) and \( Y \) are strings assigned to syntactic types;
\( Y \) may be null;
\( CL^n \) represents a single clitic or a cluster of clitics;
\( D = PR', PR'', CPR, NP\, NP, \) or \( PR'' \mid PR'' \).

The GB analyses are not quite as successful in generalizing the syntactic distribution of clitic pronouns. For instance, in Rivero’s analysis, clitics are generated in the preverbal or postverbal position within VP as shown in (85a) and (b), respectively; they may stay there or move out of VP to adjoint to XP that is complement to C, as shown in (c), or to adjoint to \( I' \), as shown in (d).

\[ \begin{align*}
\text{(a)} & \quad \text{VP} \\
& \quad \text{V} (X) \quad \text{CL} \\
\text{(b)} & \quad \text{VP} \\
& \quad \text{CL} (X) \quad \text{V} \\
\text{(c)} & \quad \text{CP} \\
& \quad \text{C} \quad \text{XP} \\
& \quad \text{CL} \quad \text{XP} \\
\text{(d)} & \quad \text{I'} \\
& \quad \text{CL} \quad \text{I'} \\
\end{align*} \]
Wanner (1991) tries to localize a position for clitics, and proposes that clitics, generated in postverbal positions, move into a position generated for them under I', as in (86).

(86) [η CL [η V+AGR+Tns/Mod]] (under I')

However, clitics can move out of this position (either by a syntactic or stylistic rule) to occupy several other positions, as shown in (87).

(87) a. \[cP_C [\eta V+CL] (under C adjoined to V)\]
b. \[Ip_1 [\eta I][\eta CL]] (Adjoined to 1)\]
c. \[cP_1 [\eta C][\eta CL]] (Adjoined to C)\]
d. \[x^a [X^n][\eta CL]] (Adjoined to a preverbal X^a)\]

Fontana (1992) proposes that clitics in OSp are generated in postverbal positions and moved to adjoin either to the left or to the right of some XP occupying the Spec of IP, as shown in (88).

(88)
```
  IP
 /   \
\|   |
Spec CL XP CL
```

If there is no XP in the Spec position, the clitic will occupy this position by itself.

In sum, none of the three analyses succeed in localizing a particular structural position for clitics in OSp or in characterizing them formally as second position clitics.

In addition, my analysis can provide a natural explanation for the so-called delaying or skipping phenomenon, as exemplified in (67), (8) and (9)—repeated below—where the clitic appears as the third or fourth constituent of the clause. Observe that the clitic in these strings does occupy the second position following the initial constituent within the domain D, whose value is specified in the parenthesis.

(67) Et el [d dijo=L que=L parescia
and he said=HIM that=HIM it seemed
que dizian razon] (D=PR''')
that they said reason
"And he told him that it seemed to him that they
were right" (Luc 15.8-9)

(8) que [d Dios=LE curie de mal] (D=PR''')
that God=HIM protect from bad
"that God protect him from evil" (Cid 18)

(9) si él [d mal=LO mandaba] (D=PR')
If he badly=IT ordered
"If he wrongly ordered it" (Mil 768d)

The clitic placement in these strings conforms to the general principle in (84), and there is nothing irregular about it.

5 Historical Development

In conclusion, I will briefly discuss how clitic pronouns differ in OSp and MSp, and sketch out the factors that may have contributed to the historical change. Limiting my discussion to clitics appearing in finite (indicative and subjunctive) clauses, there are two ways in which MSp clitic pronouns differ from their OSp counterparts. As shown in (89) and (90), they are phonologically proclitic, and their host must be a verb.

(89) LOS=escuchó.
"He listened to them"

(90) Era necesario que LOS=escuchara.
"It was necessary that s/he listen to them"

Note that strings with a clitic in the clause-initial position, as in (89), are well-formed in MSp.

With respect to their syntactic and semantic function, I assume that DAT and ACC clitics in MSp also instantiate (along with the clitic-doubled NP if there is one) the DAT and ACC argument of the verb, respectively. Since they always occupy the preverbal position, they can also be assigned to type-raised categories of NP, however, unlike those in OSp, they are assigned to functor categories of the form X/Y, instead of Z\(\backslash(X/Y)\), since they do not require a left element. With all the properties taken into account, DAT clitics in MSp, for instance, can be defined as as in (91b), shown with their counterparts in OSp as in (a). In each entry, the syntactic category is shown on the left-hand side and the prosodic subcategorization frame on the right-hand side.

(91) a. DAT Clitic Pronouns in OSp
\[<W/(PR^m/x))\backslash(W/((PR^m/DAT)/x)),=CL >\]

b. DAT Clitic Pronouns in MSp
\[<PR/x)/((PR/DAT)/x), CL= >^{39}\]

In nonfinite clauses, the CL is enclitic to the verb, as shown below.

(i) Es necesario escuchar=LOS. "It is necessary to listen to them"
(ii) Están escuchando=LOS. "They are listening to them"
(iii) Escúchate=LOS, por favor "Listen to them, please"

39 Similar proposals have been made independently by Shaulberg (1983) and Casadío (1988) for modern Spanish and Italian clitic pronouns, respectively.
As we can see, a CL in OSp syntactically affixes to the element to the left and phonologically enclitizes to the rightmost word of its syntactic host, whereas a CL in MSP syntactically affixes to the element to the right and phonologically procliticizes to the leftmost word of its syntactic host.

What may have contributed to the syntactic and the prosodic change in clitic pronouns from OSp to MSP? I will sketch out a possible scenario in keeping with the analysis proposed above. There are two areas in which MSP differs from OSp with respect to word order: (a) lack of complement preposing,31 and (b) lack of the V[+finite]−CL linearization. From this, I assume that sometime between medieval and modern times, two lexically-governed syntactic rules based on type-raising, namely Complement Fronting, as in (56), and Verb Raising, as in (63), disappeared. The loss of such rules would force clitic pronouns to appear in the clause initial position in certain root clauses, thus forcing them to procliticize to the element to their right. As clitic pronouns acquired the option to lean to the right, their syntactic property would naturally undergo a change as well, i.e., from the category of the form \(Z\{X/Y\} \rightarrow X/Y\), since the left element was not obligatory any longer. There is one other factor that may have contributed to the eventual syntactic rearrangement of the clitic distribution. In MSP, interpolation is completely ruled out, and clitic climbing occurs only with a particular subset of verbs that take a nonfinite clause complement.42 This indicates that Composition, which liberally allowed interpolation and clitic climbing in OSp, does not operate as a free syntactic rule in MSP.43 With this change, clitic pronouns can appear only immediately to the left of either their verbal head or a clitic climbing trigger,44 to which they procliticize. In sum, the affix-like property of clitic pronouns in MSP is the direct consequence of a series of changes that took place from OSp to MSP: (a) The loss of two lexically-governed syntactic rules, (b) the prosodic change in clitics from enclisis to proclisis, and (c) a more restricted use of the combinatory rule, Composition.

Appendix: A Grammar Fragment of Old Spanish

A.I. Categories

(A) Atomic Categories

<table>
<thead>
<tr>
<th>CAT</th>
<th>DESCRIPTION</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Common Noun</td>
<td>ferida “wound”</td>
</tr>
<tr>
<td>NP</td>
<td>Complement NP</td>
<td>una ferida “a wound”</td>
</tr>
<tr>
<td>A</td>
<td>Predicate AP</td>
<td>algo “something”</td>
</tr>
<tr>
<td>PR</td>
<td>Person/Number, Tense</td>
<td>grande “big”</td>
</tr>
<tr>
<td>PR’</td>
<td>(NEG, PR)</td>
<td>por Dios de todos “as God of all”</td>
</tr>
<tr>
<td>PR”</td>
<td>(subject NP, PRn where (n \leq 1))</td>
<td>Digo que te creo. “I say that I believe you”</td>
</tr>
<tr>
<td>PR’”</td>
<td>Clause that cannot be argument to a complementizer</td>
<td>No=L querades. “Do not want him”</td>
</tr>
<tr>
<td>CPR</td>
<td>(Complementizer, PR” where (n \leq 2))</td>
<td>yo=L daré buen galardón “I will give him good reward”</td>
</tr>
<tr>
<td>(et)</td>
<td>dio=L vida perdurable para siempre “(and) he gave him an eternal life”</td>
<td></td>
</tr>
<tr>
<td>qe=L perdonas lo que avie errado “that he forgive him what he had erred”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(B) Functor Categories

<table>
<thead>
<tr>
<th>CAT</th>
<th>DESCRIPTION</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR/ACC</td>
<td>Transitive Verbs</td>
<td>viéron “they.saw”</td>
</tr>
<tr>
<td>(PR/DAT)/ACC</td>
<td>Ditransitive Verbs</td>
<td>dize “he.said”</td>
</tr>
<tr>
<td>PR/PRinf</td>
<td>Verbs subcategorising for an infinitival complement</td>
<td>querién “they.wanted”</td>
</tr>
</tbody>
</table>
A.II. Syntactic Rules

(A) Free Rules (Applicable to any categories)

1. Functional Application
   a. X/Y: $\lambda v[p(v)]$ Y: if $v = \phi$; otherwise $\lambda v_1 \lambda v_2 (v_1(v_2))(a)$.
      where $Z = NP$ or PP; $y$ may be null.
   b. Y: a Y/X: $\lambda v(p(v))$. $p(a)$

2. Functional Composition
   a. X/Y: $\lambda v_1[p(v_1)]$ Y/Z: $\lambda v_2[q(v_2)]$ $\rightarrow X/Z: \lambda v_2[p(q(v_2))]$
   b. Z/Y: $\lambda v_2[q(v_2)]$ Y/X: $\lambda v_1[p(v_1)]$ $\rightarrow Z/X: \lambda v_2[p(q(v_2))]$

(B) Category-changing Rules (Applicable to certain categories)

Type-Raising (Harmonic)

a. Complement Fronting
   Z: $a \rightarrow (PR''/[FR]/y)/(PR''/y)/Z$: $\lambda v_1[v(a)]$ if $y = \phi$; otherwise $\lambda v_1 \lambda v_2 (v_1(v_2))(a)$.
   where $Z = NP$ or PP; $y$ may be null.

b. Verb Raising
   $(PR/x)/y$: $\lambda v_1 \lambda v_2 (p(v_1))(v_2)$ $\rightarrow (PR''/z)/(PR'/z)/(PR''/z)/(PR'/z)/y$: $\lambda v_1[p(p)]$ if $x$ and $y$ are null; $\lambda v_2[v_2(\lambda v_1[p(v_1)])]$ if $x$ or $y$ is null; otherwise.

   where i. $z$ takes the same value as $x$ or $y$;
   ii. $x$, $y$, or/and $z$ may be null.

A.III. Convention on Combinatory Processes

Functor categories whose domain is CAT PR*/x (where $x$ may be null) are compatible with CAT PR''/x or with functor categories whose range is CAT PR''/x as long as $m < n$.

A.IV. Well-formedness Condition

An expression that belongs to a type-raised category of NP or PP but whose range is not PR''/Q cannot be separated from its verbal head by a “node” bearing CAT CPR/x.

Text editions

Auto = Auto de los Reyes Magos, ed. by Ramón Menéndez Pidal, in Revista de Archivos, Bibliotecas y Museos IV: pp. 453–62. 1900. [location by stanza]


Cid = Cantar de Mio Cid, ed. by Ramón Menéndez Pidal, 12th edition, Mexico City: Espasa-Calpe. 1949. [location by stanza]


Luc = Don Juan Manuel, Libro de los enzímpulos del conde Lucanor et de Patronio, ed. by Hermann Knust, Leipzig: Dr. Seele & Co. 1900. [location by page]

Mil = Gonzalo de Berceo, Los milagros de Nuestra Señora, ed. by Brian Dutton, London: Thames. 1971. [location by stanza, verse]

Por = Poridad de las Poridades, ed. by Lloyd A. Kasten, Madrid: Consejo Superior de Investigaciones Científicas. 1957. [location by page]

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