Clitics, Procedural Elements and Spanish Syntax

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Abstract

In this paper we address the nature, syntax and semantics of Spanish clitics with special focus is on the syntax-semantics interface. 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

Resumen

En este trabajo trataremos cuestiones relacionadas con la naturaleza, la sintaxis y la semántica de los clíticos en español, con foco en la interfaz sintaxis-semántica. Trataremos el problema del llamado "doblado de clíticos" CD para observar las consecuencias semánticas que producen diferentes configuraciones sintácticas e investigar cómo las operaciones sintácticas están motivadas por la necesidad de generar efectos en la interfaz. Propondremos que los clíticos son categorías procediementales cuya función es licenciar la presencia de sus "asociados" y proveer a la interfaz semántica de instrucciones respecto de cómo interpretar a los constituyentes asociados .

Palabras Clave: Doblado de Clíticos; Español; Marcado de Caso; Categorías Procedimentales

1. WHAT ARE CLITICS?

The word *clitic* comes from the ancient Greek word *klinein*, which means *[to] lean*. In modern languages, the term *clitic* refers to lexical items which are syntactically independent but phonologically dependent phrasal constituents. Phonological dependence typically implies that the clitic undergoes 'phonological word-formation', by means of which it joins a constituent which bears stress. Their position in this constituent depends on language-specific properties:

Spanish allows clitics to appear at 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)
   Manda*le* dinero (Enclitic)

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 the issue, as it goes beyond our scope, but simply assume (with all concomitant problems) that clitics are *base-generated*, at least in Spanish. 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.

Clitics are usually dealt with in the literature as "syntactically extraordinary" elements[1]. 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).

[1] For example: "Interest in clitics originates probably from their special character. As elements which are neither words nor affixes but share some of their properties, they are an especially fruitful ground to test grammatical theories." (Mascaró & Rigau, 2009: 9)

h. Clitics do not allow further morphology on their hosts.

Within Generative Grammar, the situation is the same. For example, Chomsky (1994) classifies them as [+ min], [+ max] elements: heads that are at the same time maximal projections within his Bare Phrase Structure framework; Embick & Noyer (2001) also dub them special elements that do not configure a category on their own; and more recently, 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], [‘ll], [‘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. 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 is an inflectional head H_0 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, against which we have argued since assuming that the syntactic component is label-sensitive is assuming that it is partly interpretative, a conclusion that departs from the simpler scenario of separating generation from interpretation (see Chomsky, 2009 for a related claim). Jaeggli (1981) takes clitics to have a nominal nature, based on the fact that they:

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 not always hold. River Plate Spanish, for example, displays stress shifting in ditransitive constructions caused by both the ACC and the DAT clitic:

3) 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 accusative contexts:

4) Le$_{DAT}$ vi (a Juan)

This leads us to think that there is a situation of underspecification in the dative morphology in Paraguay Spanish which is absent in River Plate Spanish. We see that Jaeggli's position is to be, at least, relativized.

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 ClP-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 D^0 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[2]. 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):

5) Merge is a free unbounded operation that applies to two (smallest non-trivial number of elements) distinct objects sharing format, either ontological or structural.

[2] Notice that we claim that the *constraints* are universal, though not their interrelation. We leave the possibility open for OT-like models in which language variation relies on variations on constraint hierarchy. See Prince & Smolensky (2004).

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*[3]:

6) *Concatenation* defines a *chain* of coordinates in *n*-dimensional generative workspaces W of the form $\{(x, y, z\ldots n) \subset W_X \ldots (x, y, z\ldots n) \subset W_Y \ldots (x, y, z\ldots n) \subset W_n\}$

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* (Adger, 2011)

3) Merge (α, β, γ…), $\alpha \neq \beta \neq \gamma$ *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 OT-like manner. We will set our focus on LF 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). 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:

[3] Notice that our formalization of Merge makes no reference to Labeling, *contra* Hornstein & Pietroski (2009) and Boeckx (2009), who also use the term *concatenation*, but invariably followed by *copy* (Boeckx) or *labeling* (Hornstein & Pietroski).

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) 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. Pustejovsky, 1995; Hale & Keyser, 1993) 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*; Wurmbrand's, 2013 *Merge Condition*, among many others). For the historical basis of this claim, see Halle & Marantz, 1993, and subsequent work in Distributed Morphology.

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 Spanish[4].

We will therefore maintain a strong uniformity thesis here, namely, *there are no syntactically extraordinary elements, all differences arise at the interfaces*[5]. 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

[4] 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.

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

(RT) and its *conceptual-procedural* distinction to make clitics' contribution to the Logical Form LF fully explicit. We will distinguish these two kinds of elements, whose difference is given not by their format or inherent syntactic properties but by their interpretation potential at the semantic interface:

Roots: Roots will be defined as pre-categorial linguistic instantiations of a-categorial generic concepts[6] (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 $S = \{\alpha_1 ... \alpha_n\}$

Procedural elements: according to Escandell & Leonetti (2004), traditional *functional nodes* in generative syntax convey *procedural* instructions to the post-syntactic semantic parser as to how to manipulate a given semantic substance. 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:
  - $\sqrt{} = \{\alpha, \beta, \gamma, \lambda, \delta\}$
  - $[X, \sqrt{}] = \{\alpha, \beta, \gamma\}$
  - $[Y, \sqrt{}] = \{\gamma, \lambda, \delta\}$
- Provide instructions as to:

[6] 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).

- Where to retrieve information, assuming a massively modular architecture of the mind (Carruthers, 2005) in which specialized modules interact in interpretation.
- What kind of information to retrieve

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), and they are thus logical *predicators*.

Under this light, we will define a "clitic" as the Spell-Out of a *procedural* terminal node, 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 to interpret conceptual content, typically, structures containing a *root*, of the type {X, √}, being X a terminal node (as far as its LF characteristics are concerned). The characteristics of procedural elements are summarized below, following the bulleted characterization by Escandell & Leonetti (2011), which we will comment on from our point of view, to make similarities and differences very explicit. We believe this is of major importance for the reader to have a clear view of our take on clitics, and its differences and similarities to current proposals:

1. *Instructions are operational: they specify a set of algorithms or logical operations, such as search, retrieval, matching, attribute-assigning and combination, among others.*
2. *Instructions operate over conceptual representations.*
   (from Escandell & Leonetti, 2011: 2)

This is possible because of Merge: interface conditions accept syntactic objects of the form {X, Y}, being X a procedural node and determining label recognition at the semantic interface. In older terms (GB model, specially LF theories like May's 1985 or Hornstein's 1995), we would say that instructions have *scope* over conceptual representations in LF. In any case, 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.

3. *Instructions can operate at two different levels: that of* ***syntactic computation*** *and that of* ***interpretation****. Some instructions, such as those encoded in agreement features or structural case-marking, are combinatorial, i.e.,* ***relevant to syntactic computation only****; they are erased after the instruction is completed and are not "visible" at the interpretive interface. Other instructions, in contrast, are interpretive; in addition to their role in*

syntactic structure building, they are crucial for the interpretive component. What is usually called procedural meaning in relevance-theoretic terms corresponds to interpretive instructions. (Op. Cit.: 2)[7]

We disagree with this last claim: there are no instructions since the syntactic computation of Merge is free and unbounded, and completely blind to the characteristics of the elements it manipulates (except format). These instructions for the level of syntactic computation is what in orthodox generative terms it is called "formal features", which we have eliminated from the theory, (see Krivochen 2011 for discussion). In a nutshell, The so-called "syntactic computation" is a dynamic workspace, result of the interaction of the pre-frontal cortex and determined areas of the brain (D'Espósito, 2007). Radical Minimalism is a form of the "non-existence hypothesis", that is, we do not think that there is a specific FL module, but "syntax", i.e., Merge, is present in all manipulation of discrete symbols, regardless the "module". Thus, there are no instructions but so-called *interpretative instructions*, which are relevant at the interface.

4. *Linguistic items can encode concepts and instructions. Conceptual representations are linked to encyclopaedic knowledge, but instructional meanings lack such connections. Instructions thus represent linguistic meaning in its purest form. In fact, it is this kind of purely grammatical meaning (instead of conceptual meaning in major word classes) that underlies most crosslinguistic and parametric variation.*
5. *(…) Among functional categories,* ***we can use procedural as a shorthand term to refer to those that encode interpretive instructions****. Thus, procedural items can be defined as a sub-class of functional categories whose instructions "survive" syntactic computation and thus enter the interpretive component.*
   (Op. Cit.: 2-3)

There have been attempts to wipe the concept of *Functional Category* out of the theory in dialogue with Relevance Theory, in part eliminating some of the categories because of Full Interpretation (like Agr projections, see Chomsky, 1995) and in part subsuming these categories to a dynamic definition of *procedural* in relation to the availability of *root* terminal nodes (that is, conceptual information, see Escandell & Leonetti, 2000, 2004) in relation to the relevant elements. Other attempts, like Varas San Vicente's (2008), require additional stipulations, like a

[7] All highlightings are our own.

Project-F (project-feature) operation which turns a feature into an element capable of heading a phrase. We reject the proposal (even though it contains interesting insight on feature structure, if such elements are to be maintained in a theory of syntax, against which we have argued in Krivochen, 2011) on economy bases, given the number of additional assumptions they require (the existence of features, an *ad hoc* operation that makes them capable of heading a projection, among others). We will suggest, 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. We will refer to this process, closer to Rizzi's (2009) definition of Relativized Minimality, as *Influence*:

9) α influences β *iff*:
   - α is a procedural node and β is a conceptual node
   - The local relation α-β generates a drastic effect on the output (i.e., at the interfaces)
   - There is no γ, closer to β than α, that can have an effect on the output if influencing β

Contrarily to *Agree* or any of its variants (within the Feature Inheritance framework of Chomsky, 2005; Ouali, 2010; Gallego, 2010), we do not work with features, and relations are established only at the interface levels. If we defend a Free-Merge scenario, any mention of features would be a way of constraining such a scenario, since structure is driven to satisfy probe-goal requirements (as Boeckx, 2010 points out). In our framework, there are no other relations that those established at the interfaces. We will come back to the *Influence* process below, when dealing with case marking.

6. *Not only words encode instructions (as discourse markers and personal pronouns do); sub-lexical and grammatical features also do: features, such as [definite], [perfective] or [focus], encode instructions that are linked to specific morphs or syntactic positions. Thus, an item could encode conceptual meaning and at the same time include some instructions, but these two kinds of meaning are not mixed together.*
7. *Instructional features can also be associated to lexical items encoding concepts in the course of syntactic derivation (for instance, when a constituent receives focal stress marking), but again both kinds of meanings (i.e., conceptual and instructional) are different.*
8. *The* ***distinction between representation and computation*** *or between conceptual and procedural meaning, concerns encoded meaning and hence is a semantic distinction. The fact that procedural instructions guide interpretive processes carried out by means of*

> *inference does not make them a matter of pragmatics. This is a crucial aspect of the distinction: procedural meaning is a class of encoded linguistic meaning that plays a decisive role in triggering pragmatic inference, but it is not itself a part of any sort of pragmatic rules or routines*.

(Op. Cit.: 3. Our highlighting)

This last claim is also in conflict with a strong version of a derivational model along the lines of Epstein & Seely (2002), at least in part: we argue in favour of 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" can have access to the syntactic workspace after each application of Merge to evaluate whether the resultant object is a legible (and therefore transferable) unit. The derivational dynamics such a system implies is the following:

10) Concatenate (α, β) = {α, β}
    $\text{Analyze}_{\text{IL}}$ {α, β} [is {α, β} fully interpretable by IL?]
    (Transfer {α, β]} if $\text{Analyze}_{\text{IL}}$ results in convergence at IL)

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 (10) –which correspond, we believe, to a strongly derivational system- hold all the same. Conceptual elements provide the substance, whereas procedural elements provide instructions for interpretation in the form of relations that hold between concepts.

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 between two conceptual elements, say, two {D, √root} (i.e., DPs in Abney's 1987 terms) structures. Take the following example -from Radeva-Bork (2011, 2012)-:

11) Bulgarian: Tatkoto$_{DEF}$ go$_{ACC\text{-}clitic}$ celuna Maria

Father$_{DEF}$ him$_{ACC}$ kissed Maria

"Maria kissed the father"

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 as suggested by the neutral word order SVO in Bulgarian (Radeva-Bork, p.c.), via procedural instructions, in spite of what word order might tell us, accepting that the external position of T is reserved for the *theme* of the clause, in informational terms (Krivochen, 2011), and Merge in this position is licensed by the semantic interface to the syntactic object that is to be interpreted as a theme, in an architecture with *invasive interfaces*. 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 environments of Bulgarian CD, 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 *phi*-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 (C-I, 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 domain, typically within a *phase*. 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 et. seq.) a *drastic effect on the output*, i.e., in the interface. If there is a mismatch, the derivation crashes:

12) Sp: *A mí$_{[DAT, Sg]}$ 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 around[8] with basis on the contrast between the constructions (13) and (14), where we find a DAT argument:

13) Sp: Me$_{[DAT, Sg]}$ gusta el Jazz

CL$_{[DAT, Sg]}$ like$_{1SgPres}$ the Jazz

14) Sp: *A mí$_{[DAT, Sg]}$ gusta el Jazz

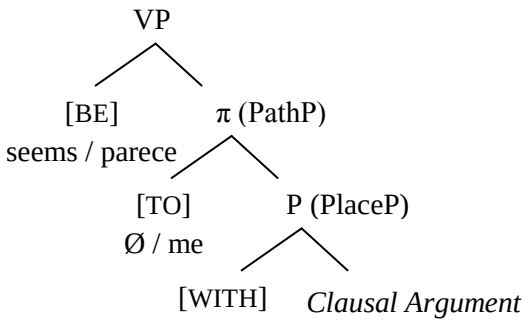
To me$_{[DAT, Sg]}$ like$_{1SgPres}$ the Jazz

(13) 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. (14), 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*. Moreover, following Acedo-Matellán & Mateu (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, a *central*

[8] 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 (…)."

coincidence one. 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 (15):

15)



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 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:

3.1 Agree, Influence and Case "valuation":

The basic claim underlying all Agree machinery, as we understand it, is "things establish relations to one another" (Hedde Zeijstra, p.c.). If that is the intuition, our system is completely compatible with it. Let us first summarize what is needed in an Agree-based syntax (Chomsky, 1999; Pesetsky & Torrego, 2000, 2004, 2007; Di Sciullo & Isac, 2008; Müller, 2011):

16)

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, via *influence*.

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. Although we adhere to this definition, we would like to present a new approach, which does not rest in directionality issues. Dimensions enter into mutual influence relations when their influence zones overlap. Think of this as throwing stones to calm water: circular waves generate, and sometimes those waves intercross. There we have a very interesting type of influence that *Agree* has neglected, because of its unidirectional character (see Zeijlstra, 2011 and Putnam et. al, 2011 for opposite views on the directionality of Agree). In our system, in which trees are nothing more than a symbolic representation (and not a mental reality), elements have *areas of direct influence* in a local domain, and a wider *area of indirect influence* via a third element. That is, α can *directly* influence β if there is no γ structurally closer to β that can influence it, both α and γ being procedural and *specific* enough distributionally (so as to generate a non-ambiguous interpretation at the interface). However, the combination of α and γ can also influence β, in what we have called *cumulative influence*. For example, T and Asp can influence definiteness in {D} (there being a correlation between *perfectiveness* and *definiteness*), but only T is relevant for Case-category recognition purposes.

Influence α must not be taken as an operation, but as *the result of certain configurations* that arise in the *syntax-semantics interface*, that is, a reading off a structure. This way, the sphere of influence of an element is not limited to its "domain" which, if defined upon c-command (as in the Chomskyan tradition) runs the risk of becoming a representational notion, with little place in a strongly derivational theory; but extends upwards and downwards, its boundaries being determined by interface conditions on output effects, rather than limiting themselves stipulatively to the first available goal. Of course, both may coincide, but the problem is theoretical justification rather than visible effects. *Influence* is not a constraint on Merge, since it is read in

the semantic interface. Therefore, it is perfectly compatible with a free *Merge α* system like the one we have built. Collapse and category recognition, both *interface readings* (see Krivochen, 2011), are read "top-down", but that does not mean that it is the only allowed relation in our system. In this respect, we are close to *bi-directional probing* (Putnam et. al. 2011), but we eliminate features from the picture, so there is *no probing*, and there are no probes or goals either. By impoverishing syntax and refining the semantic interface theory we aim at a simpler minimalism, both methodologically and substantively. If the scope of *Influence* is determined by Optimal Relevance, as we think it is, then we are talking about third factor principles and not specific syntactic constraints, like domains defined by headedness (e.g., *v** or C, following the system of Chomsky, 2005). This, we believe, is another highly desirable consequence of adopting our framework.

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 and T_S/T_O 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*, as posited in Krivochen (2012):

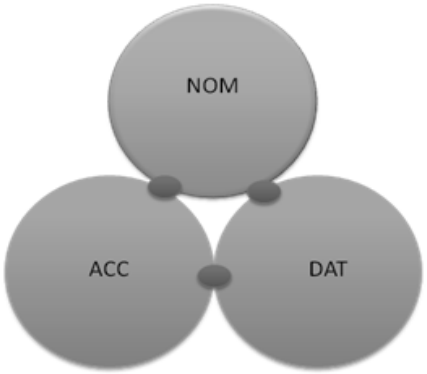
- Nominative: *read off* at LF from a {Time, {D}} local relation (i.e., respecting *Minimality*), and *interpreted thematically* (in the explicature building process, see Wilson & Sperber, 2003) as Agent / Force

- 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.

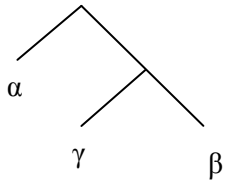
An essential claim is that the spheres are not "far apart", but in semantic interaction, and there are *points of contact*. There are elements, uses of the VI corresponding canonically to one Case that appear in unusual configurations: of these, we will say they are *intersective uses* of the Cases (small dark circles):

17)



To summarize, our conception of Case is simply *a morphological epiphenomenon*, parasitic on the syntactic configurations that license so-called "theta-roles" under *collapse*.The general configuration for *Influence*, to which we have referred above, is as follows:

18)



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 *v*, 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 "marked" as ACC if the relation in (18) holds provided that the influencer is *v* (bearing the interpretable semantic dimension *causativity*).

Any other interpretation from the three spheres we have outlined (like Ablative, Locative, Instrumental, even Genitive) is actually inferential, part of the construction of the inferential

propositions, and that needs the addition of extra assumptions –propositions that increase computational cost but with the benefit of extra positive cognitive effects-.

Notice that the locality conditions imposed by *influence*, 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 Ø / 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. 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):

   *(**Los**) invité (a ellos).

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.

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

19) A $\text{Juan}_{\text{Assoc}}$ 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"

20) *A $\text{Juan}_{\text{Assoc}}$ parece que María lo engaña

To Juan seems that María CL_{ACC} cheats

21) 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, unless there is a powerful reason to Spell-Out elements that are not strictly*

necessary[9]. The last clause contemplates cases like (21), in which the PP is not necessary for grammaticality, as we see in (19), but generates a different interface effect, namely, a *contrastive interpretation*:

22) 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"

This possibility is ruled out if the PP is left covert:

23) *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):

24) Le *parece, no está seguro* de que María lo engaña[10]

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 an interface requirement of contrast, for example (as 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 Agree, as orthodox Minimalism does (see Chomsky, 1998; Pesetsky & Torrego, 2004, 2007,

[9] Cf. Nunes' (2004: 44) *Delete the **minimal number** of constituents in a non-trivial chain CH that suffices for CH to be mapped in a linear order in accordance with LCA* (our emphasis). We attempt to minimize Spell-Out, and do not consider the LCA in the picture.

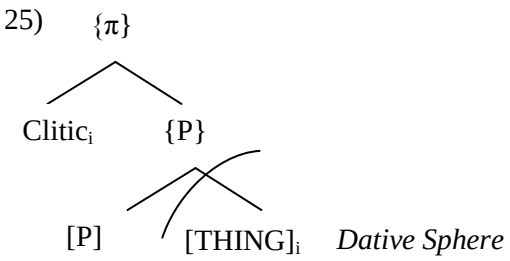
[10] *Italics* are used to indicate phonological prominence.

among many others). The next section will introduce some theoretical machinery that is indispensable to fully understand our proposal.

4.1 Structures:

We will now analyze the structures and make some comments, following the framework outlined above[11]. 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:

25)



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 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-

[11] We include subindexes to relate the clitic and the associate for purely expositive reasons, but this is not to be interpreted as the assertion that indexes have any reality in the mental grammar.

time entities instead of nominal, sortal semantic substance (see Borer, 2005, 2009, and Panagiotidis, 2010 for details). Let us examine an example:

26) I like listening to Jazz

The corresponding logical representation could be something along the lines of (27)

27) $\exists(e) \mid e$ = listen (I, Jazz) $\wedge$ like (I, e)

The last part, after the conjunctive functor, is the same as if we have had (28):

28) I like [$_{DP}$ Jazz]

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:

29) Lo vi a Juan ayer

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

30) 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, but if we replace a proper name or an animate entity for a common name, the situation changes in the following form[12]:

31) Vi el libro que te gustaba

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

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

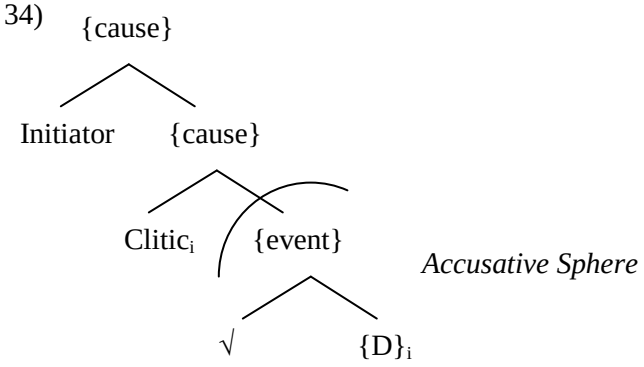
CL_{ACC} $See_{1SgPast}$ the book that CL_{DAT} $like_{2SgPast}$

[12] 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 (32) according to 20 native speakers consulted. In any case, our framework includes (32) as a subset of the cases, being thus able to cope with all possibilities.

33) Lo vi, al libro que te gustaba (River Plate Spanish, also acceptable in Andalucía Spanish)
CL_{ACC} $see_{1SgPast}$ 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 there a P needed? Our answer is the following: the P is a dummy procedural element, which takes a {D} structure as complement (assuming traditional tree-like diagrams) 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 C-I. 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:

34)

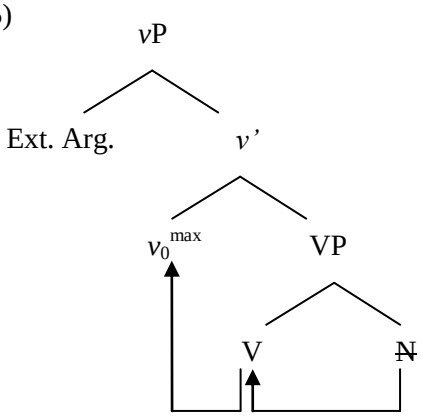


The local relation between [cause] and {D} generate the ACC case licensing sphere, and the procedure is the same as in the previous case[13]. The {event} domain is a "lexical" domain, the VP in traditional terms. Given the functional-procedural value of the clitic, we find it more appropriate to consider it a {cause} node, since: the associate manifests ACC morphological marks and the ACC reading is licensed by the presence of a {cause} primitive in the syntactic structure (as in Burzio's generalization, in our terms related to *affectedness*), coming from the

[13] Of course, the root is under the scope of [cause] as well, but as it does not bear a quantum [$Case_X$] dimension, no case interpretation is generated, and the element is not an intervenient node for Minimality purposes. In more concrete terms, verbs do not inflect for case.

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 {cause} 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) and Mateu Fontanals (2002) result from N-to-V incorporation in the following manner (using traditional notation for Larsonian shells):

35)



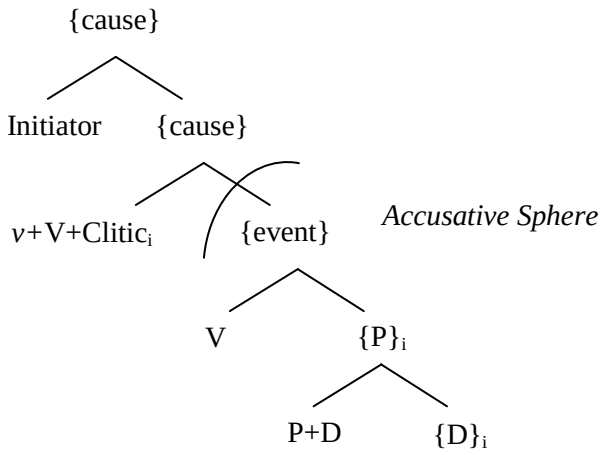
The phonological matrix of an Unergative V comes from the incorporation of a nominal element onto a light dynamic V, [DO] in Mateu Fontanals' (2002) terms. This incorporation, it is crucial to point out, does not leave a trace behind, because the incorporated element is not an argument but, in our terms, a root. Thus, this place can be occupied via Generalized Transformation with a fully-fledged DP, providing further specification with respect to the incorporated root. For example:

36) 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 incorporated underspecified root [dream]; in a case like (31) – (33) 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 {cause} domain, as a "sister" of {event} (assuming 2-D

representations) and gets case-marked in that local relation. Once the clitic adjoins the *v*+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, (32) 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:

37)



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, or simply that ACC features need not be Spelled Out in this case to establish the dependency at the 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 interface effects, it must be, and this is what happens: the P layer is omitted altogether, but the dependency can still be established. This is an example of the preeminence of semantics over phonology in language design: *ceteris paribus*, as

long as semantic effects are maintained and can be retrieved, phonological exponents can be modified. We will see a clear example of this in section 5.

4.1.1 *Some interesting 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 (38) and (39):

38) Le di [a Juan] [el libro que querías]
    CL_{DATi} $give_{1SgPast}$ [to $John_i$] [the book that $want_{2SgPast}$]
39) Le_i di [el libro que querías] [a $Juan]_i$

Following Bleam (2003), we characterize (38-39) as Double Object Constructions, in which the CD situation generates the presupposition of goal-possession of the theme: 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 (40):

40) *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 parseable.

Now, what happens when we have a ditransitive construction in which both, the theme and the goal are P-marked? Let us focus on (41):

41) 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"

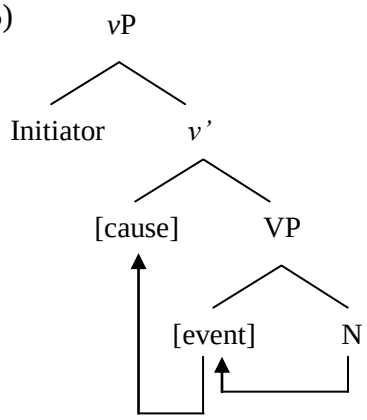
The problem here is clear: we have two animate entities, and since both require a P in Spanish, it is not clear which is the theme and which the goal. Both interpretations are available: I delivered the Chief of Police to the boss of the Mafia or the other way around. Both entities are capable of being themes and goals / possessors, and since they both have a P, it is not possible, in isolation, to determine which of these P is a dummy P and which is a real *terminal coincidence* locative P. 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 used to build explicatures (see Wilson & Sperber, 2003 for details on this process) disambiguate the sentence and the context-sensitive logical derivation proceeds at C-I 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) and much related work, we take Unergatives to have the following lexical structure (using traditional labels for clarification purposes):

42) (= 35)



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:

43) Ayer me caminé Buenos Aires

Yesterday CL walk$_{1SgPastPerf}$ 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 (43) is thus "Yesterday I walked all throughout Buenos Aires". Notice that the preposition-less version (44) is unacceptable, at least in River Plate Spanish, as well as in some Peninsular dialects:

44) #Ayer caminé Buenos Aires.

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

45) Ayer caminé por Buenos Aires

Yesterday walk$_{1SgPastPerf}$ through B.A.

(45), crucially, implies that there was some location within Buenos Aires left unwalked, whereas the delimiter clitic, incorporated on the V node in (43) 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):

46) 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 telic 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:

47) 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]:

48) *Juan se durmió toda la tarde

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

49) *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 (47) is not a *change* of state, but a statement of the maintenance of a state beyond a limit:

50) 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, indicating abstract movement beyond the conceptual limits of the root it modifies. Crucially, for this interpretation to obtain, we need the atelic alternances to be viable: no delimiting adjuncts are allowed:

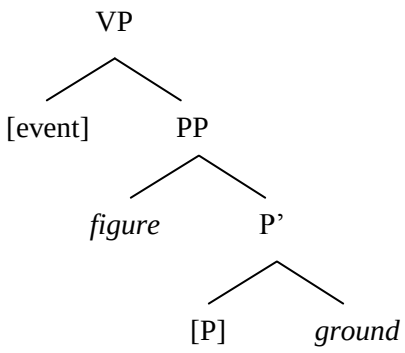
51) *Juan se durmió durante tres horas

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 (43), or metaphorically, as in (47). The clitic, in these cases, de-causitivizes the construal, making it ergative.

Unaccusative verbs are more transparently locative. Let us explicit the structure we assume for unaccusatives, following Hale & Keyser (2002):

52)



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 semantic primitives BE or GO respectively); and the

locative relation can be one of either central or terminal coincidence (the 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-)
- Motion (ir "go", venir "come")

There are no *activities*, since that Aktionsart presupposes *agency* (linguistically 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. Given the essentially *locative* nature of unaccusatives construals, it is to be expected that the addition of clitics has to do with the expression of movement. Let us see two examples:

53) Me fui de casa temprano
CL leave$_{1SgPastPerf}$ from home early

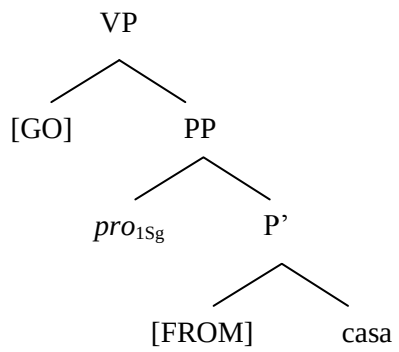
54) Me llegó la factura de luz
CL arrive$_{3SgPastPerf}$ the bill of electricity

There is a crucial difference between these two examples, which also throws light on the unergative examples. Let us take (53) 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:

55) *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:

56)



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 (54). 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* (which would be the [electricity bill]) but between the clitic and the *ground* (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*, the clitic can adopt the "se" form; but this is impossible when the referential link is established between the clitic and the *ground*. 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).

5. A "late notice" on Late Insertion

The reforms of the architecture of grammar outlined here (like *invasive interfaces*, adapting an idea of Boeckx's 2007) allow 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), and we have formulated it as follows:

57) 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 {α, β}, but because:

58)

a. α and β are in a local domain (i.e., within the same phase)

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). We have proposed in earlier works a newly defined version of Minimality, which works in either 2-D or 3-D models of syntax, and there is also no problem if X_0-XP distinction for the computational system to "read", as this is an interface-driven locality requirement of non-intervenient nodes:

59) Radically Minimalist Minimality (RMM)

A node X = {D_1, D_2…D_n} and a node Z = {D_1, D_2…D_n}, D being interpretable dimensions, 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.

If the syntactic component is to transfer information to the phonological component, and if we also consider the above condition (which could well be considered a *bare output condition* in Chomskyan terms, even though, in an *invasive interfaces* framework, it would be better to speak about *bare input conditions*), 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 in press *Survive Minimalism*). This condition is more generally expressed in our Dynamic Full Interpretation principle (Krivochen, 2011, 2012):

60) 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 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, 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"[14] in examples like (61):

61) a. Les_j envié el $paquete_i$ a mis $parientes_j$.

$CL_{DAT[Plural]}$ $send_{1SgPast}$ the parcel to my relatives

"I sent the package to my relatives"

b. Se_j los_i envié.

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

"I sent it to them"

In this case, the clitic [se] is not reflexive, as it is most of the times, but it is an allomorph of [le] to avoid cacophony (*le los envié). 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 terminal node, this feature looks for the closest host (within a Minimal Configuration, in Rizzi's 2004 terms, within the same local domain in ours, but always respecting Minimality) in which this feature is plausible to be materialized. This process, we will refer to as *feature migration*, and, arguably, is 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.

6. CONCLUSION

[14] 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).

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 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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