Clitics, Procedural Elements and Spanish Syntax¹

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Abstract

In this paper we address problems regarding the nature, syntax and semantics of Spanish clitics

with special focus on the syntax-semantics interface perspective. We will address the problem of

so-called "clitic doubling" CD, to see the semantic consequences that different syntactic

configurations have, and investigate on how syntactic operations are triggered by the need to

generate interface effects. We will put forth the thesis that clitics are procedural elements whose

function is to license the presence of their associates and provide the semantic interface with

instructions as to how to manipulate those sortal associates.

Keywords: Clitic Doubling; Spanish; Case Marking; procedural elements

1. WHAT ARE CLITICS?

The term *clitic* refers to lexical items which are syntactically independent but phonologically

dependent constituents, they behave syntactically as if they were maximal projections XPs, but

take no complements or specifiers: within the Bare Phrase Structure of Chomsky (1994), they are

dubbed as X_0^{max} , at the same time maximal and minimal projections. Phonological dependence

typically implies that the clitic undergoes 'phonological word-formation' or, more technically,

head-to-head movement at PF, by means of which it joins a constituent which bears stress

(typically, a verb). Their position in this constituent depends on language-specific properties:

Spanish allows clitics to appear at either the left or right of a phonologically heavy word, capable

of bearing stress. This determines two categories, enclitics and proclitics:

1) *Te* veo venir (Proclitic)

Mandale dinero (Enclitic)

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All mistakes are entirely our responsibility.

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Their position and syntactic status have been dealt with from mainly two perspectives: base generation (e.g., Jaeggli, 1986) and movement (e.g., Kayne, 1975). Belloro (2007) presents evidence in favor of both approaches, with focus on the syntax-phonology interface. In the present work, we will not problematize position and movement (so-called "clitic climbing"), as it goes beyond our scope, but simply assume (with all concomitant problems) that clitics are basegenerated, at least in Spanish: this means that clitics do not move to their final positions, but rather, they are merged in those positions in which they surface. An instance of the basegeneration approach is that explained in Manzini & Savoia (2002: 118), who claim that "clitics are inserted under specialized functional categories, i.e. in stricter minimalist terms their merger projects specialized functional categories". One point in favor of the base-generation approach is that, if the associate is to be merged in the place of the displaced clitic in CD constructions, there cannot be a trace left behind. We would have to resort not to movement but to incorporation (Baker, 1988 and subsequent work), which seems to complicate the scene. Moreover, morphological reorganization procedures for clitics in the form of ad hoc rules would become redundant with the basic syntactic operation Merge (particularly, Internal Merge, i.e., Move), as pointed out by Manzini & Savoia (2002: 118). A further possibility, explored in Portuguese by Sandalo & Galvez (2011) is that there is a diachronic factor influencing the distribution of clitics in the clausal skeleton: their place in clause structure is not given a priori, but processes leading to obligatory enclisis or proclisis "occur across time". Therefore, the base-generation approach could be reformulated as a synchronic view of what diachronically involved movement, and if there has been a shift from ad hoc morphological re-arrangement rules to fixed templates for clitic placement, "this shift may have involved grammaticalization" (Sandalo & Galvez, 2011). However, this perspective is admittedly requires further investigation (see Uriagereka, 1995 and Raposo & Uriagereka, 2005 for insight on this problem) particularly considering diachrony as a fundamental factor affecting clitic placement, case marking, and the local relation between clitics and their associate DPs (see also Anderson, 2005: 149).

Clitics are usually dealt with in the literature as "syntactically extraordinary" elements. May the following list of particular descriptive characteristics serve as an example of this view (Desouvrey, 2000; Zwicky, 1977; Bosque & Gutiérrez Rexach, 2008; Mascaró & Rigau, 2009, among many others):

- 2) a. Clitics must be adjacent to their host.
 - b. Only another clitic can intervene between a clitic and its host.
 - c. Clitics cannot be conjoined or modified.
 - d. Clitics cannot be stressed.
 - e. Clitics are likely to have morphologically distinguished Case.
 - f. Clitics may not occur at all in the absence of any verb.
 - g. Clitics may appear in second position of the sentence (or the clause).
 - h. Clitics do not allow further morphology on their hosts.

Within Generative Grammar, including Distributed Morphology, the situation is the same. For example, Embick & Noyer (2004) consider them special elements that do not configure a category on their own; and Anderson (2005) follows Zwicky's (1977) distinction between *simple* and *special clitics*, based on the syntactic principles that rule their distribution: simple clitics are deaccented and usually present a weak phonological form (e.g., English ['s], ['tl], ['ve]), bearing little if any difference with their non-clitic counterparts; whereas special clitics present many differences as to their syntax and semantics with their pronominal counterparts (e.g., Spanish [lo]): for example, pronouns do not allow doubling, whereas clitics do, possibly as an instance of *functionalization* in the clitic: this will be essential for our proposal that clitics are (synchronically) not *conceptual* elements (i.e., they do not denote entities, either sortal or eventive) but *procedural* elements (i.e., they provide the semantic component with instructions as to how to interpret the relations between entities), adopting the terminology from Relevance Theory (Wilson & Sperber, 2003; Escandell & Leonetti, 2004, 2011). This general thesis that clitics are somehow special units has been called *Clitic Idiosincrasy*, and can be formulated as follows:

Clitic Idiosyncrasy Hypothesis (CIH):

Certain clitics are neither words nor affixes, but constitute a separate type of object whose behaviour is partly governed by dedicated (i.e. clitic-specific) grammatical mechanisms. (Bermúdez Otero & Payne, 2008: 3).

This view is also hold by Sportiche (1995), who takes clitics to head their own ClP (Clitic Phrase) projection. In a Romance clitic construction, there would be an inflectional head H₀

heading a projection within the inflectional system, call it ClP in the general case. This view has been developed by other theoreticians: the clitic appears within a special domain, ClP / KP either as a head or a specifier (1995: 2). This is very problematic: on the one hand, it assumes that clitics are somehow extraordinary elements (a perspective which, in turn, requires additional descriptive and explanatory tools to account for their behavior); on the other, there is a strong link between clitics and the assumption of headedness in the syntactic component, which forces the X-bar schema on all syntactic elements (thus the Clitic Phrase proposal), including those that take no complements, specifiers, or adjuncts, thus creating superfluous structural positions.

Jaeggli (1981) takes clitics to have a *nominal* nature, based on the fact that they:

- 3) i. Can "climb" through the syntactic structure (analogous to raising structures)
 - ii. Do not affect the stress pattern on the V
 - iii. Show nominal inflectional morphology

However, as Belloro (2007) points out, these characteristics do not always hold. River Plate Spanish, for example, displays stress shifting in ditransitive constructions caused by both the ACC and the DAT (morphological) clitics:

- 4) a. Poné la mesa
 - b. Ponéte_{DAT} eso
 - c. Ponete_{DAT}ló_{ACC}

Inflectional morphology is also affected by variety: Paraguay Spanish has a marked tendency towards the *dative* morphology, even in contexts where we would expect an accusative clitic:

5) Le_{DAT} vi llegar (a Juan) [accusativus cum infinitivus construction]

This leads us to think that there is a situation of morphological underspecification in the dative vocabulary item in Paraguay Spanish which is absent in River Plate Spanish (see Embick & Noyer, 2004 for some discussion on underspecification). Moreover, grammaticalization patterns influencing the distribution of accusative and dative case morphology throughout Spanish have resulted in the fact that

IO-doubling is much less constrained that DO-doubling. This asymmetry is reflected both on its relative degree of dialectal spreading as well as on the degree of grammatical restrictions that it is subject to. IO-doubling yields grammatical sentences across all

varieties of Spanish; and there is no Spanish dialect in which IO-doubling does not occur to some extent. (Belloro, 2007: 14)

Morphological exponents should not be confused with abstract case (for example, the [le] clitic in (5) is marked with ACC abstract case, but is materialized via DAT morphology), but Belloro's point holds, although perhaps slightly modified: IO morphological doubling is much less constrained than DO morphological doubling, perhaps because ACC morphology tends to be more specified than DAT morphology, which undergoes underspecification in the sense of Distributed Morphology, thus allowing its insertion in more syntactic contexts. We see that Jaeggli's position is to be, at least, relativized: while it might be plausible that some clitics have nominal (or, rather pronominal) nature, it is too strong a claim to be empirically correct, as Belloro proves. However, the general pronoun-to-clitic historical dynamics (which amounts to acknowledging nominal nature for clitics) is useful when considering, for instance, the emergence of certain clitic forms in Spanish: Latin pronominal [me], the dative form of first person pronoun [ego], lost phonological independency, and is now an underspecified form for both ACC and DAT morphological cases; whereas [ego] simply disappeared by the XI century, as can be seen in the epic poem Cantar del Mio Cid. Object pronouns, which kept their phonological autonomy for some time, are already considered *clitics* as far back as the XVI century (see Keniston, 1937: 89). There seems to be a process of de-conceptualization (or, conversely, 'proceduralization') of pronominal forms, accompanied of loss of phonological independence, when it comes to morphological exponents. When dealing with case assignment, however, we will bear in mind abstract case rather than morphological case, unless explicitly specified.

To continue with our brief summary, Raposo & Uriagereka's (2005: 650), share the assumption that clitics have an essentially nominal nature and head their own projection, which they phrase as "Romance pronominal clitics are normal Ds heading a DP". Raposo & Uriagereka do not assume clitics to be extraordinary units, as their placement in an autonomous functional FP projection between TP and CP is determined by the same principles that rule the placement of any other constituent in the same position (e.g., affective constituents c-commanding polarity items). However there is no place for such claims within a free Merge, interface-driven scenario unless strongly supported empirically: their theoretical cost is too high, as every projection must have an interface interpretation (and, additionally, every element within a projection must also be

interface-justified in order not to be superfluous) and it is difficult to see how a purely functional layer, apparently different from Top and Foc (Rizzi, 1997) is to be justified in interface terms. The same is valid for CIP-like proposals: do clitics have any specific [Clitic] categorial feature to percolate to a [Cl] label? If so, which exactly is the interface value of such feature? On the other hand, if they are D⁰ heads (as in Raposo & Uriagereka's proposal), why cannot they take nominal complements in Spanish (the normal [DP [NP]] construction), or be immediately followed by their associate in doubling constructions? The CIH (assumed in the accounts we have very briefly summarized, as well as in many accounts of clitic placement and its relation to ATB extraction, verb movement and other phenomena) forces us to make a number of additional assumptions, as Bermúdez Otero & Payne acknowledge. The point, given (2), is: do we *need* those assumptions to have a descriptively and explanatorily adequate theory of clitics, applicable to any language of our interest? The optimal scenario, and the one we will assume, is that we do not: following the line of Boeckx (2010), De Belder (2011) and much related work, our position is that any phenomena arise from the interaction between generation and interpretation, interaction that should optimally be explained in a uniform way, without substantive idiosyncrasies. If the interfaces are universal, so should be the constraints they establish for the syntactic manipulation of atomic objects. Therefore, we will try to account for at least some of the aforementioned characteristics without resorting to the claim that there are semantic-syntactic particularities of clitics which resist subsumption to independent explanations in a non-standard framework.

2. GENERAL THEORETICAL CONSIDERATIONS:

In this section we will introduce some of the theoretical machinery that will be used in the rest of the paper, as well as a discussion on the nature of clitics. A preliminary discussion of the generative procedure is in order, as it will provide the basis for our conception of "syntax". To analyze derivations, we depart from a unique generative operation, call it *Merge*, which we define as follows (see Uriagereka, 1999; Boeckx, 2010; Chomsky, 1995 for previous references, although our definition, set-theoretically formalized, has different consequences for the design of generative faculties):

6) Merge is a free unbounded structure-building operation that applies to two (smallest non-trivial number of elements) distinct objects.

Our conception, shared with other researchers, clearly departs from the claim that every operation must be triggered by the need to check some unvalued feature, as Pesetsky & Torrego (2007) and Chomsky (1998) claim. Formally, free Merge is made explicit by what we call *concatenation*:

Without dismissing any possibility *a priori*, this scenario leaves us with three possible types of Merge:

- 1) Merge (α, β) , $\alpha \neq \beta$ –but α and β share format- *Distinct binary Merge* (Boeckx, 2010; Krivochen, 2011, 2012)
- 2) Merge (α, β) , $\alpha = \beta$ Self Merge
- 3) Merge $(\alpha, \beta, \gamma...)$, $\alpha \neq \beta \neq \gamma$ Unrestricted distinct Merge

As the null hypothesis, we will claim that elements Merge freely in the working area (anything else would need additional stipulations), all constraints being determined by interface conditions, in quite an Optimality Theory-like manner. We will set our focus on Logical Form interface conditions (that is, LF as the EVAL function), which we take to be constraints on legible structures for the purposes of building fully-fledged propositional representations of the syntactic structure, filling referential variables, disambiguating elements and resorting to other propositions as the context in which a given structure is computed, drawing heavily on Relevance Theory (Wilson & Sperber, 2003 for an overview of the theory, and Escandell & Leonetti, 2004 for a proposal to compatibilize RT with the clausal skeleton in the Minimalist Program) as a possible theory of the syntax-semantics interface. We will devote this paper to some problems in the syntax-morphology interface, which, in turn, will lead us to review and problematize some claims that have a long history within internalist studies of language.

Before getting fully into the topic, let us make explicit some assumptions we will draw upon during our inquiry:

1) Categories, phases and other units are not primitives of the syntactic theory, but arise as a result of the interaction of a free Merge system with interface conditions: the dynamics of the derivation and the legibility conditions of certain interpretative mental faculties or any other computational module. (see Krivochen, 2012; De Belder, 2011, Boeckx, 2010; also work in

Distributed Morphology like Marantz, 1997 and Fábregas, 2005 and Exo Skeletal Models, see Borer, 2009 among others).

2) In a claim traceable back to Generative Semantics, there is no distinction between "lexical derivations" and "syntactic derivations", and this goes beyond positing a single generative mechanism: there are just derivations, regardless the nature of the elements that are manipulated, since the generative operation is blind. This means that there is no pre-syntactic generative lexicon (Cf. Hale & Keyser's, 1993 l-syntax) and no constraints on Merge (Cf. Chomsky, 2005 and his "Edge Feature" as a *sine qua non* condition for Merge to apply; also Pesetsky & Torrego's 2007 *vehicle requirement on Merge*, among many others).

Once some basic assumptions have been outlined, let us focus on the elements we will analyze in this paper, namely, clitics. We will first define them and characterize them from our perspective, and then provide some explanations regarding case assignment and "selosismo" in Spanish².

We will therefore maintain a strong uniformity thesis here, namely, there are no syntactically extraordinary elements, all differences arise at the interfaces³. In this case, the relevant interface is PF: all that clitics have of anomalous is their phonological form (the impossibility of bearing stress and the need to attach to a phonologically heavy host), but by no means their syntactic behavior or their semantics. Since Merge is characterized as a free, unbounded, blind operation, there is simply no way in which any characteristic of clitics could have any impact on the very simple generative algorithm outlined above. Semantically, we will draw on Relevance Theory (RT) and its conceptual-procedural distinction to make clitics' contribution to the LF fully explicit. We will distinguish these two kinds of elements, whose difference is given not by their format or inherent syntactic properties (e.g., feature matrices) but by their interpretation potential at the semantic interface:

² All examples have been checked with Peninsular Spanish native speakers, and grammaticality judgments (unless explicitly indicated) follow River Plate Spanish conventions, my own native variety. When differences have arisen, they have been acknowledged.

³ A similar view with respect to clitics is held in Belloro (2007) and Bermúdez Otero & Payne (2008), on different bases.

Roots: Roots will be defined as pre-categorial linguistic instantiations of a-categorial generic concepts⁴ (Cf. Borer, 2009; De Belder, 2011; Fábregas, 2005 among others, who only consider their linguistic aspect). Generic concepts are "severely underspecified", since they are used by many faculties, and therefore cannot have any property readable by only some of them; otherwise, the derivation would crash in whatever faculty we are considering (cf. Boeckx, 2010; Panagiotidis, 2010). Roots convey generic conceptual instructions, and their potential extension is *maximal* (expressible by the superset that properly contains all referential sets), given their semantic underspecification: bare roots have no (spatio-temporal) anchor. In formal terms,

7) $\sqrt{=}$ S, where S = { $\alpha_1...\alpha_n$ }, α a member of $\sqrt{}$'s extension, and $n = \infty$ (if one considers roots can potentially refer to non-factual worlds)

<u>Procedural elements:</u> according to Escandell & Leonetti (2004), traditional *functional nodes* in generative syntax convey *procedural* instructions to the post-syntactic semantic component as to how to manipulate a given semantic substance; they provide instructions to relate conceptual content. The concept of "procedural instruction" can be better refined as follows:

8) Procedural instructions:

• Restrict reference in terms of a proper subset of the root. Each element restricts the set in different ways, say:

$$\circ [X, \sqrt{]} = \{\alpha, \beta, \gamma\}$$

$$\circ \quad [Y, \sqrt{]} = \{\gamma, \lambda, \delta\}$$

• Provide instructions as to:

 Where to retrieve information, assuming a massively modular architecture of the mind in which specialized modules interact in interpretation.

What kind of information to retrieve

⁴ The distinction is of the utmost importance for our proposal: pre-categorial roots *can* be assigned a category (either by merge with a functional categorizer, as in Marantz, 1997 and Fábregas, 2005, or by association at the semantic interface); whereas a-categorial generic concepts simply lack the possibility of being linguistically categorized because they do not belong to the Faculty of Language, being rather part of the "Language of Thought" (see Fodor, 1983; Jackendoff, 2002; Culicover & Jackendoff, 2005; Uriagereka, 2012).

Therefore, procedural elements convey *locative* meaning in the sense that they relate a *figure* (i.e., the root) to a *ground* (a set of intensional properties), assuming a localist theory of the mind (e.g., Anderson, 1976), and they are thus logical *predicators*. Under this light, we will define a "clitic" as the materialization of a *procedural* terminal node in a syntactic structure, a *weak* affix that needs a phonological host because it cannot bear stress and so cannot stand as an independent phonological word (as far as its PF characteristics are concerned). Procedural nodes convey instructions referent to how to interpret the relations between conceptual content, typically, structures containing a *root*, of the type $\{X, \sqrt{}\}$, being X a terminal node (as far as its LF characteristics are concerned), most typically, {Determiner, $\sqrt{}\}$, which gives rise to a 'sortal entity' interpretation of the root.

Procedural elements are characterized as *predicates* that have scope over their logical *argument*, whose nature and number is determined by the nature of the predicate. Unlike Escandell & Leonetti (2011: 2), we claim that procedural instructions do not affect the syntactic computation as Merge is, under the simplest assumptions, free and unbounded, and completely blind to the characteristics of the elements it manipulates. Thus, all procedural content consists of *interpretative instructions*, which are relevant at the C-I interface.

With respect to the role of configurations, and procedural elements, we will argue, along the lines of Boeckx (2010), that nothing is fixed beforehand: any interpretation is determined by combination and *local* relation between elements in the generative component and read off at the relevant interface level. In our framework, there are no other relations that those established according to semantic requirements, and read off at the interfaces representations. We will come back to the process of interpreting local dependencies below, when dealing with abstract case marking. In this vein, we argue in favour of a strongly derivational model, in which "representations", which undoubtedly exist (any *Transfer* operation applies to *representations*, more or less complex), are redefined in order to lose the connotations from the GB-era. Our use of "representation" is highly restricted, following Epstein & Seely's (2002) strongest version of a derivational system, combined with extremely local evaluation (see Heck & Müller, 2007; Müller, 2011) of the objects produced by Merge. However, unlike Heck & Müller, we do not assume *evaluation* implies *optimization*: if a unit is not ready to be transferred yet, it can wait another derivational turn that can "save" the derivation, following Putnam's (2010) definition of

soft crash. We also assume "invasive interfaces", as Boeckx (2007) does, and so the "external systems" (i.e., sound and meaning systems) can have access to the syntactic workspace after each application of the structure-building operation concatenation to evaluate whether the resultant object is a legible (and therefore transferable) unit. The derivational dynamics such a system implies is the following:

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9) Concatenate (\alpha, \beta) = \{\alpha, \beta\}
Analyze<sub>IL</sub> \{\alpha, \beta\} [is \{\alpha, \beta\} fully interpretable by the Interface Level IL?]
(Transfer \{\alpha, \beta\} if Analyze<sub>IL</sub> results in convergence at IL)
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Our claim is that the strict distinction between computation and representation should not hold, as it is not a *sine qua non* condition for the distinction *conceptual* – *procedural* to remain. If the conceptual or procedural character of a unit is determined at the interface, as a reading of the relations it has established in the generative workspace via *concatenate*, then the dynamics in (9) –which correspond, we believe, to a strongly derivational system-hold all the same. In Relevance Theoretic terms, conceptual elements provide the substance, whereas procedural elements provide instructions for interpretation of the relations that hold between conceptual elements.

Under the light of the theory outlined so far, we provisionally conclude that clitics are procedural elements because the presence of a clitic can determine the interpretation of the *relation* to be established between two conceptual elements, say, two $\{D, \sqrt{}\}$ (i.e., DPs in Abney's 1987 terms) structures at LF. Take the following example -from Radeva-Bork (2011, 2012)-:

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10) Bulgarian: Tatkoto<sub>DEF</sub> go<sub>ACC-clitic</sub> celuna Maria
Father_{DEF} him_{ACC} kissed Maria
"Maria kissed the father"
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In this case, it is the clitic that contributes to derive the interpretation "Maria kissed the father" or we could say, it disambiguates between the syntactic roles of arguments Agent / Patient as suggested by the neutral word order SVO in Bulgarian (Radeva-Bork, p.c.), via procedural instructions, accepting that the element merged in Spec-TP is read off as the *theme* of the clause, in informational terms (Krivochen, 2014). The procedural value of the clitic is straightforward.

Of course, this does not mean that the *interpretation itself* is straightforward. As discussed in Radeva-Bork (2012) there are other instances of CD in Bulgarian in which the interpretation of the sentence is not straightforward despite the presence of a doubling clitic. An instance of one such environment is a sentence with two arguments that have the same person and number features. And yet, the fact that an element is *procedural* does *not* mean that the sentence interpretation is ultimately unambiguous. What it means is simply that it provides *instructions* to the relevant system (the Conceptual-Intentional system, in this case) to compute the relation between conceptual elements (or in *thematic* terms). And, if one interpretation is *more accessible* than the other, then, *ceteris paribus*, it's *more relevant* in the technical sense, which is what we aimed at from the beginning: a system that can handle flexibility and potentially more than one interpretation for a single string. A *subpersonal* and *biologically-based* relevance-theoretic approach to C-I, provides us with prospects for building such a system. This architecture will be fully explained below.

Another distinctive feature of clitics, which we have already seen, is that they *license the* presence of XPs (i.e., minimal fully-fledged domains), which we call their associates. This licensing takes place in a local structural domain defined by the presence of both a variable and its binder (in this case, the clitic and the PP), a relation to be formalized in (16) below. The relation between the clitic and the associate is made explicit in the phonological exponent of both, since there is *feature copying* at PF: there cannot be a mismatch between the clitic and the associate with respect to VI Spelling Out ϕ -features and Case, and if we consider that a VI is inserted in a terminal node that has certain features, our last claim follows naturally. This instance of redundancy is what we call (following Grohmann, 2003) a *drastic effect on the output*, i.e., at the semantic interface. If there is a mismatch, the derivation crashes:

11) Sp: *A $mi_{[DAT, Sg]}$ les $_{[DAT, Pl]}$ -gusta el Jazz $To \ me_{[DAT, Sg]} \ CL_{[DAT, Pl]}$ like Jazz "I like Jazz" We claim that it is the clitic that licenses the XP in Spanish psych constructions and not the other way around⁵ with basis on the contrast between the constructions (12) and (13), where we find a DAT argument:

12) Sp: Me_[DAT, Sg] gusta el Jazz

 $CL_{IDAT. Sg1}$ like $_{ISgPres}$ the Jazz

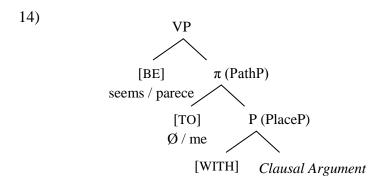
13) Sp: *A mí[DAT, Sg] gusta el Jazz

To $me_{[DAT, Sg]}$ like $_{ISgPres}$ the Jazz

(12) presents us with a situation in which the clitic is realized but the PP, its *associate*, is not, and the result is a well-formed phrase. (13), on the other hand, presents a PP with no materialized clitic, an ill-formed structure. Can a procedural perspective on clitics explain this contrast? We believe it can. First, we have to determine which are the conceptual entities involved: in this case, we will follow Belleti & Rizzi's (1988) hypothesis that psych verbs are unaccusative, relating, in cognitive terms, a *figure* and a *ground* (see Mateu Fontanals, 2002; Talmy, 2000 for developments of those notions), which are syntactically instantiated as Spec-P and Compl-P respectively. Moreover, following Acedo-Matellán & Mateu Fontanals (2010), Svenonius (2008) among many others, we will split the locative projection into π (Path) and P(Place) (see Acedo-Matellán & Mateu, 2010: 5, ss. for example), and generate the dative clitic in the π projection, leaving the propositional figure within the P projection, conveying a *central coincidence* relation between the experiencer and the clausal argument (for developments of the notion of *central* and *terminal coincidence*, see Hale & Keyser, 2002). The relevant ground in psych Vs is a *mind*, a (null) entity coindexed with the clitic, being thus its associate. The same representation is valid for raising Vs, as we see in (14):

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⁵ Some authors, like Belloro (2007: 6) simply define CD as "The referential chains formed by clitics and nominal phrases", without specifying what doubles what. Others, like Fontana (1993: 44), explicitly claim that the clitic doubles the NP: "(...) in no dialect of MSp [Modern Spanish] can object personal pronouns appear on their own in the sentence; they must be **doubled by a coindexed clitic** (...)." (our highlighting)



The use of these representations lead us to a more uniform theory, since psych-V and raising Vs are treated the same and there has been no need to posit a particular treatment for any of the structures, thus simplifying the scenario presented by the *Clitic Idiosyncrasy Thesis*. Now, we will deal with the specific problem of abstract case-marking in both clitics and their associates, with particular reference to how a doubled element, the PP, gets to be case-interpreted.

3. CASE MARKING WITHOUT AGREE:

The basic claim underlying all Agree machinery, as we understand it, is that "constituents establish relations to one another" (Hedde Zeijstra, p.c.). If that is the intuition, our semantically-based system is fully compatible with it, but relations are established not in the syntactic component but at the semantic interface. Let us first summarize what is needed in an Agree-based syntax (Chomsky, 1999 et. seq.; Pesetsky & Torrego, 2007; Müller, 2011, among many others):

15)

- a) Dimensions
- b) Values
- c) An unvalued instance of a dimension [D] that acts as a *probe*, searching for a valued counterpart
- d) An operation to relate a valued and an unvalued instance of the same dimension

Our proposal in previous works (Krivochen, 2011, 2012) there are no features as traditionally conceived, [± F] (see for example Uriagereka's comments to Chomsky, 1999) but only semantically interpretable dimensions that, *in abstracto*, comprise all possible outcomes. For example, [Case] comprises *in abstracto* all possible outcomes NOM, ACC and DAT. Following a

well-known convention in physics, we will call such state " ψ -state". In this system, a dimension in its ψ -state collapses to *one* of the possible outcomes in a local relation with a procedural node at LF.

We have suggested that α makes β collapse to one of its possible outcomes if and only if γ is not an intervenient element for Minimality effects, re-defining the concept as follows (Krivochen & Kosta, 2013: 179)

16) Radically Minimalist Minimality (RMM)

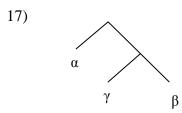
A node X and a node Z can be related at the interface level IL iff:

- a. there is no Y structurally between X and Z that has a procedural instruction that can generate a drastic interface effect in X.
- b. there is no Y structurally between X and Z such that Y is a token of either X or Z. Otherwise, Y is invisible for the purpose of interface effects.

Following the framework outlined so far, we still have to explain the presence of Case marking on clitics (fact 2e), since it is a common assumption that so-called "heads" bear ϕ -features (person / number) and T_s/T_0 features to value [u-T] on DPs (Pesetsky & Torrego, 2007) and therefore case-mark them, but it is not so common to see that *heads* are themselves case-marked. In our theory, there is no such thing as case-marking (even though we will use the term as shorthand), but *Case is an interface interpretation of a configurational relation* in accordance with RMM, as posited in Krivochen (2012: 77, ff.) and extensively applied by Trejo (2013):

- Nominative: *read off* at LF from a {Time, {D}} local relation (i.e., respecting *Minimality*), and *interpreted thematically* (in the explicature building process, see Wilson & Sperber, 2003) as Agent / Force
- Accusative: *read off* from a {Cause, {D}} local relation, and *interpreted thematically* as Theme, the object (Figure) located in / moving towards, etc. a Ground
- Dative: read off from a {P, {D}} local relation, and interpreted thematically as Location, the Ground in cognitive terms.

To summarize, our conception of Case is simply *a morphological epiphenomenon*, parasitic on the syntactic configurations that license so-called "theta-roles". The general configuration to be taken into account is as follows:



That is, being α a procedural node, specified enough as regards distribution, and γ an n number of non-intervenient nodes, the interface reads the relation between α and β as "local", since "distance" is not measured by number of branches (which are nothing more than a representation, no more real than atomic models) but by suitable procedural nodes. In the specific instance of case, α is either T, P or ν , and β is a $\{D\}$ construction, in turn a complex object since it minimally contains a *root* and a D, thus being interpreted as a referential expression (see Krivochen, 2012 for details). This means that a clitic will be abstractly "marked" as ACC if the relation in (17) holds provided that the influencer α is ν (bearing the interpretable semantic dimension *causativity*). As we said above, however, this does not mean that the argument β will be *morphologically* marked as ACC, as there are both diachronic (progressive historical underspecification of certain morphological exponents) and synchronic (availability of specific morphological exponents) factors affecting materialization.

Notice that the locality conditions mentioned so far, if developed, could derive facts (2a, b) about clitics, their adjacency to their V hosts (since V moves up to v, thus allowing the ACC marking if there is no intervenient γ) and the fact that only a clitic can intervene between the host and a clitic (since the only allowable γ in a host-clitic configuration is another clitic, that is, an element that can produce *ceteris paribus* the same interface effects than β). We have thus grouped facts (2a, b, and e) under the same explanation, which is highly desirable under minimalist desiderata. A full account of these facts, which we will not attempt here, is currently under investigation.

We will see in the structural configurations, that the associate must appear in one of the aforementioned configurations, and by means of *feature copying* in PF, the case features appear in both elements (even though it is the associate that is under the scope of a procedural node), as a *drastic interface effect*.

4. WHAT DOUBLES WHAT IN SPANISH "DOUBLING CONSTRUCTIONS"?

In this section we will analyze the consequences of adopting the following hypothesis: there is no such thing as "clitic doubling" (CD) as opposed to constructions without doubling, since the presence of the associate is licensed by the procedural node, be this Spelled Out or not. This amounts to saying that every language has argumental clitics at LF, but what they may lack is the Vocabulary Item to insert in the corresponding terminal node (what amounts to saying, in more traditional terms, that some languages have \emptyset / null / empty clitics). If there is no clitic, there is no associate, conversely, if we see the associate, we have to suppose a licensing element, which is a clitic in a wide sense: a procedural terminal node conveying instructions with respect to how to link the clitic and the associate are part of the procedural value of the clitic. Narrowing our focus to Spanish, clitic doubling can be obligatory in certain syntactic contexts (judgments correspond to River Plate Spanish):

a) Pronominal **direct object** (obligatory):

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*(Los) invité (a ellos).
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b) Non-pronominal **direct object** (clitic doubling is impossible):

Anoche (*lo) comí arroz.

c) Pronominal **indirect object** (obligatory):

María *(le) prestó los apuntes (a él).

d) Non-pronominal **indirect object** (optional):

María (le) llevó el libro a Juan.

e) Non-pronominal **possessive** dative object (obligatory):

Juan *(le) rompió el brazo (a Pedro) –notice "Juan rompió el brazo de Pedro", indicating possession-

f) **Experiencers** (obligatory):

(A ella) *(le) gusta el Jazz.

A reviewer calls our attention to the data in (18 - 19):

18) a. Tocó la sonata [durante horas]

b. La tocó a la sonata [durante horas]

19) a. He played the sonata [for hours]

b. *He played to the sonata [for hours]

The reviewer points out, following Depiante (2000), that "in the Spanish dialects allowing the doubling of inanimate objects like *sonata*, the interpretation obtaining is broader in range than that in (1b) [18b]. The normal interpretation is that the pianist plays some sonata (type) for hours, practicing it. In contrast, (1b) [18b] is meant to convey the thought that the pianist stretches one given sonata for hours, as in a very slow piece by a contemporary composer". However, we find no such contrast, as native speakers of Spanish. An important fact that should not be overlooked here is the interaction between clitic doubling and stress assignment, which generates different semantic-pragmatic effects: stress in [toc6] in (18 b) generates an implicature "he managed to play it", rather than the adjunct-influenced imperfective interpretation the reviewer, following Depiante, finds. If we take the adjuncts away, then (18a) is clearly perfective-repetitive (one plays the same sonata over and over again), whereas (18b) can have an imperfective meaning, boosted by the adjunct. The English examples in (19), in our opinion, are not relevant for the present discussion insofar as the ungrammaticality of (19 b) is not given by clitic-related reasons: even if a null clitic were posited, [play] requires an accusative object to govern directly, not a prepositional object where the P acts as a barrier for government.

Let us take a further look at the following well-known Spanish constructions:

20) A Juan_{Assoc} le_{Cl} parece que María lo engaña

To Juan CL_{DAT} seems that María CL_{ACC} cheats

"It seems to John that Mary cheats him"

21) *A Juan_{Assoc} parece que María lo engaña

To Juan seems that María CL_{ACC} cheats

22) Le parece que María lo engaña (if [A Juan] is recoverable from the context)

CL_{DAT} seems that María *CL_{ACC}* cheats

"It seems to him that Mary cheats him"

The rule behind this seems to be the following: Spell-Out as few elements as needed for convergence [i.e., legibility at the interfaces], unless there is a powerful reason to Spell-Out elements that are not strictly necessary. The last clause contemplates cases like (22), in which the

PP is not necessary for grammaticality, as we see in (20), but generates a different interface effect, namely, a *contrastive interpretation*:

23) a. A Juan, no a Pedro, le parece que María lo engaña

To Juan, not to Pedro, CL_{DAT} seems that María CL_{ACC} cheats

"It seems to John, not to Peter, that Mary cheats him"

b. Le parece a Juan, no a Pedro, que María lo engaña

This possibility is ruled out if the PP the clitic is coindexed with is left covert:

24) *Le parece, no a Pedro, que María lo engaña.

CL_{DAT} seems, not to Pedro, that María CL_{ACC} cheats

However, we can have contrastive constructions if the *verb* is the element in question, particularly if we are dealing with *raising* Vs having modal value (epistemic):

25) Le *parece*, *no está seguro* de que María lo engaña (*Italics* mark prominence)

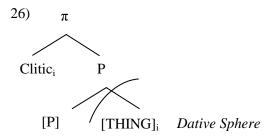
 CL_{DAT} seems, not-be sure, that María CL_{ACC} cheats

"It seems to him, though he is not sure, that Mary cheats him"

Our "Lazy Spell-Out" principle (i.e., Spell Out as little as you can) accounts for optionality in doubling, since, if doubling is triggered by a semantic-pragmatic interface requirement of Topic contrast, for example (as it seems to be the case in Spanish), Spell-Out takes place (interface requirements count as "powerful reasons") but, if there is no such requirement, then some elements can remain "covert", provided that there is no *drastic interface effect*. At this point, once we have introduced the notion of case-marking at the semantic interface, we have to expand on why we do not base our computational system on feature valuation and Agree. The next section will introduce some theoretical machinery that is indispensable to fully understand our proposal.

4.1 Structures and abstract case licensing:

We will now analyze the structures and make some comments, following the framework outlined above. Let us begin with the DAT clitic, which, as we have said above, must be within a locative / prepositional structure to license the DAT sphere, following our definition:



If the associate in the structure above is under the scope of a [P] procedural node, it will be interface-read as a Dative-sphere element, and by means of (phonological / p-) *feature copying*, the same case Vocabilary Item VI will be inserted in the licensing element, namely, the clitic. We have put the clitic on the Path (π) node for two main reasons: they typically display terminal coincidence Vocabulary Items VI and this leaves us the procedural value of Place (P) fully available to relate Figure and Ground within its own local domain. This structural requirement for DAT clitics follows from semantic conditions: locative structures appear with either unaccusative or ditransitive constructions (which denote movement, either uncaused or caused), and those are the verbs with which we find these clitics (see section 4.2 for more discussion). Incidentally, fact (2f) is partially accounted for: if an event with particular typological characteristics licenses the presence of a certain argument, within whose domain the clitic is in turn licensed (in this case, by a P head), then it is only natural that clitics cannot occur in the absence of Vs.

Notice that we have put a primitive [THING] (taken from Jackendoff, 1987) as the associate of the clitic, but that does not mean it will be *linguistically* instantiated as an object-denoting phrase (i.e., a DP). A proposition can be conceptualized as an entity, just as verbs are extending-into-time entities instead of nominal, sortal semantic substance (see Borer, 2009, and Panagiotidis, 2010 for details). Let us examine an example:

27) I like listening to Jazz

The corresponding logical representation could be something along the lines of (28)

28)
$$\exists (e) \mid e = \text{listen } (I, Jazz) \land \text{like } (I, e)$$

The last part, after the conjunctive functor, is the same as if we have had (29):

that is, a sortal entity linguistically realized by a DP.

Now, we will analyze the structure for an Accusative clitic, which deserves more development on the light of some interesting contrasts in Spanish, and particularly given the fact, as noticed above, that historically, ACC morphology has displayed a tendency to be more constrained than DAT morphology when it comes to CD, perhaps due to the resistance of 'straight' cases (taking Dionysius Thrax's term) to grammaticalization, more widely available for oblique cases (as syncretism phenomena involving Ablative and Dative in Latin, both then subsumed to a single Oblique clitic form [me / te / le] in Spanish point to):

30) Lo vi a Juan ayer

CL_{ACC} see_{1SgPast} P John yesterday

31) Vi a Juan ayer

See_{1SgPast} P John yesterday

"I saw John yesterday"

With animate objects, since the insertion of a P "a" is "obligatory" in Spanish (apparently, prescriptive grammars claim, to mark animacy. See RAE, 2010) there is no problem in determining associate-clitic relations, but if we replace a proper name or an animate entity for a common name, the situation changes in the following form⁶:

32) Vi el libro que te gustaba

 $See_{1SgPast}$ the book that CL_{DAT} like_{2SgPast}

33) #Lo vi, el libro que te gustaba (River Plate Spanish)

 CL_{ACC} See_{1SePast} the book that CL_{DAT} like_{2SePast}

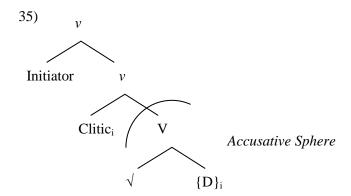
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⁶ The following discussion applies to River Plate Spanish and the Argentinian variety of Spanish in general. Peninsular Spanish (with the possible exception of Andalucía Spanish, as pointed out to us by Victoria Camacho Taboada), however, tends to prefer (33) according to 20 native speakers consulted. In any case, our framework includes (33) as a subset of the cases, being thus able to cope with all possibilities.

34) Lo vi, al libro que te gustaba (River Plate Spanish, also acceptable in Andalucía Spanish) CL_{ACC} $see_{ISgPast}$ P+the book that CL_{DAT} $like_{2SgPast}$

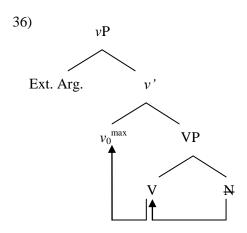
"I saw the book you liked"

The form "al" is the result of head movement from P_0 "a" to D_0 "el". The question is, why, if there is no animacy feature going around, is the P [a] needed? Our answer is the following: the P is a dummy procedural element, which takes a $\{D, \sqrt{}\}$ structure as complement and, as a whole, acts as the clitic's associate. Dummy though it is, the P is necessary, since it doubles the clitic and is therefore relevant to establish a dependency at LF, in accordance with the procedural value we have argued clitics have. Animacy and definiteness, which could be claimed to play a role in these kinds of constructions as variables, are dismissed since we are dealing with a non-animate element, which in Spanish do not take "a" prepositions for ACC and, moreover, that non-animate element is specified via a Restrictive Relative Clause, therefore being more easily recoverable from the context-cotext. We must now turn to the structure in order to have a better idea of the construal in which CD with ACC elements occurs:



The local relation between v, comprising causativity, and $\{D\}$, generate the ACC case licensing sphere, and the procedure is the same as in the previous case. Given the functional-procedural value of the clitic, we find it more appropriate to consider it a causative node, since: the associate manifests ACC morphological marks and the ACC reading is licensed by the presence of a $\{\text{cause}\}$ primitive in the syntactic structure (as in Burzio's generalization, in our terms related to *affectedness*), coming from the pre-syntactic conceptual semantic structure, via *non-transparent* interface. If we consider (as indeed we do) that the clitic licenses the associate and not the other way around (see below), then our proposal does not lack plausibility. There is, however, one problem, and it is related to how the clitic itself gets case maked, since it manifests case

morphologically, even though being outside the νP domain (i.e., in its periphery). We will resort to a mechanism devised, among others, by Hale & Keyser (1993, 2002) with respect to unergative Vs manifesting cognate objects. Unergative Vs, according to Hale & Keyser (1993, 2002) and Mateu Fontanals (2002) result from N-to-V incorporation in the following manner:

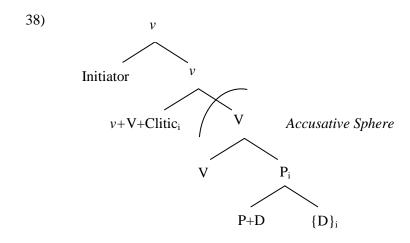


The phonological matrix of an Unergative V comes from the lexical incorporation of a nominal element onto a light dynamic V, [DO] in Mateu Fontanals' (2002) terms. This incorporation, it is crucial to point out, does not leave a trace behind (as if it were traditional movement), because the incorporated element is not an argument but a root, and the whole process does not take place in the syntactic component but in the Lexicon (again, bearing reminiscences to Generative Semantics). Thus, this place can be occupied via Generalized Transformation with a fully-fledged DP, providing further specification with respect to the extension of the incorporated root. For example:

37) John dreamt [a beautiful dream]

We will use this very same mechanics with ACC clitics and the relation to their associates. Just as [a beautiful dream] is a further specification of the extension of the incorporated underspecified root [dream] (i.e., beautiful dreams are a proper subset of dreams); in a case like (32) - (34) we will assume that [el libro que te gustaba] is a further specification of the generic element denoted by the clitic, which has no intensional restrictions. Therefore, the clitic is Merged within the ν domain, as a "sister" of V and gets case-marked in that local relation. Once the clitic adjoins the ν +V complex head, its place is filled by a DP, [el libro que te gustaba]. However, things are not quite well yet, since, as we have seen, (33) is rendered unacceptable by

native speakers in River Plate Spanish. Therefore, we need to mark ACC in the associate as well. Here is where the dummy procedural P comes into play. The "a" P is the only way in which Spanish could Spell-Out case, and thus make the relation clitic-associate more explicit (consequently, easier to process). The "further specification", as we have called it, is not provided by a DP, but by a PP containing the relevant DP, and headed by the dummy P. The structure we propose is as follows:



The P is just there to Spell-Out ACC morphology; therefore, it is *not* a locative element capable of generating a DAT interpretation of its complement. There lies its "dummy" character. The D incorporates onto P, to give [a] + [el] = [al], and the nominal complement (with all due modifiers) remains in situ.

What happens in other varieties of Spanish (like Cataluña Spanish or Peruvian Spanish), in which (32) is perfectly acceptable? We could talk of syncretism (in Distributed Morphology terms, underspecification of a phonological exponent), or simply that ACC features need not be materialized in this particular example to establish the CL-associate dependencies at the relevant interface level: they must, however, be interpreted at LF in order to generate a clitic-associate interpretation. If the amount of structure can be minimized without losing information, it must be (by basic economy principles, let us just say 'less is better than more', *ceteris paribus*), and we hypothesize this is what happens: the P projection is omitted altogether, but the dependency can still be established. This is an example of the preeminence of semantics over phonology in language design (and possibly, also in historical change): as long as semantic effects are

maintained and can be retrieved, phonological exponents can be modified to the point of surfacing as \emptyset , which is economy of representation at PF. We will see a clear example of this in section 5.

4.1.1 *Some problematic cases:*

We have presented some interdialectal variation regarding the availability of P in accusative contexts. Now, we will present some cases in which, given the fact that Ps are procedural elements and thus lead the inference to different places depending on the instructions they carry, just like clitics, the inference is not straightforward and there is a further context-sensitive inferential process to build an inferential proposition. Let us consider ditransitive constructions like (39) and (40):

39) Le di [a Juan] [el libro que querías]

 CL_{DATi} give_{1SgPast} [to John_i] [the book that want_{2SgPast}]

40) Le_i di [el libro que querías] [a Juan]_i

Following Bleam (2003), we characterize (39-40) as Double Object Constructions, in which the CD situation generates a semantic-pragmatic presupposition of goal-possession of the theme at LF: John has the book as a result of the process, a telic, durative, agentive action. Word order is not relevant here, since [Juan] is DAT-marked by a P, and the interpretation is unambiguous. This is evident when we are presented with (41):

41) *Le di a Juan al libro que querías

CL_{DAT} give_{1SgPast} [to John]_{ACC} [to the book want_{2SgPast}]_{DAT}

"I gave John to the book you wanted"

Since [al libro que querías] is not a viable possessor, then we have an ungrammatical example: the presupposition, though logically derivable, is not 'grammatical': an inanimate entity cannot be a possessor. The same happens in cases like (42), suggested by an anonymous reviewer:

42) *me / te / nos / les di al libro que querías

'I gave me / you / we / them to the book you wanted'

Once again, the goal of the movement [al libro que querías] is not a suitable possessor for the entities denoted by the clitics (whichever they turn out to be, that is irrelevant), and therefore the sentence crashes at LF.

Now, what happens when we have a ditransitive construction in which both, the theme and the goal are P-marked? Let us focus on (43):

43) Le entregué al jefe de la Mafia al jefe de Policía

CL_{DAT} deliver_{1SgPast} [P+the boss of the Mafia] [P+the chief of Police]

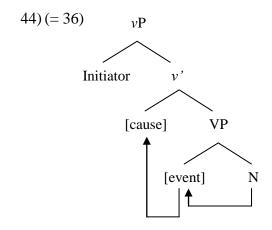
"I delivered the boss of the Mafia to the Chief of Police / I delivered the Chief of Police to the boss of the Mafia"

The problem here is clear: we have two animate entities, and since both require a P in Spanish, it is not clear which is the theme and which the goal. Both interpretations are available: I delivered the Chief of Police to the boss of the Mafia or the other way around. Both entities are capable of being themes and goals / possessors, and since they both have a P, it is not possible, in isolation and without proper context, to determine which of these P is a dummy P (indicating animacy) and which is a real *terminal coincidence* locative P (indicating the goal of the movement denoted by the V). The clitic can, in principle and *ceteris paribus*, be coindexed with either of the bracketed constituents: no procedural element leads the inference to one side or the other. But this does not result in ungrammaticality: contextual propositions are used to build representations of the explicit content of a proposition (see Wilson & Sperber, 2003 for details on this process), they disambiguate the sentence by selecting one of the constituents as the associate of the clitic in a particular situation, and the context-sensitive logical derivation proceeds at LF after *transfer*.

We have paid attention to the syntax of clitics in (di-)transitive constructions, where they can fulfill the role of an argument (thus having the same functional potential as DPs) or, more frequently, provide instructions as to how to relate two sortal entities, be them an initiator and a theme or a figure and a ground (in both cases, requiring an event, going back to fact 2f). In the next section, we will shift our focus to intransitive constructions, and briefly revise which is the behavior of clitics in unergative and unaccusatives contexts, also paying attention to the elements licensed by the Aktionsart (Vendler, 1967) of each verb.

4.2 Clitics and Verb Typology: some considerations

Let us start with Unergative verbs. Following Hale & Keyser (1993); Mateu Fontanals (2002), and much related work, we take Unergatives to have the following lexical structure (using traditional labels for clarification purposes):



The eventive and causative nodes are affixal and, as such, trigger *conflation* of the phonological signature of the N, which can be thought of as an abstract root, a conceptual element.

This typology includes:

- Motion verbs like "caminar" (walk), "correr" (run), etc.
- Stative atelic verbs like "dormir" (sleep), "soñar" (dream), etc.
- Emission verbs like "vomitar" (vomit), "escupir" (spit), etc.
- Intake verbs like "tomar" (drink), "comer" (eat), etc (in their intransitive alternations).

Let us see some examples of clitics with these verbs:

45) Ayer me caminé Buenos Aires

Yesterday CL walk_{ISgPastPerf} B. A.

We must notice that the "me" clitic is a first person form of the "se" clitic that has been on the spotlight for a long time within Spanish studies. In this case, what we have is a *delimiter* locative element (i.e., a prepositional node, heading a π projection) which restricts the reference of the incorporated N root. The interpretation of (45) is thus "Yesterday I walked all throughout Buenos

Aires". Notice that the preposition-less version (46) is unacceptable, at least in River Plate Spanish, as well as in some Peninsular dialects:

46) #Ayer caminé Buenos Aires.

The version which includes a preposition, even if not a delimiter, is fully acceptable, again:

47) Ayer caminé por Buenos Aires

Yesterday walk_{1SePastPerf} around B.A.

(47), crucially, implies that there was some location within Buenos Aires left unwalked, whereas the delimiter clitic, incorporated on the V node in (45) conveys a delimitative reading, in which there is no X, such that X belongs to Buenos Aires, and X was left unwalked.

With atelic verbs, the clitic has a different effect: it changes the verb's Aktionsart, making it *telic-non durative* (thus, an achievement):

48) Juan durmió toda la tarde

John sleep_{3SgPastPerf} all the afternoon

In this case, the adjunct [toda la tarde] provides information as to a time span during which the action took place, but without delimiting it: the action may very well have gone beyond the limits of the afternoon, into the night. In these constructions, the clitic acts like a telicity-inducing node, which has scope over the whole action, eliminates the cause from the construal and transforms the structure into an ergative, dynamic, change-of-state construal:

49) Juan se durmió

John CL sleep_{3SgPastPerf}

"John fell asleep"

The telic, non-durative nature of the construction makes it impossible to add an adjunct that requires duration, like [toda la tarde]:

50) *Juan se durmió toda la tarde

It also makes it impossible to add a clitic when the action is by nature durative, and cannot be transformed into an achievement:

51) *Juan se soñó (unless the CL is reflexive)

John CL dream_{3SgPastPerf}

A note is in order: this particular verb, "dormir" admits a further interpretation with the clitic, which is "meta-delimitative", insofar as the second possible interpretation for (49), provided an adjunct clause is added, is not a *change* of state, but a statement of the *maintenance* of a state beyond a limit:

52) Juan tenía un examen a las 10, pero se durmió y llegó tarde

John have 3SgPastImpf an exam at the 10, but CL sleep 3SgPastPerf and arrived late

"John had an exam at 10, but he overslept and got there late"

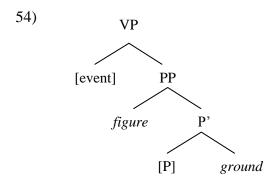
We see here that the corresponding verb in English has an overt preposition [over], indicating abstract movement beyond the conceptual limits of the extension of the eventive root it modifies. Crucially, for this interpretation to obtain, we need the atelic alternances to be viable: no delimiting adjuncts are allowed:

53) *Juan se durmió durante tres horas

John CL sleep_{3SgPastPerf} during three hours

The examples we have seen so far reinforce the prepositional (i.e., relational, procedural) nature of clitics, since the interpretations we have accounted for here are all *locative*, either literally, as in (45), or metaphorically, as in (49). The clitic, in these cases, de-causitivizes the construal, making it ergative. In all cases, moreover, the Aktionsart-related reading of [se] is a feature that developed in Spanish (i.e., after the XI century), being absent in Latin, where [se] (and its case variants) was restricted to a purely referential, anaphoric function with the possibility of having a long-distance referent in *logophoric* configurations.

Unlike *unergative* verbs, which do not include a relation between moved entity and place or goal of that movement, but just a causator and an event; *unaccusative* verbs are inherently *locative*, relating two entities in *central* or *terminal* coincidence terms, a *figure* and a *ground*. Let us explicit the structure we assume for unaccusatives, following Hale & Keyser (2002) and Mateu Fontanals (2002):



In this construal, both the eventive node and the locative node can come in two 'flavors': the event can be either *static* or *dynamic* (the eventive semantic primitives BE or GO respectively); and the locative relation can be one of either *central* or *terminal* coincidence (the prepositional semantic primitives WITH or TO / FROM, respectively). This combination gives us different types of unaccusatives verbs:

- Presentational (aparecer "appear")
- Stative (stand, ser / estar –in a locative sense, either with individual or stage level predicates, as well as literal locations- "be")
- Motion (ir "go", venir "come")

There are no *activities*, since that Aktionsart presupposes agency (syntactically represented by v), and the heart of the unaccusatives semantics is the uncaused movement (literal or metaphorical) of a theme towards / away from a location, or the absence of movement at all: the central coincidence between a theme and a location (as in individual-level predication). Given the essentially *locative* nature of unaccusatives construals, it is to be expected that the addition of clitics with unaccusative Vs has to do with the expression of *movement* (or absence of, as in stative unaccusatives) rather than agency (which is absent from these construals). Let us see two examples:

55) Me fui de casa temprano

*CL leave*_{1SgPastPerf} from home early

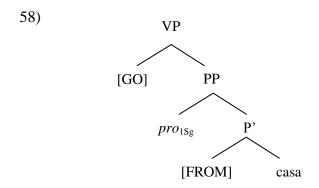
56) Me llegó la factura de luz

CL arrive_{3SgPastPerf} the bill of electricity

There is a crucial difference between these two examples, which also throws light on the unergative examples. Let us take (55) first. In this case, the "me", 1Sg, can be replaced by a "se", 3Sg, to agree with the verb if required. Thus, given the fact that the verb is a motion unaccusative, the *source* interpretation is the most accessible for the semantic parser. The associate, in this case, is the PP [de casa], the *ground* of the locative structure. As we have said before, the absence of the clitic and the presence of the associate is ruled out, as it is the clitic that licenses the associate and not the other way around:

57) *Fui de casa temprano

The verb is inflected in the 1Sg, thus, the *figure* is a 1Sg empty pronoun, co-indexed with the clitic. In terms of the unaccusative structure we graphed above:



The clitic, which can adopt the "se" form has a reflexive flavor, the clitic and the *figure* are referentially linked.

Now, let us take a look at (55). The curious thing about this example (and similar examples) is that the clitic can never adopt the "se" form: its 3Sg form is "le", sometimes an allomorph of "se" when both ACC and DAT arguments are pronominalized. In this case, however, there is no such situation: only the *goal* of the movement is expressed by the clitic. In other words, there is no referential link between the clitic and the *figure* or *moved entity* (which would be the [electricity bill]), but between the clitic and the *ground*, or *goal of movement* (i.e., the speaker, the one who *receives* the bill). It seems to be the case (and this is a descriptive generalization that awaits for further inquiry) that, when there is a referential link between the clitic and the *figure* such that they are coindexed, the clitic can adopt the "se" form; but this is impossible when the referential link is established between the clitic and the *ground* (as in this particular case, [me] and a non-

realized possible associate [a mí] "to me"). It remains to be seen whether the explanation can be looked for in pure syntax or in the syntax-semantics interface (following the semantically-based proposal for pronominal clitics by Defitto, 2002), if the concept of *figure* in transitive construals is liked to that of *affected object*; the clitic therefore adopting a form which coincides with the *reflexive* meaning.

5. A "late notice" on Late Insertion

The claims we have made in this paper allow us to account for a phenomenon that has been observed from the perspectives of lexical decomposition: apparently, the grouping of features in terminal nodes ("morphemes", Distributed Morphology terms) is of somehow constrained by the availability of Vocabulary Items to spell these nodes out, a proposal shared with Nanosyntax (Starke, 2009, 2011). For example, the lack of incorporation of [Manner] onto Motion in English (so-called "Path of Motion constructions", like *John marched into the tent*), or Direction onto Movement in Spanish (with verbs like [entrar] *in-go*, [salir] *out-go*, etc.), thus giving a linguistic typology like "verb-framed" vs. "satellite-framed" languages; would be determined by the lack of vocabulary items to materialize all (or a proper subset, such is the notion of *underspecification* in DM) of the dimensions present in the relevant terminal node. Such a constraint, we have called "Morpheme Formation Constraint" (MFC) in Krivochen & Kosta (2013: 70), and we have formulated it as follows:

59) Dimensions cannot be grouped in a terminal node (i.e., a morpheme) if there is no Vocabulary Item specified enough to materialize that node.

The fact that the items of vocabulary that are inserted late in the derivation, after syntactic operations within local cycles (so-called "Late Insertion"), conditioning the formation of clusters of features would be a violation of the strictly local Chomskyan computational system, as it would represent a clear *look ahead*. In our model, this is perfectly legal. We believe that, if a language allows the realization of a particular feature bundle, the bundle *must* materialize (that is, in our model, *theoretical possibility* equals *necessity*: if you *can* do X, you *must* do X), either in the node those dimensions appeared originally or in the structurally *nearest* node that has a corresponding element in the B List (i.e., the set of morpho-phonological matrices available in L) specified enough to be inserted in that terminal node and materialize its dimensions. This has far-

reaching consequences for Minimality effects, particularly with regards to Clitic Climbing situations. We propose that if α phonologically realizes features that belong to β it is not because α is merged to β (the preposition indicating the asymmetry of Merge) thus forming $\{\alpha, \beta\}$, but because:

60)

- a. α and β are in a local domain (as defined by RMM)
- b. there is no intervenient γ such that γ can phonologically express the whole pack of β 's features

(58b) introduces a very interesting situation: if there is no VI to insert in the terminal node γ such that it can realize phonologically all of the features in β , then it is not actually an intervenient node in terms of Minimality (see Rizzi 2004, 2009, and the discussion above). If the syntactic component is to transfer information to the phonological component, and if we also consider RMM as a valid locality requirement then it is only natural that the interface's *input conditions* constrain the computations in the generative workspace (a consequence also to be found in Stroik & Putnam's 2013 *Survive Minimalism*). This condition is more generally expressed in our Dynamic Full Interpretation principle (Krivochen, 2011, 2012):

61) Any derivational step is justified only insofar as it increases the information and/or it generates an interpretable object.

This is, in Radical Minimalism, the interface condition *par excellance*, and the condition that drives the application of operations within a workspace W_x . We assume that dimensions can be manipulated either in clusters or dispersed (*scattered*) (Giorgi and Pianesi, 1996), depending on the possibilities of materialization and global considerations of economy: a certain set of features can be projected as a single node or appear distributed in different projections, depending on the requirements of the interface systems. The number of projections is defined "(...) *According to economy considerations, that is, the shortest derivation compatible with the initial array is selected*." (Giorgi and Pianesi, 1996: 141-142). In other words, if a language L allows a set S of dimensions $\{d_1, d_2, d_3...d_n\}$ to be realized either synthetically or analytically (concomitant semantic effects aside, since we are looking at the problem from the generation-phonological

interpretation interface), the synthetic version will be preferred as default, *ceteris paribus*, as there is no movement / feature percolation operation involved (thus following from considerations of derivational economy). Crucially, features can also be realized (i.e., materialized) in different nodes than those in which they have generated, if Spell-Out possibilities require so. We also assume, crucially, that if a language L has vocabulary items to Spell-Out a dimension D (e.g., number, person, etc.), this dimension *must* be spelled out as this gives the interpreter more clues to arrive to the intended meaning. Thus, not only can we account for the typological verb-framed / satellite-framed difference but also other phenomena, more specific to certain languages, such as Spanish "selosismo" from a strictly synchronic perspective, in examples like (62):

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62) a. Les<sub>j</sub> envié el paquete<sub>i</sub> a mis parientes<sub>j</sub>. CL_{DAT[Plural]} send<sub>ISgPast</sub> the parcel to my relatives "I sent the package to my relatives"
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b. Se_j los_i envié.

CL_{DAT[u-#]} CL_{ACC[Plural]} send_{1SgPast}

"I sent it to them"

While diachronically we have to mention the change between *ge los* and *se los*, based on an alternance between /ž/ and /s/, the former being gradually displaced by the latter by means of devoicing by the end of the XV century (Eberenz, 2000: 216, ff.); synchronically the problem touches on the syntax-morphology interface, as there is a [se] which clearly has no reflexive meaning: it is not an argumental clitic, but a functional / grammatical element (*procedural*, in the terms we have been handling) which is inserted as a last resort to prevent a derivation to crash at PF by leaving potentially materializable features without phonological exponent.

In this case, the clitic [se] is not reflexive, as it is most of the times, but it is an allomorph of [le] inserted in this particular configuration to avoid cacophony (*le los envié), a resource already present in late XVI century texts (and even in co-ocurrence with [le], as in [se le abras], arguably a *leísta* variant of the ACC clitic of the same kind we saw in Paraguay Spanish, see Eberenz,

⁷ Notice that, even if there is feature migration, the rigid order DAT – ACC is maintained, that is, apparently, only Person / Number features can migrate, but crucially not Case (see Zwicky & Pullum, 1983 and Belloro, 2007 for discussion).

2000: 220). Because [se] is unable to materialize number inflection (which we have expressed through the [u-#] notation, not "unvalued" but "unspecified" since it is morphologically both singular and plural), and there is a [plural] feature in the corresponding syntactic terminal node (notice that [se] is pronominalizing [mis parientes]), this feature looks for the *closest* available host in which this feature [#] is plausible to be materialized. This process, we will refer to, following Kosta (p.c.), as *feature migration*, and is arguably a PF condition. The clitic [lo] is an element in which [number] can be materialized and, moreover, is within local boundaries: the [plural] feature that cannot be spelled out in [se] *migrates* to another host, in which it receives phonological interpretation, even though semantically. These phenomena come into our framework naturally without additional stipulations, as phonological forms and meanings are dissociated and, moreover, the process by which a terminal node gets to be materialized is not straightforward, but looks for the minimization of overt material: in this sense, our proposal stems from DM, but implements some changes in the machinery.

6. CONCLUSION

In this paper we have analyzed some phenomena concerning clitics in general (their definition, their place in a derivation) with particular attention paid to their behavior in River Plate Spanish, while attending intralinguistic variation. Within the limits of a paper, we have tried to provide an interface approach to these phenomena (and the facts in (2), which we attempted to cover), including not only considerations about syntax but also semantics, as it has been proven very useful for the definition of clitics as procedural elements which provide the semantic system with instructions as to how to interpret relations between arguments in a localist construal and thus the syntactic distribution of these units. Naturally, there are many questions that have been left unaddressed, but we believe the framework outlined here has the potential to tackle those issues in a satisfactory manner. This task, we leave to the interested reader.

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