Rioplatense Spanish Clitic Doubling and “Tripling” in Lexical-Functional Grammar

Bruno Estigarribia
University of North Carolina at Chapel Hill

1. Apparent violations of valency

Every syntactic theory has some mechanism to ensure that required arguments of a predicate appear only once. In English, for example, you cannot utter (1a) if you intend both John and an elephant to be the object of saw, or (1b) if you intend both Peter and Mary to be the subject of ‘being sad’.

1. *I saw John an elephant.
2. *Peter Mary is sad/are sad.

But it has been known since at least the mid-seventies (Kayne 1975) that data from “clitic doubling” (CLD, 3) represent a challenge to syntactic theory precisely because CLD appears to violate the verb’s valency requirements.¹

3. Yo lo quiero a mi país
   I 3SgMCL I.love A my country.SgM
   ‘I do love my country’ (Ligatto 1996)

In (3) there is a clitic and a NP (the “double”) that both instantiate the direct object (DO) of the verb. In addition to CLD, there is a related construction that hasn’t received much attention in the literature. I am calling this construction Clitic Tripling (CLT), exemplified below:

4. A esos los voy a extraditar A TODOS
   A those.M 3PlMCL I.go to extradite A all.PlM
   'I am going to extradite them all' (Anuario Barcelona 2003, p. 34)

5. Sí, las fotos las tengo que SUBIR las nuevas
   Y es the pictures.PIF 3PIFCL I.have that upload the new.Pl.F
   'Yes, I have to upload the new pictures' (Personal communication, May 10th 2005)

* I would like to thank the organizers and audience at HLS2011, and also Patrícia Amaral, Steve Wechsler, Louise Mycock, Stefan Müller, Alex Alsina, Ash Asudeh, John Payne, and Peter Austin for pointers and comments. Parts of this work were funded by funds from UNC’s Department of Romance Languages and Literatures, and from UNC’s College of Arts and Sciences.

¹ In all the examples in this paper, underlining signals the direct object clitic and its associated constituent(s). DO clitics are glossed by their agreement features (1, 2, 3 for person, Sg/Pl for singular/plural, M/F for masculine/feminine), accompanied by a “CL” subscript. Only when necessary (not exhaustively), agreement features will appear on other constituents’ glosses, and small capitals will mark focal stress. The gloss “a” will be used for the animacy marker which is obligatory before animate direct objects and is homophonous with the indirect object marker and the preposition a. Attested examples are given with their source. The remaining are constructed examples, on which this paper unfortunately has to rely given the rarity of the constructions involved. However, a project is underway to collect corpus data on clitic tripling in Rioplatense.

In these examples, there are three different constituents, all coreferential, that instantiate the direct object of the verbs: a preverbal, left-dislocated constituent; a direct object clitic; and a postverbal constituent. The construction is attested in Rioplatense Spanish, although it is usually assumed to be impossible. For example, Zagona (2002:222) states that “[t]he CLLD coreferential phrase cannot be overt; it must be an empty category, although this category may require a clitic.” Similarly, Belletti (2005:5) states

An important property which is shared by [CLD, CLLD, floating quantifiers, right dislocations, and strong pronoun doubling] is the fact that the two parts in which the original constituent split are such that one contains a lexical noun phrase the other a functional word, either a clitic or a quantifier. Th[eta]-theoretic reasons exclude the possibility that the two parts be both constituted by lexical noun phrases.

This paper will provide a common analysis of the syntactic structure of CLD and CLT within the framework of Lexical-Functional Grammar (LFG). LFG is multistratal, with different kinds of information represented on different grammatical levels. This provides a very flexible architecture to model interactions between linear order, constituency, grammatical function, and discourse function. Moreover, it is non-configurational, separating grammatical function from syntactic position. These two characteristics are crucial in modeling CLD and CLT.

2. CLD in LFG

Space considerations preclude me from giving a complete presentation of LFG. The interested reader can consult Bresnan (2001) or Falk (2001). The basic difference between LFG and movement-based generative syntax (e.g., Government and Binding, Minimalism) is that LFG is non-derivational and does not countenance movement rules. Moreover, syntactic objects have several levels of structure.

Categorial or constituent structure (c-structure) encodes linear order and dominance relations. This level resembles most closely the familiar trees of generative grammar. C-structures are generated by context-free phrase structure grammars. Take the CLD example below:

6. Las vi las fotos nuevas.

3PlFCL I.saw the pictures.PIF new.PIF

‘I saw the new pictures.’

The c-structure generated from Spanish phrase structure rules is as shown below (omitting the internal structure of the NP):

```
S
  | VP
    | V NP
      | CL V
        | las fotos nuevas
       | las vi
```

Crucially, grammatical functions (gfs) are not encoded on c-structures, but rather on another level of representation: functional structure (f-structure). The relevant gfs for this paper are SUBJ, OBJ, ADJ(UNCT), and TOPIC and FOCUS (the “grammaticalized discourse functions”). F-structure is usually
represented as an attribute-value matrix, where each attribute can only have one value. Most of an f-structure’s attributes (PRED, TENSE, INDEX, SUBJ, OBJ…) are intuitively readable. The PRED attribute, however, presents some idiosyncracies. Somewhat non-technically, PRED has a semantic value that encodes the lexical meaning of words and phrases. It is subject to a uniqueness requirement: whereas other attributes can fill out their values by unifying information from different sources, PREDs cannot, they can only be contributed once. In addition, a verb’s PRED also gives the verb’s subcategorization (between angled brackets): PRED = ‘read < (↑SUBJ)(↑OBJ)’ means that the “outer” f-structure (that is, the f-structure that contains the verb read, represented by an up arrow) has to have a value for the SUBJ and OBJ attributes (because read is transitive). So, verbs encode lexically their own valency and subcategorization requirements. At the f-structure level, a verb’s valency is enforced by the principles of completeness (all GFs required by a verb must be instantiated by an f-structure containing a valued PRED) and coherence (every argument function in an f-structure must be required by a PRED). Completeness rules out cases like *John hugged and the combined operation of coherence and the constraint on single instantiation of PREDs a priori rules out doubling (even of identical NPs).

GFs are related to c-structure constituents via language-specific mappings. C-structures are “augmented” in LFG with functional annotations. Each c-structure node is annotated with an equation that expresses how that node’s content is represented in f-structure.

The up arrows refer to the mother nodes (technically, to their f-structure, not to the nodes themselves), and the down arrows refer to the nodes bearing the annotation (rather, to the f-structure information contributed by that node). The annotation (↑OBJ) = ↓ identifies the postverbal NP as the object of the sentence. In practical terms, this says “whatever functional information the current node bears will appear in the object f-structure of the sentence”. The annotation ↑ = ↓ identifies heads, constituents that share their information with their mother node. In practical terms, this says “whatever functional information the current node bears will appear in the f-structure of its mother”.

In the tree above, the clitic las, being a DO clitic, is also lexically assigned the OBJ function (see next section). This is an apparent violation of coherence, because both clitic and NP double have been assigned the OBJ function. However, LFG provides a mechanism of structure sharing that allows us to unify the information of both clitic and NP into a single OBJ f-structure, thus satisfying coherence, as explained in the next section.

2.1. Lexical entries for direct object clitics

The direct object clitics of Spanish are morphologically marked as accusative. Their lexical entry, therefore, specifies that they contribute information to the OBJ f-structure of the clause they are in (see Sharma 2003). I use here inside-out functional application (see, e.g. Nordlinger 1998) and annotate the direct object clitics’ lexical entries with (OBJ ↓). This means that the clitics’ lexical information (represented by the down-arrow) is the value of an OBJ attribute in the immediately containing f-
structure. The other information contributed lexically is that the object is a pronominal
\((\downarrow \text{PRED}) = ‘\text{PRO}’\), and that its INDEX (agreement) features (for the clitic used below as an example) are
third person, plural number, feminine gender.

\[
\text{las: CL} \ (\text{OBJ}) \\
(\downarrow \text{PRED}) \quad ‘\text{PRO}’ \\
(\downarrow \text{INDEX}) \quad 3\text{PlF}
\]

As discussed above, PREDs are the only f-structure attributes that cannot unify: they have to be
singly instantiated in any given f-structure. Therefore, in a CLD sentence it is not possible for both the
clitic and the lexical NP in CLD to contribute PRED values to the OBJ f-structure, or this would violate
coherence. Andrews (1990) suggested that the clitic instantiates its PRED ‘\text{PRO}’ optionally, that is, only
if required for completeness. (This optionality is indicated below by enclosing the PRED value in
parentheses.) If a doubling lexical NP is present, then the clitic does not contribute a PRED.

\[
\text{las: CL} \ (\text{OBJ}) \\
((\downarrow \text{PRED}) \quad ‘\text{PRO}’ \\
(\downarrow \text{INDEX}) \quad 3\text{PlF}
\]

The optional PRED above is an abbreviated way of expressing the fact that Spanish has two DO
cлитic sets: one non-doubling with a PRED value, and one doubling without a PRED value. Of interest,
CLD is known to be subject to specificity effects and this restriction lends support to the proposal that
there are two DO clitic sets in Spanish. The specificity restriction is encoded in the lexical entry for the
doubling clitics, but omitted in the lexical entry for the non-doubling clitics. Since the specificity effect
states that CLD only obtains with specific DOs, or at least indefinite partitive DOs (Estigarribia 2006;
Leonetti 2008; Gutiérrez-Rexach 1999), I posit the following two lexical entries:

\begin{align*}
\text{Non-doubling} \\
\text{las: CL} & \ (\text{OBJ}) \\
\ (\downarrow \text{PRED}) & \quad ‘\text{PRO}’ \\
\ (\downarrow \text{INDEX}) & \quad 3\text{PlF}
\end{align*}

\begin{align*}
\text{Doubling} \\
\text{las: CL} & \ (\text{OBJ}) \\
\ (\downarrow \text{INDEX}) & \quad 3\text{PlF} \\
\neg (\downarrow \text{SPEC}) & \quad –
\end{align*}

Note that the doubling clitic requires the OBJ not to be instantiated elsewhere as non-specific (that
is what \(\neg (\downarrow \text{SPEC}) = –\) means).

\footnote{Do not confuse this with the “big pro” of other theories. It merely represents the contribution of the semantics of
pronominals to f-structures.}
2.2. Structure-sharing by unification

The c-structure with functional annotations and lexical annotations is the following:

![Diagram of c-structure]

Note that the clitic and the double match in INDEX features. This is a necessary condition for their functional information to be unified in a single OBJ f-structure. All of the c-structure nodes annotated ↑=↓ are mapped to the top f-structure, the functional structure of the whole sentence.

![Diagram of f-structure]

But the OBJ lacks a PRED and therefore does not satisfy completeness. The PRED value is actually contributed by the double, giving a complete and coherent f-structure.
Interestingly, this elegant structure-sharing solution also solves a binding puzzle. Cecchetto (1999) notes that [in-situ] CLD constructions should be a Principle C violation, but suggests that Principle C possibly does not apply because the CL and the NP share the same theta-role. This is straightforward in the LFG formalism, because binding conditions are stated in terms of f-structure functions, and both clitic and double belong to a single function OBJ. The structure of CLD poses no particular problem for LFG, since this theory was designed to accommodate non-configurational phenomena.

3. Clitic Tripling (CLT) in LFG

Suñer (2006) already recognized a restricted class of constructions with a left-dislocated direct object and a direct object in situ, calling them “Clitic Left Dislocations with anaphoric epithets”. CLT, however, is more general. First, Suñer explicitly excluded postverbal inanimate constituents, which (5) above shows to be empirically incorrect. Second, the postverbal constituent need not be an anaphoric epithet. It can be a headless anaphoric NP functioning as an adjectival modifier (either a Det + Adj or a Det + Rel Clause sequence, 7–10), a Det + Possessive pronoun (11), a quantifier (12), or a full headed NP with an anaphoric interpretation with or without a deictic (13, 14). Only the last two are examples of anaphoric epithets, if we accept Aoun and Choueiri’s (2000) definition of an epithet as a noun phrase with a definite article or demonstrative, mainly with an affective meaning.3

7. Las fotos las tengo que subir las nuevas.
The pictures.PIF 3PlIFCL I.have that upload the new.PIF ‘I have to upload the new pictures.’ (Personal communication, May 10th 2005)

8. A mi vecina la atropellaron a la vieja.
∧ my neighbor 3SgFCL they ran-over ∧ the old.SgF ‘My neighbor was run over, the old woman.’

9. Las fotos las tengo que subir las que saqué ayer.
The pictures.PIF 3PlIFCL I.have that upload the.PIF that I.took yesterday ‘I have to upload the pictures that I took yesterday.’

3 Although 8 possibly qualifies as well.
10. A los soldados los mataron a los que no se rindieron.  
   ‘They killed the soldiers that did not surrender.’

11. El auto lo tengo que lavar el mío.  
   ‘I have to wash my car.’

12. A esos los voy a extraditar a todos.  
   ‘Those people, I am going to extradite them all.’ (Anuario Barcelona 2003, p. 34)

13. La moto la tengo que lavar esa porquería.  
   ‘I have to wash that crappy motorcycle.’

14. A mi vecina la atropellaron a la pobre mujer.  
   ‘My neighbor was run over, the poor woman.’

I extend here Suñer’s view of CLLD with epithets as CLLD+CLD to the larger set of CLT cases. CLT is a case of CLLD because it shares the properties of that construction: the clitic is obligatory (15), the left-dislocated constituent enters in an unbounded dependency (16), and CLT can appear in embedded contexts (17).  

Moreover, just as in CLD, in CLT the postverbal constituent is not right-dislocated. This is shown by several facts (following diagnostics by Cecchetto 1999; Sportiche 1996). First, prima facie no pause or special dislocation prosody are needed before it. Second, it is possible to have certain adverbs which are commonly taken to be VP-internal follow it:

15. *Las fotos tengo que subir las nuevas.  
   Intended: ‘I have to upload the new pictures.’

16. Las fotos Juan me dijo que las tengo que subir las nuevas.  
   ‘Juan told me I have to upload the new pictures.’

17. Juan me dijo que las fotos las tengo que subir las nuevas.  
   ‘Juan told me I have to upload the new pictures.’

Moreover, just as in CLD, in CLT the postverbal constituent is not right-dislocated. This is shown by several facts (following diagnostics by Cecchetto 1999; Sportiche 1996). First, prima facie no pause or special dislocation prosody are needed before it. Second, it is possible to have certain adverbs which are commonly taken to be VP-internal follow it:

18. Las fotos las tengo que subir las nuevas cuidadosamente.  
   ‘I have to upload the new pictures carefully.’

19. A mi vecina la atropellaron a la pobre mujer descaradamente.  
   ‘My neighbor was shamelessly run over, the poor woman.’

---

4 I am not using tests referring to island sensitivity or weak crossover here because it is clear to me that judgments on those constructions are more variable and less reliable than it is usually claimed in the literature.

5 This example is OK with a different prosody that marks the left-edge constituent as a hanging topic and las nuevas as focus.
Third, secondary predication can follow the double in situ in CLD (20) and in CLT (21). Subjects can follow the double in situ in CLD (22) and CLT (23) as well (following diagnostics by Tsakali 2007; Kechagias 2011).

20. Porque finalmente yo la consideraba a ella mi amiga [...] Because finally I 3SgF CL considered A her my friend.F
   ‘Because, in the end, I considered her my friend.’

21. A mi vecina yo no la considero a esa vieja una amiga. A my neighbor.F I not 3SgF CL I.consider A that.F old.SgF a friend.F
   ‘My neighbor, I don’t consider that old woman a friend.’

22. No la quieren a la vieja sus hijos. Not 3SgF CL they.love A the old.SgF her children
   ‘Her kids don’t love the old woman.’

23. A mi vecina no la quieren a la vieja sus hijos. A my neighbor.F not 3SgF CL they.love A the old.SgF her children
   ‘My neighbor, her kids don’t love the old woman.’

Therefore, the postverbal constituent is a sister of V, and is not right-dislocated, just as in CLD.

Unbounded dependencies are captured in LFG by functional uncertainty (Lødrup 2011), modeled via uncertainty equations (see Bresnan 2001, ch. 13). This means that the CLLD phrase is functionally identified with some predicate’s subcategorized GF, embedded in an arbitrary number of complement clauses (COMP*). The annotated phrase structure rule below captures that generalization, using in addition an underspecified discourse function (UDF) to subsume the grammaticalized discourse functions TOPIC and FOCUS (Asudeh 2011).

\[
S \rightarrow \text{NP*} \quad \text{VP} \quad (\uparrow \text{UDF}) = (\uparrow \text{COMP* GF}) \quad \uparrow = \downarrow
\]

The c-structure of CLT is therefore (simplifying the internal structure of the postverbal NP):

Now three constituents are assigned the same GF (OBJ). (Remember that the clitic is assigned that function lexically, not structurally.) The next section will explain why coherence is not violated and how the information from all OBJ c-structure constituents is unified in f-structure.

3.1. The functional Structure of CLT

Let’s analyze example (14) below:
14. *A mi vecina* la *atropellaron* a *la pobre mujer.*

A my neighbor 3SgF CL they ran-over A the poor woman

‘My neighbor was run over, the poor woman.’

In order to derive this f-structure without violating coherence, one has to allow for argument GFs to be set-valued, just like non-argument GFs are (UDF—i.e, TOPIC or FOCUS—, ADJ). This extension is not ad hoc, but is independently needed to treat appositional and coordination phenomena in a variety of languages (as it is done by Sadler and Nordlinger 2006). We consequently allow NP c-structure nodes to be annotated ↓ ∈ (↑GF). Thus, the following is the annotated c-structure for (14):^6

In Spanish, grammatical function assignment is enforced by coherence and completeness. The c-structure node annotations ↓ ∈ (↑OBJ) are assigned so as to make the sentence coherent. Note that, by coherence, the two NP nodes can only be assigned SUBJ or OBJ. Because the verb is inflected for 1Sg subject, and the NPs are 3Pl, they cannot be assigned SUBJ or there would be a clash of features. Therefore, they must be assigned OBJ. Note that if the subject was 3PlF, completeness would still require that at least one lexical NP was assigned OBJ.

The annotated c-structure derives the “appositional” f-structure representation below:

---

^6 This tree has more detailed lexical annotations.
The three constituents marked \( \downarrow \in (\uparrow \text{OBJ}) \) and \( (\text{OBJ}) \downarrow \) share their information in a single f-structure, which is made possible by the fact that they all agree in INDEX features. If one of them was not compatible with 3PIF, then the OBJ f-structure would have different values for the attribute INDEX, violating uniqueness.

Structure-sharing, then, rules out as ungrammatical sentences where there is any feature mismatch, without resorting to any kind of ad hoc “matching principle” (e.g., Suñer 1988):³

24. *Las fotos las vi la nueva
   The pictures.F-Pl 3PIF I.saw the new-SgF

25. *Las fotos las vi los nuevos
   The pictures.F-Pl 3PIF I.saw the new-PlM

26. *Las fotos las vi las locas lindas
   The pictures.F-Pl 3PIF I.saw the crazy-PIF pretty-PIF

The first two examples have agreement mismatches; the last example is an animacy mismatch: the expression loco lindo means “a nice person”, hence, it is animate and cannot be coreferential with the inanimate las fotos (“the pictures”).

3.2. Information structure mismatches in CLT

A full treatment of the discourse functions and information structure of both CLD and CLT would require more space than I have for this paper. In this section, I will briefly illustrate the advantages of LFG’s multistral structure for modeling the interactions between grammatical function and informational function. I follow Mycock’s (2006) and Butt & King’s (2000) view of information structure (i-structure):

³ However, definiteness and/or specificity might be violated, under conditions that are at present unclear (see Estigarribia 2006a): Las fotos las vi unas que tenías en tu computadora
Moreover, I will assume with these authors that syntactic positions are associated with these discourse functions by a projection from c-structure to i-structure.

Although CLD has often been assumed to be linked to topicality, the examples below show that focused CLT is possible with animate DOs: either the LD or the post-verbal constituent can be focused. In example (27) a mi mamá is a contrastive focus, and a la pobre is completive information.

27. - ¿Echaron a tu tía del trabajo?
   They.fired A your aunt of.the job
   ‘Was your aunt fired (from her job)?’

   - No, a MI MAMÁ la echaron a la pobre.
   No A my mom 3SgFCL they.fired A the poor.Sg
   ‘No, they fired my poor mom.’

In example (28) a mis hijas is a topic, (or perhaps background information), and a las que me tratan bien is the focus, carrying the weight of new information.

28. - ¿Las querés a tus hijas?
   3PlFCL you.love A your daughters
   ‘Do you love your daughters?’

   - A mis hijas las quiero A LAS QUE ME TRATAN BIEN.
   A my daughters 3PlFCL I.love A the.PlF that me they.treat well
   ‘My daughters I love those that treat me well.’

Note that in each of these cases, the two members of the set-valued OBJ f-structure have different informational statuses. LFG’s multistratal architecture is perfectly suited to account for cases where information structure and grammatical function are mismatched. These cases are well known in the LFG literature (King 1997; King and Zaenen 2004). CLT examples (29) and (30) illustrate a type of mismatch where only part of an f-structure unit is focused.

29. [{A esos}TOP]OBJ los maté [{A TODOS}OBJ
   A those.M 3PlMCL I.killed A all.PIM
   ‘Those (people), I killed them ALL.’

30. [{A MAMÁ}OBJ la echaron [{A la pobre}TOP]OBJ
   A my mom 3SgFCL they.fired A the poor.Sg
   ‘They fired MY MOM, the poor (woman).’

In each of the above cases, the two lexical NPs that instantiate the OBJ of the verb carry different information structure functions. In the first case, the left-edge constituent is topical, and the postverbal constituent is focused, whereas in the second case the arrangement is reversed. Since the mappings from c-structure to f-structure and from c-structure to i-structure are independent, two constituents that bear the same grammatical function can be mapped to different discourse functions.
4. Conclusion

This paper briefly illustrated how the structural, functional, and discourse properties of both CLD and clitic tripling (CLT) can be accounted for without recourse to movement transformations in the LFG formalism. LFG was explicitly designed to deal with nonconfigurational languages. Hence, it can accommodate a host of doubling, tripling, and discontinuous constituency structures without ad-hoc machinery. LFG represents grammatical information via several projections, among which are c-structure for constituency and linear order, f-structure for grammatical function information, and i-structure to indicate information or discourse status. These projections are related by formally well-defined mappings. This multistratal architecture allows for a constituent being instantiated multiply at the c(ategorial)-structure level (yielding “doubling”) and singly at the f(unctional)-structure level (in agreement with the verb’s valency requirements), and for mismatches between grammatical function and informational status.

References


