

Abstract

The information-structural status of clitic left dislocated arguments in Spanish has been argued to depend crucially on their thematic role. Earlier HPSG analyses of related phenomena in other languages do not take into account this sort of information. A formalization will be presented which can handle differences in information-structure arising from different thematic roles of clitic left dislocated phrases.

1 Introduction

Spanish has a left dislocation construction in which the fronted phrase is doubled by a clitic within the core sentence whenever Spanish provides a clitic for the fronted category. The corresponding construction in Italian is discussed in Cinque (1990), where it is termed *clitic left dislocation* (henceforth CLLD). Various authors have pointed out that, from the point of view of information-structure, CLLD is a topic-marking construction (e. g. Zubizarreta, 1998; Zagana, 2002; Casielles-Suárez, 2004). On these approaches, *topic* and *focus* designate disjoint portions of an utterance and are thus mutually exclusive.¹

On the other hand, it has been observed that whether or not a CLLD-ed constituent can be interpreted as part of the focus depends on its thematic role (Contreras, 1976; Gutierrez-Bravo, 2006, among others). For example, Gutierrez-Bravo (2006) argues that sentence (1a), where the indirect object is CLLD-ed, has unmarked constituent order in the sense that it allows for a sentence focus interpretation (adequate in out-of-the-blue utterances). The examples in (1b)–(1c), each of which constitutes the first sentence of a newspaper article, illustrate the same point. On the other hand, (2) displays no clitic left dislocation, but the subject cannot be interpreted as part of the focused portion of the utterance.²

- (1) a. [A Juan_{IO} le gustan_V los chocolates_S]_F
 to Juan to.him-CL appeal the chocolates
 ‘Juan likes chocolates.’
 b. [A Carlos Fuentes no le gustan las fronteras]_F³
 to Carlos Fuentes not to.him-CL appeal the frontiers
 ‘Carlos Fuentes doesn’t like frontiers.’

[†]I would like to thank Stefan Müller, Roland Schäfer and three anonymous reviewers for discussion and helpful comments. All remaining errors are mine.

¹For Zagana, a topic is a special part of the ground, which in turn is complementary to focus. Zubizarreta, while assuming a twofold distinction between focus/ground and topic/comment, states explicitly that a topic can never be part of a focus.

²In (2), the indirect object is doubled by a pronominal clitic although it is not CLLD-ed. This phenomenon is pervasive with indirect objects in Spanish and is not directly relevant for the issue at hand. Glosses: S=subject, O=direct object, IO=indirect object, A=accusative marker, [...]_F=focus.

³*El País*, 09/10/1997. Carlos Fuentes, escritor.

- c. [Al dinero_{IO} no le gustan_V las incertidumbres_S]_F⁴
 to.the money not to.it-CL appeal the insecurities
 ‘The world of finance doesn’t like insecurity.’

- (2) Los chocolates_S le gustan_V [a Juan_{IO}]_F.
 [the chocolates to.him-CL appeal to Juan
 ‘JUAN likes chocolates.’

The behavior of the CLLD-ed *experiencer* objects in (1) contrasts with CLLD-ed *theme* objects, which arguably cannot be interpreted as part of the focus. Example (3) illustrates the latter case (square brackets indicate what is assumed here to be largest focus that is compatible with the construction).

- (3) Este partido_O [Boca_S lo está jugando_V desde hace dos meses.]_F
 this match Boca it-CL is playing from make two months
 ‘This match, Boca has been playing it for two months.’

Thus, clitic left dislocation blocks focus projection to the entire structure in some cases, whereas it yields unmarked linear order and the corresponding broad focus reading in other cases. Earlier HPSG accounts of clitic left dislocation, such as Engdahl and Vallduví (1996) for Catalan and Alexopoulou and Kolliakou (2002) for Modern Greek, are based on Vallduví’s (1992) threefold partition into *focus*, *link* and *tail*. A link is a sentence-initial aboutness topic, and link and tail jointly constitute the ground. In these analyses, a CLLD-ed constituent is invariably interpreted as a link. Since links are defined as being part of the ground, these accounts do not in principle allow a wide-focus interpretation of CLLD constructions, and thus do not cover cases like (1) above.

In what follows, I will propose an HPSG approach that can handle the differences in focus projection arising from different thematic roles of the CLLD-ed phrase. Instead of Vallduví’s (1992) three-way categorization of information-structural primitives, an orthogonal two-dimensional distinction between topic/comment and focus/ground is assumed. The topic/comment and focus/ground partitions of a sentence are allowed to overlap in ways excluded under Vallduví’s approach. In particular, nothing prevents topics from being embedded within foci, such that out-of-the-blue utterances like those in (1) may still be analyzed as containing an aboutness topic.⁵

⁴*El País*, 30/06/1997. Inversiones de baja tensión.

⁵The idea that topic and focus may be embedded within each other is not new. Chafe (1976) suggested that all-new sentences can be construed as conveying information about a particular entity, and thus contain an aboutness topic (a subject, in his terminology). More recently, Frey (2004) has argued that the focused part of a sentence may in principle contain an aboutness topic. Conversely, Krifka (2007) proposes that contrastive topics (as discussed in Büring, 1997) are contrastive precisely because they contain a focus which introduces alternatives. See also Steedman (2000). In this paper I will not be concerned with topic instantiation. The HPSG formalization presented below leaves topic instantiation in CLLD constructions underspecified.

2 Clitic left dislocation

As noted by Cinque (1990), Balari (1998) and others, clitic left dislocation differs from other long distance dependencies in that it fails to correlate with phenomena typically observed with ordinary extraction, such as sensitivity to islands and obligatory subject inversion in Spanish. Balari argues that clitic left dislocation constructions are weak unbounded dependencies: only indices are shared between the fronted phrase and the clitic, while binding theory is relied on for ruling out ungrammatical dislocations. However, CLLD-ed phrases in Spanish show case agreement with the corresponding clitic, and since CASE is not represented on indices, it is hard to see how such an approach can rule out case mismatches. Alexopoulou and Kolliakou (2002) propose an account of *clitic left dislocation* in Modern Greek. At the heart of their proposal lies a set-valued CLITIC feature, which is an additional non-local feature and serves to optionally collect information about cliticized arguments. As with other non-local features, the CLITICS set is passed up to dominating nodes. In analogy to SLASH dependencies, a phrasal type *cldd-phrase* finally licenses the combination of a left dislocated constituent with a head daughter that has an appropriate object in its CLITIC set. Alexopoulou and Kolliakou argue that these objects cannot be of type *local*, as is commonly assumed for SLASH dependencies. The reason is that *local* objects contain semantic information specifying (in the case of nouns) the subtype of *nominal object*. Assuming that object clitics are specified as *pronominal*, this may conflict with the specification of the dislocated phrase, which may or may not be pronominal. In order to overcome this difficulty, Alexopoulou and Kolliakou propose that a dislocated phrase and the corresponding clitic share only HEAD values. To ensure sharing of agreement information, they are forced to modify the commonly assumed HPSG feature geometry such that agreement features are represented in the HEAD path (instead of INDEX). However, such a move will complicate an account of symmetric coordination, and it does not really seem to be necessary either: if *cldd-phrase* does not require token identity of the non-head daughter's LOCAL value with some element in the head daughter's CLITIC set, the problem does not arise. Instead, sharing of only HEAD and INDEX values can be specified in *cldd-phrase*, as illustrated in Figure 1.⁶ Note that the head daughter must be saturated for its complements, but may still subcategorize for a subject, thus allowing CLLD-phrases to intervene between the subject and the VP.

As noted above, the information-structural partitioning I am assuming here divides an utterance into *focus/ground* and *topic/comment*. Unlike Engdahl and Vallduví's (1996) and Alexopoulou and Kolliakou's (2002) approaches, the focused portion of a sentence may include the non-head daughter in a *cldd-phrase* in some cases. Moreover, the non-head daughter need not always be interpreted as a topic. Focus projection will be modeled by means of an interface constraint between linearisation and information-structure, which will take into account in-

⁶Here, the CLITICS feature takes a list as its value.

$$cldd\text{-}phrase \Rightarrow \left[\begin{array}{l} \text{COMPS } \langle \rangle \\ \text{CLITICS } [1 \oplus 2] \\ \text{HEAD-DTR } \left[\begin{array}{l} \text{COMPS } \langle \rangle \\ \text{CLITICS } [1 \oplus \langle \text{HEAD } [3] \text{ INDEX } [4] \rangle] \oplus 2 \end{array} \right] \\ \text{NON-HD-DTRS } \langle \text{HEAD } [3] \text{ INDEX } [4] \text{ SPR } \langle \rangle \text{ COMPS } \langle \rangle \rangle \end{array} \right]$$

Figure 1: Constraint on phrasal type *cldd-phrase*

formation associated with the thematic role of the fronted constituent.

3 Thematic roles

Within the current HPSG feature geometry, information about thematic roles is contained in the semantic contribution of the head that assigns these roles to its dependents. Role attributes proposed in the HPSG literature range from specific features for every semantic relation (Pollard and Sag, 1994) to very generic attributes (Flickinger et al., 2003), with most approaches falling somewhere in between (e. g. Davis, 2001). The current grammar architecture does not provide a means to retrieve this kind of information from the dependents when these are realized syntactically. While it seems clear that information derived from thematic roles is needed in order to appropriately constrain focus projection in clitic left dislocation constructions, it is not desirable to directly associate discourse function with thematic roles. The reason is that the relationship between linearisation, thematic role and discourse function may be affected by specific constructions (such as passive, see Contreras, 1976), and possibly also by extensions of a head’s argument structure. Moreover, as pointed out by Müller (1999) (who discusses a suggestion by Uszkoreit, 1986), representing thematic roles on the dependents that carry them is problematic because a dependent may be assigned different roles by different verbs in a complex predicate. To avoid these complications, I suggest to model the connection between semantics and linearisation by means of a mediating boolean-valued feature *UPV* (*unmarked preverbal*), located under *LOCAL*. A head may then specify which of its dependents, if any, can be realized as a non-head daughter in a broad-focus CLLD construction. These specifications need not be stipulated for every single verb, but can be expressed as constraints on lexical types. To illustrate, the statements in (4a)–(4b) constrain the *UPV* value of transitive verbs and intransitive psych verbs of the *gustar*-class, respectively. Linking of arguments to thematic roles is included here for expository purposes, and nothing hinges on the rather specific role attributes.

$$\begin{aligned}
(4) \quad a. \text{ strict-tr-v-lxm} &\Rightarrow \left[\begin{array}{l} \text{ARG-ST} \left\langle \left[\begin{array}{l} \text{UPV} \quad + \\ \text{INDEX} \quad \boxed{1} \end{array} \right], \left[\begin{array}{l} \text{UPV} \quad - \\ \text{INDEX} \quad \boxed{2} \end{array} \right] \right\rangle \\ \text{RELS} \left\langle \left[\begin{array}{l} \text{AGENT} \quad \boxed{1} \\ \text{THEME} \quad \boxed{2} \end{array} \right] \right\rangle \end{array} \right] \\
b. \text{ io-unerg-itr-v-lxm} &\Rightarrow \left[\begin{array}{l} \text{ARG-ST} \left\langle \left[\begin{array}{l} \text{UPV} \quad - \\ \text{INDEX} \quad \boxed{1} \end{array} \right], \left[\begin{array}{l} \text{UPV} \quad + \\ \text{INDEX} \quad \boxed{2} \end{array} \right] \right\rangle \\ \text{RELS} \left\langle \left[\begin{array}{l} \text{THEME} \quad \boxed{1} \\ \text{EXPERIENCER} \quad \boxed{2} \end{array} \right] \right\rangle \end{array} \right]
\end{aligned}$$

As for (4a), the assumption is somewhat simplified since it presupposes that all transitive verbs assign a THEME and an AGENT role. In fact, verbs like *temer* ‘to fear’ are transitive, but the subject is arguably an EXPERIENCER rather than an AGENT. However, the constraint in (4a) could be further refined such that it applies only to the relevant subset of transitive verbs.

4 Interface constraints

Instantiation of the FOCUS value in CLLD constructions can now be made sensitive to the UPV value of the dislocated constituent. In addition to the HEAD and INDEX values, the UPV value must be shared between the relevant object in the head verb’s CLITICS list and the dislocated phrase. This can be achieved by slightly modifying the constraint on *clld-phrase*, as shown in Figure 2.

$$\text{clld-phrase} \Rightarrow \left[\begin{array}{l} \text{COMPS} \langle \rangle \\ \text{CLITICS} \boxed{1} \oplus \boxed{2} \\ \text{HEAD-DTR} \left[\begin{array}{l} \text{COMPS} \langle \rangle \\ \text{CLITICS} \boxed{1} \oplus \left\langle \left[\begin{array}{l} \text{HEAD} \quad \boxed{3} \\ \text{INDEX} \quad \boxed{4} \\ \text{UPV} \quad \boxed{5} \end{array} \right] \right\rangle \oplus \boxed{2} \end{array} \right] \\ \text{NON-HD-DTRS} \left\langle \left[\begin{array}{l} \text{HEAD} \quad \boxed{3} \\ \text{INDEX} \quad \boxed{4} \\ \text{UPV} \quad \boxed{5} \\ \text{SPR} \quad \langle \rangle \\ \text{COMPS} \langle \rangle \end{array} \right] \right\rangle \end{array} \right]$$

Figure 2: Revised constraint on phrasal type *clld-phrase*

The interface constraint in Figure 3 on the following page may now refer to the UPV feature: if the dislocated constituent is [UPV −], then its semantic contribution cannot be part of the focus. In this case, the FOCUS value of the entire *clld-phrase* must be identical to that of the head daughter. On the other hand, if the fronted phrase is [UPV +], the constraint in Figure 3 does not apply, thus allowing for a reading where the *clld-phrase* as a whole contributes to focus.

FOCUS is a list-valued feature here, and a phrase’s FOCUS value may become instantiated in one of two ways: either all the daughters’ FOCUS values are col-

$$\left[\begin{array}{c} \text{cld-phr} \\ \text{NON-HD-DTRS} \end{array} \left\langle \left[\text{UPV} \quad - \right] \right\rangle \right] \Rightarrow \left[\begin{array}{c} \text{FOCUS} \boxed{1} \\ \text{HEAD-DTR} | \text{FOCUS} \boxed{1} \end{array} \right]$$

Figure 3: Syntax/information-structure interface constraint on *cld-phrase*

lected (see De Kuthy, 2002), or the phrase’s FOCUS list contains as its single element the phrase’s RELS value. The latter case corresponds to focus projection, where the semantics of the entire phrase contributes to focus. Focus projection is assumed here to be generally possible unless some constraint blocks it. The interface constraint in Figure 3 is one such constraint. It will block focus projection whenever a CLLD-ed constituent is not the one which, according to its thematic role, may appear preverbally in unmarked constituent order.

Analyses of sentences (1a) and (3) above are given in Figures 4 and 5 on the next page, respectively. In each case, they describe an interpretation with a maximally large constituent in focus. Both sentences have other readings, not illustrated here, in which the focused part is smaller. The important point is that the dislocated constituent cannot be interpreted as focused in (3), while it may or may not be part of the focused portion in (1a).

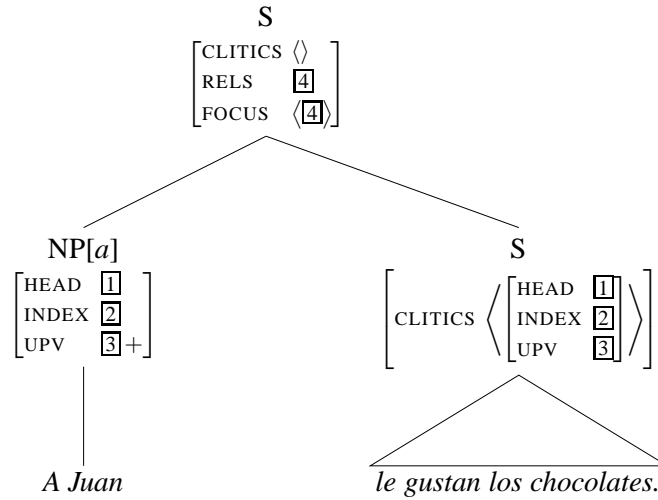


Figure 4: Broad focus reading with a CLLD-ed *experiencer* object

5 An alternative

In this section I will very briefly discuss a proposal by Vogel and Villada (2000), who analyze the preverbal EXPERIENCER-NP of *gustar*-verbs not as an instance of clitic left dislocation, but rather as a quirky (dative) subject. Consequently, the

behavior is predicted if *parecer* can only raise the (grammatical) subject of the embedded verb, and the preverbal dative-NP is treated a CLLD-ed phrase.

Vogel and Villada's analysis would be supported if it could be shown that ordinary object NPs do not occur preverbally with raising verbs, as this would exclude clitic left dislocation as an explanation for (5). But the corpus data in (6)–(9) illustrate that CLLD is possible with raising verbs. Thus, although it looks promising to analyze examples like the one in Figure 4 as a sort of *head-subject-phrase*, I believe more evidence is still needed to show that the construction is substantially different from clear cases of clitic left dislocation.

- (6) [Esta corrección] la suele hacer el centro coordinador mundial
 this correction it-CL does.usually make the center coordinator world
 de observaciones heliofísicas ...⁹
 of observations heliophysics
 'It's usually the world heliophysics coordination center that makes these corrections.'
- (7) Cuando [a una sociedad] la empiezan a analizar los sociólogos, ay mi
 when A a society her-CL begin to analyse the sociologists oh my
 Dios ...¹⁰
 god
 'When sociologists begin to analyse a society, oh my god ...'
- (8) [A mi hermano] le dejaban de llamar por teléfono los amigos ...¹¹
 A my brother him-CL stopped to call by telephone the friends
 '(As for) my brother, his friends stopped calling him.'
- (9) [A Cristina] ... le acaban de comprar el chándal.¹²
 to Cristina to.her-CL just.did to buy the tracksuit
 'Cristina has just been bought the tracksuit.'

6 Conclusion

The formalization proposed here makes available on a verb's dependents just the right amount of information that is necessary in order to constrain focus projection in Spanish clitic left dislocation constructions. Following Contreras (1976), Gutierrez-Bravo (2006) and others in assuming that the crucial factor is the thematic role of the dislocated constituent, I showed how the connection between thematic roles and unmarked constituent order can be established at a point where

⁹José María Oliver. *Manual práctico del astrónomo aficionado*. Barcelona: De Vecchi, 1992, p. 42.

¹⁰Fernando Vallejo. *La virgen de los sicarios*. Santafé de Bogotá: Alfaguara, 1999, p. 64.

¹¹TVE 1, 23/04/87, Debate: El Sida

¹²*El Mundo*, 07/09/1994. La vuelta al cole. Más de un cuarto de billón de pesetas en material escolar.

information about thematic roles is retrievable without complications, that is, in the lexicon. Constraining focus projection indirectly by using a mediating feature (UPV) seems to be more promising than stating a direct connection between thematic roles and unmarked order, since changes in a verb's argument structure may affect unmarked linearisation of the arguments, while their thematic roles need not change. Focus instantiation has only been sketched in the present proposal, and it is clear that prosodic factors as well as linearisation constraints in the postverbal field have to be taken into account in order to restrict it further.

References

- Abeillé, Anne and Godard, Danièle. 2002. The Syntactic Structure of French Auxiliaries. *Language* 78(3), 404–452.
- Alexopoulou, Theodora and Kolliakou, Dimitra. 2002. On Linkhood, Topicalization and Clitic Left Dislocation. *Journal of Linguistics* 38, 193–245.
- Balari, Sergio. 1998. Pronouns, Variables, and Extraction in HPSG. In Balari and Dini (1998), pages 151–217.
- Balari, Sergio and Dini, Luca (eds.). 1998. *Romance in HPSG*. Stanford: CSLI Publications.
- Belletti, Adriana and Rizzi, Luigi. 1988. Psych-Verbs and Theta-Theory. *Natural Language and Linguistic Theory* 6, 291–352.
- Büring, Daniel. 1997. *The Meaning of Topic and Focus. The 59th Bridge Accent*. London and New York: Routledge.
- Casielles-Suárez, Eugenia. 2004. *The Syntax-Information Structure Interface. Evidence from Spanish and English*. London: Routledge.
- Chafe, Wallace L. 1976. Givenness, Contrastiveness, Definiteness, Subjects, Topics and Point of View. In Li (1976), pages 25–55.
- Cinque, Guglielmo. 1990. *Types of A'-dependencies*. Cambridge, Mass.: MIT Press.
- Contreras, Heles. 1976. *A theory of word order with special reference to Spanish*. Amsterdam: North-Holland.
- CREA. 2008. Real Academia Española. Corpus de referencia del español actual. <http://www.rae.es>.
- Davis, Anthony R. 2001. *Linking by Types in the Hierarchical Lexicon*. Stanford: CSLI Publications.

- De Kuthy, Kordula. 2002. *Discontinuous NPs in German*. Stanford: CSLI Publications.
- Engdahl, Elisabeth and Vallduví, Enric. 1996. Information Packaging in HPSG. In Claire Grover and Enric Vallduví (eds.), *Studies in HPSG*, Edinburgh working papers in cognitive science, No. 12, pages 1–31, Edinburgh: Centre for Cognitive Science, University of Edinburgh.
- Fernández Soriano, Olga. 1999. El pronombre personal. Formas y distribuciones. Pronombres átonos y tónicos. In Ignacio Bosque and Violeta Dumonte (eds.), *Gramática descriptiva de la lengua española*, pages 1209–1273, Madrid: Espasa-Calpe.
- Flickinger, Dan, Bender, Emily M. and Oepen, Stephan. 2003. MRS in the LinGO Grammar Matrix. A Practical User's Guide, <http://faculty.washington.edu/ebender/papers/userguide.pdf>.
- Frey, Werner. 2004. A Medial Topic Position for German. *Linguistische Berichte* 198, 153–190.
- Gutierrez-Bravo, Rodrigo. 2006. *Structural Markedness and Syntactic Structure*. New York and London: Routledge.
- Krifka, Manfred. 2007. Basic Notions of Information Structure. In Caroline Féry, Gisbert Fanselow and Manfred Krifka (eds.), *Interdisciplinary Studies on Information Structure*, Working Papers of the SFB 632, No. 6, pages 13–56, Potsdam: Universitätsverlag.
- Li, Charles N. (ed.). 1976. *Subject and Topic*. New York: Academic Press.
- Miller, Philip H. and Sag, Ivan A. 1997. French Clitic Movement without Clitics or Movement. *Natural Language and Linguistic Theory* 15(3), 573–639.
- Monachesi, Paola. 1998. Decomposing Italian Clitics. In Balari and Dini (1998), pages 305–357.
- Müller, Stefan. 1999. *Deutsche Syntax deklarativ. Head-Driven Phrase Structure Grammar für das Deutsche*. Linguistische Arbeiten, No. 394, Tübingen: Max Niemeyer Verlag, <http://hpsg.fu-berlin.de/~stefan/Pub/hpsg.html>.
- Pollard, Carl J. and Sag, Ivan A. 1994. *Head-Driven Phrase Structure Grammar*. Chicago, London: University of Chicago Press.
- Steedman, Mark. 2000. Information Structure and the Syntax-Phonology Interface. *Linguistic Inquiry* 31, 649 – 689.
- Uszkoreit, Hans. 1986. Constraints on Order. *Linguistics* 24, 883–906.

- Vallduví, Enric. 1992. *The informational component*. New York: Garland.
- Vogel, Carl and Villada, Begoña. 2000. Spanish Psychological Predicates. In Ronnie Cann, Claire Grover and Philip Miller (eds.), *Grammatical Interfaces in HPSG*, Studies in Constraint-Based Lexicalism, No. 8, pages 251–266, Stanford: CSLI Publications.
- Zagona, Karen. 2002. *The syntax of Spanish*. Cambridge: Cambridge University Press.
- Zubizarreta, Maria Luisa. 1998. *Prosody, Focus and Word Order*. Cambridge, Massachusetts: MIT Press.