Clitic placement in Old and Modern Spanish: a dynamic account
Miriam Bouzouita and Ruth Kempson

This paper addresses clitic placement in Old Spanish (12th century-mid 15th century) in finite main clause environments with the goal of using *Dynamic Syntax* (DS; Kempson & al. 2001, Cann & al. 2005) to explore a diachronic account of the differences found between the clitic distribution in Old Spanish (OSp) and Modern Spanish (MSp). The aim of this paper is twofold. On the one hand, we provide a synchronic account for both Old and Modern Spanish clitics. In addition, we model the diachronic changes that took place, which can be represented as progressive lexical simplifications.

1. *Clitic Placement in Old Spanish*

Unlike MSp, OSp clitics occur both preverbally (proclisis) and postverbally (enclisis). Preverbal clitics need not be adjacent to the verb, a phenomenon called 'interpolation'. Further, unlike MSp, no clitic occurs first in a sentence. This restriction on sentence-initial clitics is known as the Tobler-Mussafia law.

1.1 *Strict Proclisis Constructions: Negation, Wh-questions and Focus*

There are only three kinds of root clauses in which OSp clitics continuously occur in a proclitic position throughout the whole period between the 12th and the 16th century, namely main clauses with negation, wh-questions, and construals containing a left-dislocated focused object NP which is not coreferential with the clitic (Nieuwenhuijsen 1999; Granberg 1988:131-136 *inter alia*):[1]

(1)   *Ove   famne e   no**m** diestes   a   comer*
        I-had   hunger and   not-CL you-gave   to   eat
        "I was hungry and you did not feed me." (XIII; Granberg 1988:131)

(2)   *Qui   **los**   podrie   contar?*
        who   CL   he-could   count
        "Who could count them?" (XIII; Fontana 1993:270)

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[1] For each OSp example we will provide the century from which it comes between brackets. For visual clarity, the clitic will be in bold.

(3) *A   to   linnaje   **la**   daré*
     to   your   lineage   CL   I-will-give
     "I will give it to your lineage." (XIII; Granberg 1988:135)

1.1.1 *Strict Enclisis Constructions: Verb-Initial and Vocative Clauses*

The root clause environments in which clitics appear in enclisis in the 13th century are verb-initial clauses and clauses commencing with a vocative (Nieuwenhuijsen 1999; Granberg 1988:152-155 *inter alia*).[2]

(4) *Respondio**l**   don   Pelayo en guisa* […]
     he-answered-CL   don   Pelayo in this-way
     "Don Pelayo responded him […]." (XIII; Fontana 1996:41)

(5) *Amigos,   ruego**uos**   por Dios* […]
     friends,   I-beg-CL   for God
     "Friends, I beg you for God's sake […]." (XIII; Granberg 1988:152)

As concerns the shift from enclisis to proclisis, which was taking place in the Middle Ages, the earliest examples of sentence-initial clitics are found in the 15th century (1438) and they occur in direct style dialogue, which indicates that, in colloquial language, sentence-initial clitics may have been widely used.[3] As with verb-initial main clauses, paratactic root clauses commencing with a verb seem to admit proclitic object clitics in the 16th century. The same applies for clauses commencing with a vocative expression.

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[2] Proclisis is found in clauses commencing with a vocative if the vocative element is preceded by an adverb that normally is followed by a preverbal clitic such as, for example *agora* "now". Since we decided to limit the scope of this account by excluding adverbs, these vocative proclitic examples have not been taken into account. In this preliminary account, coordination is also excluded.

[3] As Granberg (1988:246) noted, it is difficult to determine when exactly this shift started taking place on basis of written corpora due to the existence of prescriptive rules:

You cannot say […] that what some careless people or foreigners say, commencing their discourse with those enclitics like in: "te vas?" […] or "se va", which is intolerable, but the proper use is "vaste?, voime, vase, vanse"; that all are warned with this […]. The rule says that if the verb introduced the discourse, the pronouns are postponed to it […]. (Our translation from Correas 1626 *apud* Granberg 1988:246)

1.3 *Pro-/Enclitic Constructions: Clitic Left-Dislocation and Preverbal Subjects*

In some root environments, OSp clitics oscillate between pro- and enclisis, namely in Clitic Left-Dislocation structures (CLLD) and in clauses containing an expressed preverbal subject. As concerns the CLLD constructions, in the 13th and 14th century, object clitics occur predominantly in postverbal positions unless the dislocated NP contains a quantifier such as *todos* "all" or *am(b)os* "both" (Rivero 1986; Ramsden 1963:85-86; Granberg 1988:146-152):

(6) *E*   *estas pazes$_i$*   *traxolas$_i$*   *marutas [...]*
     and   these peaces   he-brought-CL   Marutas
     "And Marutas brought this peace […]." (XIII; Fontana 1993:266)

(7) *Con*   *el*   *su*   *manto a*   *amas$_i$* *las$_i$*   *cubrió*
     with   the   his   mantle to   both   CL   he-covered
     "He covered both with his mantle." (XIII; Ramsden 1963:86)

Aside from the CLLD constructions involving *todos*/*ambos*, the earliest cases in which CLLD occurs with proclitic object clitics are found in the 15th century.

With respect to clitic behavior after preverbal subjects, Granberg (1988:195-227) showed that the position of the OSp clitic is determined by the presence or absence of emphatic stress on the subject, as in Modern Galician: clitics occur postverbally unless the subject is highlighted by emphatic stress.[4]

(8) *E*   *yo*   *donna Maria que*   *uendi* *la*   *sobre*
     and   I   doña   Maria who   I-sold   the   above

     dicha *eredad*   *la*   *otorgo* […]
     spoken inheritance   CL   I-confer-on
     "And I, doña Maria who sold the above mentioned inheritance confer it on […]." (XIII; Granberg 1988:205)

(9) *el*   *arçipreste*   *fiçolo*   *assi*
     the   archpriest   he-did-CL   like-this
     "The archpriest did it like this." (XIII; Granberg 1988:209)

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[4] Example (8), taken from a legal document, contains an oath while (9) proceeds from a document that recounts a series of events.

In these construals as well, there is a shift from enclisis to proclisis starting in the 14th century.

2. *Dynamic Syntax Analysis*

In this section we will give a DS analysis for OSp object clitics. We will also outline a possible analysis for Renaissance Spanish (RSp) and sketch an account of the OSp-RSp shift.

2.1 *A Brief Introduction to Dynamic Syntax*

The novelty of DS is that it is a grammar formalism that reflects the dynamics of parsing. According to DS, the parsing of a natural language string is a monotonic tree growth process defined over the left-to-right sequence of the words, where the tree to be established as the overall goal represents one possible interpretation of that string and has some logical form of type t (*Ty(t)*) decorating its root node. This overall goal – represented as *?Ty(t)* – of establishing a propositional formula as interpretation at the root node of a tree, e.g. *Fo(Sneeze(Ruth)))* as interpretation for *Ruth sneezes,* will be achieved through the annotations of the nodes of the tree, each node being decorated with a subterm of the formula. The tree is arrived at by imposing additional subgoals such as *?Ty(e$\rightarrow$t)* for a predicate, *?Ty(e)* for an individual-denoting expression, and then using the words in the string in order to create the appropriate decorations. Transitions from one partial tree to another are licensed by the interaction of lexical, computational and pragmatic rules.

At any interim stage, the tree will be in some way not fully specified. The primary tools required for this account of clitics are the concepts of 'underspecified formula' value, 'unfixed node', and 'linked structure'. Underspecified formula values are projected from pronouns, which are lexically defined as providing a metavariable place-holding device instead of a full content expression. This placeholder is then assigned a value either from context or during the construction process.

2.1.1 *Building Unfixed Nodes from the Left Periphery*
Unfixed nodes are used to represent positional underspecification at an early stage of the parsing process, as the structural analogue of pronoun construal: the structural relation of the unfixed node to the other nodes in the tree structure is not known at the point at which the left-peripheral expression is parsed. This analysis is used to replace accounts of long-distance dependency

and other movement phenomena: the left-peripheral position marks the introduction of the appropriate term into the structure albeit at an unfixed node, the position of the 'trace' in movement accounts is the point in the left-right interpretation process at which the contribution of the unfixed node is determined. The introduction of an unfixed node is ensured by the '*Adjunction' rule which introduces a node that is characterized as being dominated by a node a ($<\uparrow_*>Tn(a)$) and requiring a fixed tree node position ($?\exists xTn(x)$). This new node is required to be decorated by an argument node (marked $?Ty(e)$).[5]

Sentences containing left-dislocated items such as *Mary, John likes* will be analyzed in these terms as in Figure 1, which represents the point after the verb has been processed:
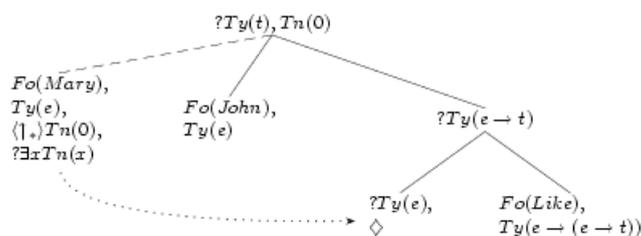
Figure 1: Parsing *Mary, John likes*

With the pointer at the open object node which the lexical actions of the verb have introduced, there remain some outstanding requirements: a requirement for a fixed tree node position ($?\exists xTn(x)$) on the unfixed node and a requirement for a construal of type e ($?Ty(e)$) on the object node. These two requirements can be solved simultaneously by unifying the not yet annotated object node and the unfixed node through a process called 'Merge'. Once all terminal nodes are decorated, rules for evaluating the tree provide annotations for non-terminal nodes, leading to a tree that is decorated at the top node with the formula value *Fo(Like(Mary)(John))* of type t (*Ty(t)*).

2.1.2 *Building Linked Structures from the Left Periphery*
Another primary tool required for DS is the concept of 'linked structures'. These structures involve the development of two separate trees connected by a 'link relation', with a requirement for a shared term in each of the two trees. The rule of 'Link Adjunction' introduces a new tree across a 'link relation'

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[5] $<\uparrow_*>Tn(a)$ means, by definition, "somewhere dominating the current node is a tree node with label a". $Ty(e)$ picks out individual-denoting expressions. In any partial node, there is a pointer ◊ indicating the node currently being developed.

from a head node in some partial tree structure to a new tree with requirement $?Ty(t)$.[6] It will also impose a requirement on the local tree for a copy of the head node formula α somewhere within the newly introduced tree, forcing an anaphoric link between the two structures.

This concept of 'linked structure' is used for relative clauses and topic constructions. In the case of relative clauses, it is, in English, the relative pronoun which provides the required copy. Figure 2 shows the partial tree for the construal of a relative clause at the point at which the relative pronoun *who* has been uttered and parsed.

$Tn(0), ?Ty(t)$

$Tn(n), Fo(Mary)$ $?Ty(e \to t)$

$\langle L^{-1} \rangle Tn(n), ?Ty(t), ?\langle \downarrow_* \rangle Fo(Mary)$

$\langle \uparrow_* \rangle \langle L^{-1} \rangle Tn(n), Fo(Mary), \Diamond$
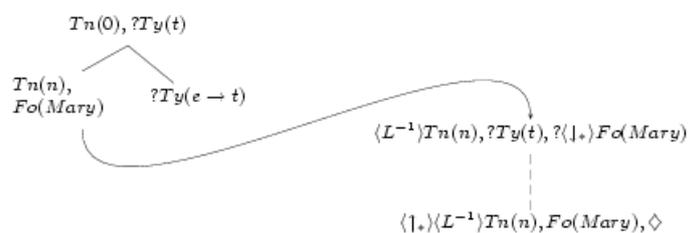
Figure 2: Parsing *Mary, who* in *Mary, who smokes, is sick*

Note that in this example the link relation is built from the node annotated with formula *Fo(Mary)* to a new tree, the top node of which is connected to an unfixed node, introduced by the process of *Adjunction. The parsing of the relative pronoun ensures a flow of information between the two trees and will therefore fulfill the requirement for a copy of the head formula *Fo(Mary)* ($?<\downarrow_*>Fo(Mary)$) since it constitutes an anaphoric device. In the case of topic structures, the pronoun has to provide the copy, as in *Ruth Kempson, she talks too fast*.

2.1.3 *Building Unfixed Nodes and Linked Structures from the Right Periphery*
Both these strategies of building paired linked structures and introducing unfixed nodes may also be applied in the later stages of processing an utterance. Building linked structures at the right periphery is used to model the 'background topic' effect in sentences such as *She talks too fast, Ruth Kempson*. In these construals, the pronoun, having lexically introduced a place-holding metavariable as a decoration on the subject node, is identified contextually. Then the subsequent full NP is interpreted as providing the decoration for a separate linked tree. This formula and the metavariable already

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[6] The modal operator $<L>$ and its inverse $<L^{-1}>$ describe this relation.

identified are interpreted as coreferential, thus ensuring that the paired linked structures share a term.

The use of unfixed nodes at a late stage of the interpretation process can be illustrated by English expletive pronouns, as in *It is likely that I am wrong*. In these construals, the pronoun introduces a place-holding device (the lexically provided metavariable). This is replaced during the construction process by the rule of Merge, which applies after the sequence *I am wrong* has been used to decorate an unfixed node, unifying that propositional structure with the subject node, thereby updating the metavariable. The updating of the unfixed node within the structure does not itself require the presence of an anaphoric device, but the interaction of Merge, and updating a metavariable is not precluded, in this case allowing the replacement of that metavariable with structure. The only difference between a regular anaphoric device and the expletive pronoun is that the metavariable which the latter projects can be replaced by such tree-structure rather than merely some formula value. This difference is secured by presuming that the substitution of the metavariable projected by regular anaphoric expressions must be a terminal node in the resultant tree (Cann & al. 2005). Since this is a minor difference in lexical specification, we can model the development of anaphoric expressions into expletive devices by simple loss of this restriction.

2.2 *A Dynamic Account of Old Spanish Clitics*

2.2.1 *Proclisis Triggers: Unfixed Nodes*
The main claim about proclisis in OSp, we propose, is that if a clitic follows an expression interpreted as decorating a left-peripheral unfixed node, the clitic will appear in proclisis.[7] Given the independent motivation for unfixed nodes in DS analyses, this claim leads us to expect two environments in particular as inducing strict proclisis: (i) wh-questions and (ii) left-dislocated focused NP constructions.[8]

2.2.1.1 *Wh-questions.* English wh-questions in which the wh-expression appears sentence-initially as in *Who did Bill see?*, are modeled in DS as projecting a metavariable *WH* that annotates an unfixed node (Kempson & al.

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[7] This account is developed in detail in Bouzouita (2002, 2005).
[8] Negation also induces proclisis. We will not provide a detailed analysis for negation since this issue has not been addressed yet in the DS framework. For now, we will use the feature [NEG +] to indicate the presence of a negation operator in a clause.

2001:150-189). As in *Mary, John likes*, the unfixed node will merge with the object node. OSp wh-questions are very similar to English ones:

(10) *¿Qué* **me** *darás?*
 what   CL   you-will-give
 "What will you give me?" (XIII; Granberg 1988:132)

(11) *Qui* **los** *podrie* *contar?*
 who   CL   he-could   count
 "Who could count them?" (XIII; Fontana 1993:270)

Example (10) contains a wh-element which functions as an object while the wh-expression in (11) is a subject. Since this object wh-expression projects a left-dislocated element, it will annotate an unfixed node, as in English. Initial wh-elements that function as subjects will also decorate unfixed nodes in OSp, due to the fact that, unlike English, OSp is a subject pro-drop language which can be represented formally in DS by letting expressed subjects annotate either unfixed nodes or linked structures while the parsing of the verb will project the full predicate-argument structure.

Given the analysis of wh-initial questions as decorating an unfixed node, proclisis seems to be triggered by the presence in the tree of a left-peripheral unfixed node. Accordingly, we will define the preverbal clitic as itself introducing lexically a locally unfixed node, in addition to an already present unfixed node.
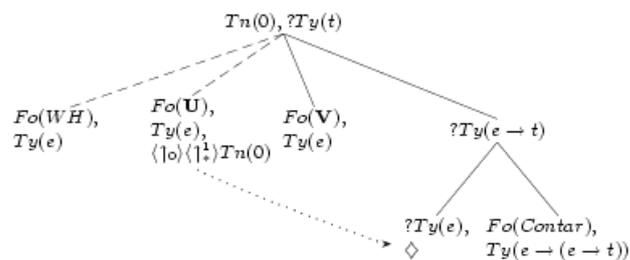
Figure 3: Clitics decorating a locally unfixed node

As shown in Figure 3, the object metavariable (*Fo(U)*) from the clitic in (11) decorates the locally unfixed node and will unify with the object node that has

been introduced by the parsing of the verb.[9] The subject metavariable (*Fo(WH)*), on the other hand, will merge with the subject node.

2.2.1.2 *Focused NP Constructions.*

OSp sentences containing left-dislocated focused NPs will be analyzed in the same way as English focus constructions, as in *Mary, John likes* (see Figure 1). There we saw that *Adjunction and Merge were used to model so-called 'focus movement'. Likewise, OSp focused NPs will decorate unfixed nodes which will unify with the direct or indirect object node projected by the verb. These phenomena then also corroborate the hypothesis that OSp clitics occur preverbally when preceded by a left-peripheral expression taken to decorate an unfixed node.[10]

2.2.2 *Enclisis Triggers*

Unlike the proclisis case, enclitic pronouns need no special statement: like postverbal object NPs, they decorate a fixed object node. We will look at (i) verb-initial root clauses, and (ii) main clauses introduced by vocative phrases.

2.2.2.1 *Verb-Initial Root Clauses.*

In the 13th century, the V_{finite}-CL configuration is the predominant one for root clauses. Since in this configuration the clitics appear in the position in which full NPs usually occur, we propose that these OSp clitics decorate in the tree the fixed object node on which the pointer has been left and which has been introduced lexically by the verb.

As regards paratactic main clauses commencing with a verb, we consider them as distinct trees of type *t*. In these cases we expect that the clitic will appear in enclisis (as long as there is no negation marker) since prior to parsing the verb, the tree is by definition empty and so will not have an unfixed node, which is the trigger for proclisis.

2.2.2.2 *Root Clauses Commencing with Vocatives.*

In our view, main clauses commencing with vocative phrases can be analyzed, like CLLD structures, as instances of linked structures:[11]

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[9] This tree display ignores the auxiliary *podrie* for simplicity.

[10] Further evidence for this account is strict proclisis in OSp relative clauses. See Section 2.1.2 for an account of English relative pronouns as decorating an unfixed node.

[11] Although the vocative expression and the clitic are coreferential in example (12), this is not always the case. Such instances are then analyzed as linked structures which do not impose a requirement for a copy of the head node formula.

(12) *Amigos$_i$,   ruego**uos**$_i$ por Dios [...]*
      friends,   I-beg-CL   for God
      "Friends, I beg you for God's sake […]." (XIII; Granberg 1988:152)

Recall the concept of linked structures. Topic constructions are analyzed as a pair of linked trees: the left-peripheral NP projects a tree of type *e* (with a root node annotated by a formula *α*) which is linked to the top node of another tree of type *t*, the development of which is constrained by the requirement for the occurrence of the formula *α* somewhere in this tree. We propose, that is, the same analysis for OSp CLLD structures and the vocative cases involving coreferential clitics.

With respect to OSp clitic placement, the discussed vocative constructions and verb-initial root clauses both corroborate indirectly the hypothesis that proclisis takes place after any expression that induces the construction of a left-peripheral unfixed node since these construals do not involve unfixed nodes as tools for their account and, as expected on this analysis, are expressed using postverbal clitics.

2.2.3 *The Mixed Situation: Pro- and Enclisis Triggers*
The mixed situation is displayed by CLLD structures and preverbal subjects. Again the distribution is as the DS analysis would lead us to expect.

2.2.3.1 *Clitic Left-Dislocations.* The account so far proposed treats OSp CLLD constructions as a pair of linked structures (see (6)). This analysis, however, does not apply for the CLLD construals involving a quantifier such as *todos* "all" or *am(b)os* "both" (see (7)). In our view, these left-dislocated quantifiers are emphasized and thus, need to be analyzed as decorating unfixed nodes which will unify with the coreferential metavariable associated with the clitic through the application of Merge. Consequently, the OSp clitics arise in proclisis.

2.2.3.2 *Expressed Preverbal Subjects.* This assumption leads us to expect with Granberg (1988:195-227) that proclisis arises when the expressed preverbal subject is emphasized while enclisis appears when the stress lies on the verb. We have already seen that subject NPs in subject pro-drop languages can either decorate a linked structure or an unfixed node. The difference from English is that no pronoun will be required to establish the link-required copy, as it is the verb and its lexical specification that will ensure the presence in the tree of a metavariable in subject position, exactly as though a morphologically expressed pronoun were present. This metavariable will duly be replaced by a

term which is identical to whatever decorates the linked structure, fulfilling its requirement for a shared term. So we expect subject NPs to be able to be construed as either focused or as a topic-presenting structure without any explicit anaphoric devices being present. The only reflex of this distinction in construal will be the positioning of the object clitics, these being proclitic in the focused case, enclitic otherwise. The mixed effect is thus expected.

2.2.4 *Old Spanish Clitics*

2.2.4.1 *Lexical Entry*. In the light of the general proclisis pattern of occurring immediately after any left-peripheral expression that induces the construction of an unfixed node, we propose the following lexical entry for OSp clitic *lo* as illustrative of the general pattern.

Lo

IF	$?Ty(t), Tn(a)$		
THEN	IF	$[NEG+] \mid$	} Negative marker
		$(\langle\downarrow_*\rangle Fo(\alpha), ?\exists x Tn(x))$	} Unfixed node
	THEN	$make(\langle\downarrow_*\rangle), go(\langle\downarrow_*\rangle),$	
		$put(Fo(U), Ty(e)),$	
		$?\exists x Tn(x), ?\exists x Fo(x),$	
		$?\langle\uparrow_0\rangle Ty(e \to t),$	
		$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a), [\downarrow]\bot)$	
	ELSE	ABORT	
ELSE	IF	$?Ty(e), \langle\uparrow\rangle\top$	
	THEN	IF	$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle[NEG+] \mid$
			$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle(?Ty(t) \wedge\langle\downarrow_*\rangle Fo(\alpha))$
		THEN	ABORT
		ELSE	$put(Fo(U), Ty(e)),$
			$?\langle\uparrow_0\rangle Ty(e \to t),$
			$?\exists x Fo(x), [\downarrow]\bot)$
	ELSE	ABORT	

Figure 4: Lexical entry for OSp accusative clitic

This lexical entry makes pro- and enclisis complementary since it not only induces the construction of an unfixed node to be decorated with a metavariable in the presence of either a negative marker or an already constructed unfixed node but it also explicitly states that enclitic positions in those environments are ungrammatical. The trigger condition $<\uparrow>\top$ is a specification ensuring that this use of the clitic only decorates a fixed node in a structure (one with an immediately dominating node). Notice how nothing additional needs to be said to ensure the Tobler-Mussafia law, which becomes

in this account epiphenomenal. In a partial structure with only a predicate (as provided by the verb), enclisis will be obligatory.[12]

2.2.4.2 *Interpolation and Multiple *Adjunction.* In order to account for the interpolation cases, it appears that we need multiple applications of the process of *Adjunction. Consider the following example of double interpolation:

(13) *Qui*   ***lo***   *fer*   *non*   *quisiesse* […]
      who   CL   to-do not   he-wanted
      "Who were to refuse to do it […]." (XIII; Sánchez Lancis 1992:327)

Qui, the wh-element, decorates an unfixed node introduced by *Adjunction and, thus, triggers proclisis. Given the presence of this unfixed node, the clitic also annotates an unfixed node but this second unfixed node is induced by the lexical actions of the clitic. However, this unfixed node is in turn apparently followed by the construction of another unfixed node which the left-dislocated infinitive *fer* "to do" will decorate, and which is also introduced computationally by *Adjunction.[13]

2.3 *Sketch for Renaissance Clitics*

As mentioned earlier, during the Middle Ages a shift from enclisis towards proclisis took place and seems to have been almost completed at the beginning of the 16th century. Basically, all the OSp cases in which enclisis appeared during the Middle Ages acquired the possibility of occurring in proclisis as well. In other words, the restrictions that were imposed on the occurrence of proclitic pronouns in the 13th century no longer applied in the 16th century. Notice how in the following lexical entry these subconditions for proclisis – which were present in the lexical entry for OSp clitics – are dropped, hence generalizing proclisis. Nonetheless, the restrictions for enclisis did not vanish.

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[12] Unlike other accounts (e.g. Rivero 1986), this analysis does not reduce the Tobler-Mussafia effect to a purely phonological phenomenon.

[13] These data are problematic for Cann & al. (2005) who claim that only one node within a tree can be unfixed at any one stage in the construction process. However, they propose a range of types of structural underspecification, and it remains possible that (13) can be analyzed as involving more than one type of Adjunction operation. See Bouzouita (2005, forthcoming) for an account along these lines.

Lo

IF	$?Ty(t), Tn(a)$		
THEN	$make(\langle\downarrow_*\rangle); go(\langle\downarrow_*\rangle)$		
	$put(Fo(U), Ty(e),$		
	$?\exists x Tn(x), ?\exists x Fo(x),$		
	$?\langle\uparrow_0\rangle Ty(e \rightarrow t),$		
	$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a), [\downarrow]\bot)$		
ELSE	IF	$?Ty(e), \langle\uparrow\rangle\top$	
	THEN	IF	$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle[NEG+] \mid$
			$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle(?Ty(t) \wedge \langle\downarrow_*\rangle Fo(\alpha))$
		THEN	ABORT
		ELSE	$put(Fo(U), Ty(e),$
			$?\langle\uparrow_0\rangle Ty(e \rightarrow t),$
			$?\exists x Fo(x), [\downarrow]\bot)$
	ELSE	ABORT	

Figure 5: Lexical entry for RSp accusative clitic

The diachronic shift from enclisis towards proclisis is thus modeled in this account as the simplification of the lexical characterization of the clitic. However, it remains to be seen what triggered these lexical simplifications.[14]

2.4 *Dynamic Account for Modern Spanish Clitics*

2.4.1 *Modern Spanish: Standard Spanish Data*

In Modern (Standard) Spanish (MSp), only proclisis has survived the passage of time.

(14) **Lo** *vi,* *a* *Juan*
CL I-saw to Juan
"I saw Juan."

(15) *(**Lo**) *vi* *a* *él*
CL I-saw to him
"I saw him."

(16) **Le** *di* *el* *libro* *a* *Juan*
CL I-gave the book to Juan
"I gave Juan the book."

As regards accusative clitic doubling, MSp can double full NPs, if an intonational break precedes the full NP.[15] There is a specificity restriction: only

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[14] See Bouzouita (2005) where different hypotheses are explored.
[15] In this MSp account, we have omitted CLLD structures, since the main focus of this paper is the diachronic change in clitic placement in finite main clauses.

referentially construed NPs are allowed.[16] However doubling with overt, so-called strong pronouns *él / ella*, is obligatory. With the dative counterpart, there is equally obligatory doubling with strong pronouns, but with full NP clitic doubling, there is no specificity restriction and no requirement for an intonational break.

2.4.2 *Lexical Entries for Modern Spanish*
The analysis we propose for MSp clitics involves a further lexical simplification: compared to RSp, the enclisis trigger is lost. Therefore, in MSp, clitics decorate an unfixed node irrespective of whether any other (unfixed) node has already been introduced, as in RSp.

Lo		*Le*	
IF	$?Ty(t), Tn(a)$	IF	$?Ty(t), Tn(a)$
THEN	$make(\langle\downarrow_*\rangle); go(\langle\downarrow_*\rangle)$	THEN	$make(\langle\downarrow_*\rangle); go(\langle\downarrow_*\rangle)$
	$put(Fo(U), Ty(e),$		$put(Fo(U), Ty(e),$
	$?\exists xTn(x), ?\exists xFo(x),$		$?\exists xFo(x), ?\exists xTn(x),$
	$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a),$		$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a),$
	$?\langle\uparrow_0\rangle Ty(e \rightarrow t), [\downarrow]\bot)$		$?\langle\uparrow_0\rangle Ty(e \rightarrow (e \rightarrow t)))$
ELSE	ABORT	ELSE	ABORT

Figure 6: Lexical entries for MSp accusative and dative clitic

Modeling the dative clitic pronoun as lacking one restriction retained by the accusative clitic can bring out the distinction between dative and accusative. The accusative clitic remains a full pronoun, only decorating a node in the tree that is terminal.[17] All instances of clitic doubling must therefore involve a pair of linked trees, linked only through the sharing of a term, a sharing which is secured through the presence of the pronoun. The specificity restriction follows, as quantifiers cannot bind across from one tree structure to another, so not across linked trees. The dative, on the other hand, lacks this terminal node restriction. This allows it to decorate an unfixed node which can then unify with any other node that may get introduced into the structure, whatever the complexity of the structure with which it unifies.[18] So, for example, in a derivation such as (16) in which the clitic pronoun precedes the verb and the full doubled NP follows it, the clitic will be taken to decorate an unfixed node

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[16] Indefinites are also allowed, but, for simplicity, we shall take these here to be name-like under this interpretation (Fodor & Sag 1982), though see Kempson & Meyer-Viol (2004).

[17] It remains to be seen whether this difference is due to a diachronic change or whether it stems from some inherent difference between the accusative and dative case, the dative case signaling a semantic relation whose status as adjunct or argument is unclear.

[18] In this paper, names have been analyzed as semantically simple terms. In a fuller account, these would be analyzed as uniquely referring terms with internal structure.

which then merges with the indirect-argument node projected by the verb, and this node may then unify with some node introduced by late application of *Adjunction. Hence the lack of any necessity of an intonational break.[19] It is notable that on this analysis, there is no need to invoke ambiguity between two uses of the dative clitic as a regular anaphoric expression on the one hand and some quasi-agreement device on the other, since the analysis of the dative clitic as lacking a terminal node restriction, immediately predicts its broader distribution than the accusative clitic which retains such a restriction. The idiosyncrasy of the obligatory doubling with a strong pronoun across all dialects is captured by analyzing these strong pronouns as lexically defined only to decorate a linked structure or an unfixed node, in effect encoding their use for specialized pragmatic effects. Despite appearances, they never decorate a node as introduced into the structure through lexical specification by the verb. Hence the obligatory presence of the clitic, itself decorating an unfixed node, but merging with the appropriate argument node of the verb's specification, and expressing the basis for the shared-term restriction imposed by the link relation.

3. *Conclusion*

Though this short sketch is no more than the beginning of an account of clitics, the general advantage of the dynamic perspective of DS is apparent. With just three concepts of tree growth, all independently motivated, we have provided a principled account of the heterogeneous positioning of OSp clitics; and thus, unlike other accounts, we do not have to invoke additional machinery or special projections. Furthermore, we outlined an account of the diachronic change in clitic placement in finite main clause environments as a process of lexical simplification, namely the reduction of complexity of possible triggers, which leads to a contracted distribution, since enclisis is considered ungrammatical in MSp. The difference between the MSp accusative and dative clitic has been captured by the absence of a terminal node restriction for the dative clitic, which is the basis of its more generalized distribution in clitic doubling. This analysis signally does not necessitate the invocation of ambiguity in the clitic itself.

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[19] In *Río de la Plata* Spanish (Uruguay / Argentina), the accusative clitic is also losing this terminal node restriction, no longer requiring any intonational break between the string containing the clitic pronoun and that of the doubled NP, but nevertheless retaining a specificity restriction (Suñer 1988).

References

Bouzouita, Miriam. 2002. "Clitic Placement in Old and Modern Spanish: A Dynamic Account". MSc Dissertation, King's College.

Bouzouita, Miriam. 2005. "Variation and Change in Spanish Clitic Placement: from Medieval to Renaissance Spanish". Paper presented at the Dynamic Syntax Workshop-King's College, London, May 2005.

Bouzouita, Miriam. forthcoming. "Variation and Change in Spanish Clitic Placement". *Papers in Linguistics of the University of Manchester: Proceedings of the 14th Postgraduate Conference in Linguistics, 4th March 2005, The University of Manchester* ed. by Nuria Yañez-Bouza. Manchester: Manchester University Press.

Cann, Ronnie, Ruth Kempson & Lutz Marten. 2005. *The Dynamics of Language*. Oxford: Elsevier.

Fodor, Janet Dean & Ivan A. Sag. 1982. "Referential and Quantificational Indefinites". *Linguistics and Philosophy* 5.355-398.

Fontana, Josep M. 1993. "Phrase structure and the syntax of clitics in the history of Spanish". PhD Dissertation, University Microfilms International, Ann Arbor, Mich.

Fontana, Josep M. 1996. "Phonology and Syntax in the Interpretation of the Tobler-Mussafia Law". *Approaching Second. Second Position Clitics and Related Phenomena* ed. by Aaron L. Halpern & Arnold M. Zwicky, 41-83. Stanford, Calif.: CSLI.

Granberg, Robert Arthur. 1988. "Object pronoun position in Medieval and Early Modern Spanish". PhD Dissertation, University Microfilms International, Ann Arbor, Mich.

Kempson, Ruth, Wilfried Meyer-Viol & Dov Gabbay. 2001. *Dynamic Syntax. The Flow of Language Understanding*. Oxford: Blackwell.

Kempson, Ruth & Wilfried Meyer-Viol. 2004. "Indefinites and scope choice". *Descriptions and Beyond* ed. by Marga Reimer & Anne Bezuidenhout, 558-84. Oxford: Oxford University Press.

Nieuwenhuijsen, Dorien. 1999. "Cambios en la colocación de los pronombres átonos en la historia del español". (= *Estudios de Lingüística Española*, 5), ISSN: 1139-8736, Depósito Legal: B-39198-99, http://elies.rediris.es/elies5/.

Ramsden, Herbert. 1963. *Weak-pronoun Position in the Early Romance Languages*. Manchester: Manchester University Press.

Rivero, María Luisa. 1986. "La tipología de los pronombres átonos en el español medieval y el español actual", *Anuario de Lingüística Hispánica* 2.197-220.

Sánchez Lancis, Carlos. 1992. "La interpolación de complementos entre el

pronombre personal átono y el verbo en español medieval". *XXe Congrès International de Linguistique et Philologie Romanes*, *Zurich*, *6-11 April 1992* ed. by Gerold Hilty, vol. II, 324-334. Tübingen: Franke Verlag.

Suñer, Margarita. 1988. "The Role of Agreement in Clitic Doubled Constructions". *Natural Language and Linguistic Theory* 6.391-434.
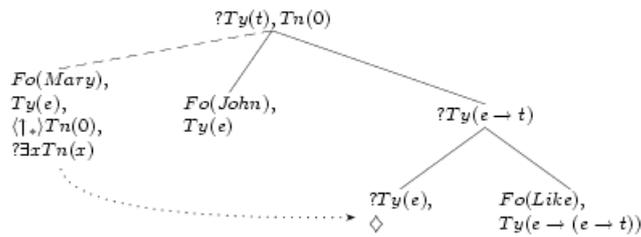
Figure 1: Parsing *Mary, John likes*
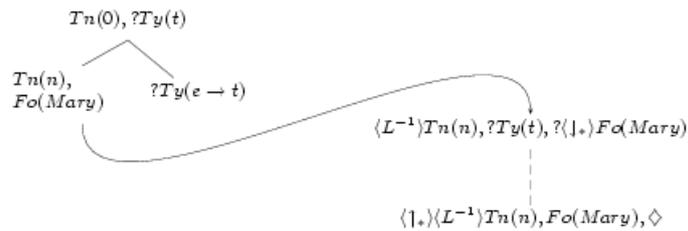
Figure 2: Parsing *Mary, who* in *Mary, who smokes, is sick*
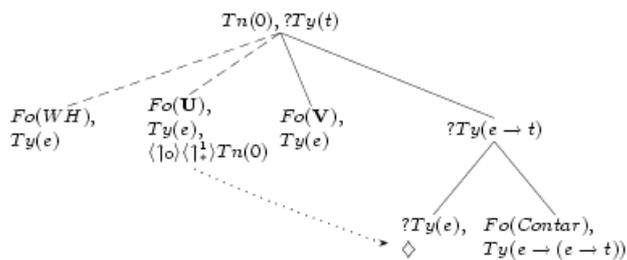
Figure 3: Clitics decorating a locally unfixed node

Lo

IF	$?Ty(t), Tn(a)$		
THEN	IF	$[NEG+]$ $\mid$	} Negative marker
		$(\langle\downarrow_*\rangle Fo(\alpha), ?\exists x Tn(x))$	} Unfixed node
	THEN	$make(\langle\downarrow_*\rangle), go(\langle\downarrow_*\rangle),$	
		$put(Fo(U), Ty(e),$	
		$?\exists x Tn(x), ?\exists x Fo(x),$	
		$?\langle\uparrow_0\rangle Ty(e \rightarrow t),$	
		$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a), [\downarrow]\bot)$	
	ELSE	ABORT	
ELSE	IF	$?Ty(e), \langle\uparrow\rangle\top$	
	THEN	IF	$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle[NEG+]$ $\mid$
			$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle(?Ty(t) \wedge\langle\downarrow_*\rangle Fo(\alpha))$
		THEN	ABORT
		ELSE	$put(Fo(U), Ty(e),$
			$?\langle\uparrow_0\rangle Ty(e \rightarrow t),$
			$?\exists x Fo(x), [\downarrow]\bot)$
	ELSE	ABORT	

Figure 4: Lexical entry for OSp accusative clitic

Lo

IF	$?Ty(t), Tn(a)$		
THEN	$make(\langle\downarrow_*\rangle); go(\langle\downarrow_*\rangle)$		
	$put(Fo(U), Ty(e),$		
	$?\exists x Tn(x), ?\exists x Fo(x),$		
	$?\langle\uparrow_0\rangle Ty(e \rightarrow t),$		
	$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a), [\downarrow]\bot)$		
ELSE	IF	$?Ty(e), \langle\uparrow\rangle\top$	
	THEN	IF	$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle[NEG+]$ $\mid$
			$\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle(?Ty(t) \wedge\langle\downarrow_*\rangle Fo(\alpha))$
		THEN	ABORT
		ELSE	$put(Fo(U), Ty(e),$
			$?\langle\uparrow_0\rangle Ty(e \rightarrow t),$
			$?\exists x Fo(x), [\downarrow]\bot)$
	ELSE	ABORT	

Figure 5: Lexical entry for RSp accusative clitic

Lo		**Le**	
IF	$?Ty(t), Tn(a)$	IF	$?Ty(t), Tn(a)$
THEN	$make(\langle\downarrow_*\rangle); go(\langle\downarrow_*\rangle)$	THEN	$make(\langle\downarrow_*\rangle); go(\langle\downarrow_*\rangle)$
	$put(Fo(U), Ty(e),$		$put(Fo(U), Ty(e),$
	$?\exists x Tn(x), ?\exists x Fo(x),$		$?\exists x Fo(x), ?\exists x Tn(x),$
	$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a),$		$?\langle\uparrow_0\rangle\langle\uparrow_*^1\rangle Tn(a),$
	$?\langle\uparrow_0\rangle Ty(e \rightarrow t), [\downarrow]\bot)$		$?\langle\uparrow_0\rangle Ty(e \rightarrow (e \rightarrow t)))$
ELSE	ABORT	ELSE	ABORT

Figure 6: Lexical entries for MSp accusative and dative clitic