

## CYCLIC TRANSFER IN THE DERIVATION OF COMPLETE PARENTHETICAL CLAUSES<sup>1</sup>

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**ABSTRACT.** The goal of this paper is to show that some parentheticals are *syntactic orphans* (cf. Haegeman 1988) and that this intuition can be formalized using tools independently motivated in linguistic theory. We concentrate on new data regarding clitic realization in what are commonly called *Reduced Parenthetical Clauses* (RPCs). We show that these constructions with clitic differ from their reduced counterpart in many aspects; crucially, they behave as root domains. Thus, we argue that they are derived independently from the host clause (in a parallel workspace) and their linear interpolation occurs during the Spell-Out process, assuming a dynamic version of cyclic Transfer (cf. Chomsky 2001, Uriagereka 1999).

**Keywords:** parentheticals, Transfer, phases, root clause, linearization.

**RESUMEN.** El objetivo de este artículo es demostrar que la intuición de que algunos parentéticos son sintácticamente *huérfanos* (cf. Haegeman 1988) puede formalizarse usando herramientas de la lingüística teórica motivadas independientemente. Se presentan nuevos datos sobre la realización de clítico en las llamadas *construcciones parentéticas reducidas*. Cuando el parentético presenta clítico difiere en muchos aspectos de su contrapartida “reducida”; crucialmente, posee las propiedades de una oración matriz. Por esta razón, sostenemos que estas estructuras parentéticas se derivan independientemente de la oración huésped (en un espacio de trabajo paralelo) y que su interpolación se produce durante el proceso de materialización, asumiendo una versión dinámica de un sistema de materialización cíclico (cf. Chomsky 2001, Uriagereka 1999).

**Palabras clave:** parentéticos, Materialización, fases, oración matriz, linealización.

### 1. Introduction

Parentheticals represent a challenge for linguistic theory to the extent that they have been repeatedly put aside of grammar, seen as merely performance phenomena. At the core of this tendency is the conflict between linearity and hierarchy that these constructions give rise to. As Burton-Roberts puts it (2005), a parenthetical is an expression linearly integrated into another (the host clause), but structurally independent from it. There are many tests showing the syntactic independence of parenthetical clauses (PCs) and, thus, it has been proposed in the literature that they are not integrated in the syntactic structure (Haegeman 1988, Fabb 1990, Peterson 1999). However, given Kayne’s (1994) LCA, PCs must be somehow attached to the host in order to be linearized. De Vries (2007) also argues against unintegrated approaches that PCs are present at the two interfaces, LF and PF, because, obviously, they have sound and meaning and, hence, they should be present in syntax too. We

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want to pursue the idea that there is a way to formalize the intuition behind unintegrating approaches without violating the LCA and warranting that the PC is built in the narrow syntactic derivation and, then, transferred to the interfaces as every syntactic object.

To make discussion manageable, this paper does not deal with parentheticals in general. Instead, it is focused on one type of PCs that are poorly studied in the literature. In fact, the constructions we will deal with have not been recognized yet as a class of its own, maybe due to their closeness to a well-established type of parentheticals, *Reduced Parenthetical Clauses* (RPCs; Schneider 2007). RPCs are characterised by lacking the realization of an argument (normally the object), which is correferent with the host clause.

- (1) a. Mary is coming, *I believe*. COMMENT CLAUSE  
 b. “Mary is coming”, *John said*. REPORTING CLAUSE

As shown in (1), it has been proposed a distinction between two types of RPCs, comment clauses and reporting clauses. In general, comment clauses are formed with ‘weakly assertive’ verbs (cf. Hooper 1975), which tend to be conjugated in first person singular of the present. By contrast, in reporting clauses we find ‘strongly assertive’ verbs, among other types of predicates (manner of speaking verbs, for instance).

In Romance languages,<sup>2</sup> there is a “complete” correlate of RPCs, where the argument is realized by a clitic (correferent with the host clause), as shown in (2b). In Spanish, there is a clear grammatical contrast concerning the presence/absence of the clitic. It is obligatory when the parenthetical verb is ‘strongly assertive’ and conjugated in a specific form: 1<sup>st</sup> person singular of the present, that is, under a non-reportative reading.

- (2) a. María, *prometió* Juan, es una buena profesora. RPC  
 María promised.3SG Juan is a good teacher  
 ‘María, Juan promised, is a good teacher’  
 b. María, *\*(lo)* *prometo*, es una buena profesora.<sup>3</sup> CPC  
 María CL.ACC.3SG promise.1SG is a good teacher  
 ‘María, I promise, is a good teacher’

We will refer to PCs with a clitic as *Complete Parenthetical Clauses* (CPCs), in opposition to *Reduced Parenthetical Clauses* (RPCs).

As far as we know, some studies have pointed out to the existence of examples like the one in (2b), but they have never been analysed (cf. Cornulier 1978, Schneider 2007, Kluck y De Vries 2015, Fortmann 2007), contrary to RPCs, which probably are one the most studied types of parenthetical clauses. For this reason, in this paper we focus all our attention in CPCs, while RPCs only serve as a term of comparison. We will try to provide a clue to explain the contrasts found between them by the end of the paper, but our main goal is to provide an analysis for the relationship of CPCs with their host. We do so by relating the insertion of parentheticals with the points where Transfer applies in a derivation. Since CPCs behave essentially as matrix domains (cf. section 2.2), we think that they are derived detached from the host clause, and then sent to the interfaces separately, when Transfer is applied to the host.

<sup>2</sup> In this paper, we will focus on Spanish data, but the contrast exists in Catalan and has been documented for French and Italian too (Cornulier 1978, Schneider 2007).

<sup>3</sup> From now on, we simplify the gloss of the clitic *lo* in CPCs as *it* for expository reasons.

Thus, we correlate the operation Transfer with the possibility of changing from one derivational workspace to another in syntax (and idea put forth in Uriagereka 1999).

The paper is structured as follows. We begin with an empirical characterization of CPCs (in opposition to RPCs). In section 3, we evaluate some previous analyses about the relationship between PCs and their host. Our own proposal for CPCs is developed in detail in section 4. Section 5 concludes the paper.

## 2. Complete Parenthetical Clauses

This section focuses on the empirical properties of CPCs. In the first subsection they are defined by opposition to RPCs, since CPCs do not obey RPCs' well-known grammatical restrictions. The second subsection is concerned with the root-like properties of CPCs, which will be the crucial empirical evidence for our proposal. Finally, the last subsection provides a first approximation to the distribution of CPCs into the host clause.

### 2.1. The overcoming of RPCs grammatical restrictions

RPCs obey at least three salient grammatical restrictions: (a) they are formed (mainly) with assertive verbs,<sup>4</sup> (b) they have obligatory subject-verb inversion in Spanish, and (c) they disallow negation. These three restrictions do not hold in CPCs, where: (a) we can find also factive and semifactive predicates, (b) subject-verb inversion is not required, and (c) negation can be licensed, given a plausible context. Consider each property in turn.

In (3a) we can see that a verb like *regret* is banned in Spanish in a RPC comment clause, without the clitic.<sup>5</sup> In (3b) and (3c) we find similar examples with semifactive predicates.<sup>6</sup>

- (3) a. Su hijo, *\*(lo) lamento*, falta mucho a clase.  
       your son    it regret.1sg misses a lot    to class  
       ‘Your son, I regret, skips classes a lot’
- b. Mi hijo, *el director \*(lo) ha sabido desde siempre*, falta mucho.  
       my son, the director it has known since always misses a lot  
       ‘My son, the director has always known, skips classes a lot’
- c. Mi hijo, *el director \*(lo) descubrió ayer*, falta mucho.  
       my son, the director it found.out yesterday misses a lot  
       ‘My son, the director found out yesterday, skips classes a lot.’

One salient feature of RPCs in some languages is that subject-verb inversion is obligatory, as (4) illustrates for Spanish. By contrast, it is optional in CPCs, as (4') shows. In CPCs, inversion is only triggered by information structure requirements (in (4b') the subject is interpreted as an informational focus).

<sup>4</sup> Under a quotative or reporting reading RPCs license some non-assertive predicates (for instance, *regret*, see footnote 2).

<sup>5</sup> *Regret* can appear without the clitic in reporting RPCs (as shown in (i)), but this possibility is banned in comment clauses (in 1<sup>st</sup> person singular of the present).

- (i) “Qué pena”, lamentó Juan.  
       What pity regretted.1sg Juan  
       ‘What a pity, regretted Juan’

<sup>6</sup> To our knowledge, only two semifactive verbs can appear in RPCs in Spanish: *see* and *hear*. We relate this possibility to their evidential meaning (see example (51a) in section 5).

- (4) a. \*Este alumno, *el director ha asegurado*, falta mucho.  
 this student the director has assured misses a lot  
 ‘This student, the director has assured, skips classes a lot.’  
 b. Este alumno, *ha asegurado el director*, falta mucho.  
 this student has assured the director misses a lot  
 ‘This student, the director has assured, skips classes a lot.’
- (4’) a. Este alumno, *el director lo ha asegurado*, falta mucho.  
 this student the director it has assured misses a lot  
 ‘This student, the director has assured, skips classes a lot.’  
 b. Este alumno, *lo ha asegurado el director*, falta mucho.  
 this student it has assured the director misses a lot  
 ‘This student, the director has assured, skips classes a lot.’

Finally, it is commonly assumed that RPCs disallow negation, as (5a) illustrates for Spanish. We can only have a negative operator in the PC if it co-occurs with a clitic, that is, in CPCs (5b). In addition, the verbs that can provide a plausible reading under negation in a parenthetical configuration always require the clitic (6-7).

- (5) a. \*Mañana, *no creo / no he dicho*, no va a llover.  
 Tomorrow not believe.1SG not have.1SG said not going to rain  
 ??‘Tomorrow, I don’t believe/ I haven’t said, it’s not going to rain.’  
 b. Mañana, *no lo creo/ no lo he dicho yo*, no va a llover.  
 Tomorrow not it believe not it have.1SG said I not going to rain  
 ‘Tomorrow, I don’t believe so / I haven’t said so, is not going to rain.’
- (6) Juan, no \*(lo) niego, es un buen profesor.  
 Juan not it deny.1SG is a good teacher  
 ‘Juan, I don’t deny it, is a good teacher.’
- (7) A lo mejor, no te \*(lo) aseguro, vamos al cine.  
 perhaps not CL.DAT.2SG it assure.1SG go.2PL to-the cinema  
 ?‘Perhaps, I don’t assure it, we will go to the cinema.’

In sum, CPCs, unlike RPCs, do not have any special grammatical restrictions: we can find all kinds of predicates, free subject-verb inversion is possible, and negation can be licensed. In the next subsection, we study some special properties of CPCs (again vis-à-vis to RPCs).

## 2.2. Root-like properties

We now turn to the most salient properties of CPCs. We will concentrate on two features that characterize CPCs and can qualify as root-like properties: they have their own illocutionary force and license *Main Clause Phenomena*.

In the literature, it has been claimed that RPCs can have a different illocutionary force from their host (cf. Schneider 2007, Kaltenboch 2007). However, if we analyse the examples, we can see that it is the host clause that can have a marked illocutionary force, while the parenthetical is always declarative. In Spanish, if we try to reverse this situation and turn the PC into an interrogative or imperative clause, the clitic emerges, as in (8).

- (8) a. Sus padres, ¡créete\*(lo)!, lo adoptaron.  
 His parents believe.2SG-CL.PRN-it CL.ACC.3SG adopted.3PL  
 ‘His parents, believe it!, adopted him.’

- b. Sus padres, ¿\*(lo) suponías?, lo adoptaron.  
 His parents it supposed.2SG CL.ACC.3SG adopted.3PL  
 ‘His parents, can you believe it?, adopted him’

An interrogative or exclamative PC without the clitic is ungrammatical, so we think that only CPCs are able to have a marked illocutionary force, which seems to be a root-like property. Notice that, although interrogative or exclamative clauses can be embedded, it is well-known that we are referring to a modality type in those cases, not to true illocutionary force –differently put, embedded illocutionary force does not percolate up to the main clause. Since illocutionary force is a property of speech acts, we can conclude that, semantically, CPCs qualify as speech acts in their own right, but the same does not hold for RPCs.<sup>7</sup>

Another interesting property of CPCs is that they license some *Main Clause Phenomena* (MCP; cf. Aelbrecht, Haegeman & Nye 2012 and references therein). Specifically, they allow the insertion of emphatic particles in their left periphery, such as the expression *bien (que)* (cf. Hernanz 2007), as we illustrate in (9). This piece of data proves that CPCs project a full-fledged CP, capable of hosting affective elements in its edge, unlike embedded clauses.

- (9) a. \*Mañana, *bien que creo* yo, todo se irá  
 Tomorrow good that believe.1SG I everything SE will.go.3SG  
 al gárate.  
 down-the-drain  
 ?‘Tomorrow, sure I believe so, everything will go down the drain.’
- b. Al final, *bien que te lo dije*, se montó  
 In-the end good that CL.DAT.2SG it said.1SG SE set-up  
 un gran revuelo.  
 a big stir  
 ?‘In the end, sure I told you, there has been a big stir.’

In this subsection, we have offered some data proving the root status of CPCs. We conclude that, syntactically, these constructions are full-fledged CPs and, semantically, they constitute speech acts, as shown by their capacity to display a marked illocutionary force and to host emphatic particles in their left periphery.

### 2.3. Distribution into the host

One of the most prototypical (and mysterious) properties of parentheticals is that they can appear intertwined in a given clause. It has been claimed that parentheticals have ‘positional flexibility’, but it seems legitimate to ask what the specific positions they can be inserted in are. For practical reasons, instead of trying to provide a complete account here, we will focus on the contexts where the main claim of this paper can be tested, that is, on the potential points of Transfer of the syntactic structure to the interfaces.

As we stated in the introduction, the working hypothesis is that there is a connection between cyclic Transfer and the interpolation of parentheticals. In particular, we can formulate the hypothesis as follows:

<sup>7</sup> Schneider (2015: 296) establishes that parentheticals can be either propositions or speech acts. Regarding the data presented in this article, we suggest that RPCs are propositions that modify the host clause, while CPCs represent speech acts in their own right, detached from their host.

- (10) *Hypothesis about the distribution of parentheticals:*  
PCs appear in phase edges.

The hypothesis in (12) is validated if we focus on the two standard phase heads in Chomsky's framework (2000, 2001), C and v. In the rest of the section, we provide some data in order to prove the validity of the hypothesis. Firstly, we will pay attention to the vP edge, and, then, to the CP edge.

To begin with, consider the following contrast:

- (11) a. Juan tiene, *creo* / *te lo digo yo*,<sup>8</sup> tres hijos.  
Juan has believe.1SG CL it say.1SG I, three children  
'Juan has, I believe/ ?I say so, three children.'  
b. \*Juan tiene tres, *creo* / *te lo digo yo*, hijos.  
Juan has three believe.1SG CL it say.1sg I, children

The generalization in (10) explains why (11b) is ruled out. Basically, the PC is not inserted in a phase edge. As for (11a) we think it represents an instance of a PC in the vP edge. Given that we know that the verb moves to T in Spanish, it can be the case that the PC is inserted after merging the verb and its complement, above vP, as we represent in (12).

- (12) Juan [T tiene], *creo* / *te lo digo yo*, [vP Juan [v [V tiene [tres hijos]]].

Remember that the working hypothesis is that PCs are sensitive to phase edges. We have tested it within the vP, now we will see what happens with C, the other standard phase head according to Chomsky's framework.

The interpolation of parentheticals into the CP edge is very natural. As the reader can observe in (13-15), both CPCs and RPCs can appear after a CLLD or a fronted adjunct.

- (13) A Juan, *creo* / *te lo digo yo*, le han puesto  
to Juan believe.1SG CL it say.1SG I CL.DAT.3SG have.3PL put  
una denuncia.  
a report  
'Juan, I believe / I say so, has been reported.'  
(14) Mañana, *creo* / *te lo digo yo*, iremos al cine.  
Tomorrow believe.1SG CL it say.1SG I will.go.2PL to-the cinema  
'Tomorrow, I believe / I say so, we will go to the cinema'  
(15) En el cine, *creo* / *te lo digo yo*, te esperan.  
In the cinema believe.1SG CL it say.1SG I CL.DAT.2SG wait.3PL  
'In the cinema, I believe / I say so, they are waiting for you.'

Nonetheless, the most compelling evidence comes from asymmetries like the following, where we see that, in an embedded context, a PC must appear before the complementizer (16); the presence of a PC after the complementizer yields ungrammaticality (16b).

<sup>8</sup> From now on, we simplify the gloss of the CPC *te lo digo yo*, due to expository convenience.

- (16) a. Dice, *creo* / *te lo aseguro*, que Juan tiene tres hijos.  
 says.3SG believe.1SG CL it assure.1SG that Juan has three sons  
 b. \*Dice que, *creo* / *te lo aseguro*, Juan tiene tres hijos.  
 says.3SG that believe.1SG CL it assure.1SG Juan has three sons  
 ‘(S)he says, I believe / I assure, that Juan has three sons.’

This means that, in fact, a PC can interrupt the relationship between a verb and its (clausal) complement and, by contrast, it cannot interrupt the relationship between a phase head and its complement. This fact leads us to follow a non-standard approach to the question of what constitutes the transferred unit in a phase, as we will explain in section 4.1.1. For now, what the reader should keep in mind is that both RPCs and CPCs appear in phase edges,<sup>9</sup> which will be crucial for our proposal. Before developing the analysis, we will dedicate a section to discuss briefly the previous literature that deals with the relationship between PCs and their host clause.

This section has discussed all the relevant empirical properties of CPCs. Firstly, it has been shown that these constructions overcome the grammatical restrictions that characterize RPCs, because they present all kinds of predicates, free subject-verb inversion is possible, and negation can be licensed. Secondly, it has been proven that CPCs, unlike RPCs, represent root domains, that is, full-fledged CPs, with their own illocutionary force and an active left periphery. Finally, regarding their linear interpolation, it has been shown that they tend to appear in the phase edges of the host clause.

### 3. The relationship between parentheticals and their host. Previous analyses

The existing proposals about the relationship between a parenthetical and its host vary a lot among them, although one can easily distinguish two main lines of analysis. In brief, there are *integrated* and *unintegrated* approaches (cf. Dehé & Kavalova 2007). Integrated approaches defend that there is some kind of syntactic attachment of the PC to its host, while unintegrated ones claim that there is no syntactic relation whatsoever between them. In this section of the paper, we offer a very brief summary of both approaches in order to provide some perspective to the reader before presenting our own proposal. It should be noticed that, since CPCs have not been defined as a class in the previous literature, the analyses we discuss here have been proposed for RPCs (or, as indicated when necessary, for PCs more generally).

Ross (1973) proposed the first formal analysis for RPCs and also represents the clearest example of a syntactic integration approach to parentheticals. He claimed that RPCs are derived transformationally from a construction where the parenthetical verb selects the host clause as its complement, as in (17a). According to him, a transformational rule, *Slifting* (*Sentence-Lifting*), is responsible from fronting the embedded clause and also from deleting the complementizer.

<sup>9</sup> This first approximation could make us think that both types of PCs differ only in their internal syntax (as shown in sections 2.1 and 2.2). However, there exists some conflicting evidence about their syntactic distribution. For instance, only RPCs can appear inside DPs:

- (i) a. ?Las, *dices tú*, grandes amigas de Juan no han venido a su cumpleaños.  
 b. \*Las, *lo dices tú*, grandes amigas de Juan no han venido a su cumpleaños.

This issue should be investigated in depth, although we can provisionally conclude that only RPCs can be interpolated inside a DP (see section 5 for a first approximation to the contrasts between RPCs and CPCs).

- (17) a. I believe (that) John is intelligent.  
 b. John is intelligent, I believe.

To derive examples with the PC in medial position, it was needed to propose another rule (*Niching*). The final result was similar to the common analysis of coordination by then, with a node dominating RPC and host at the same time.

One big advantage of this analysis is that it can explain, without further stipulations, why RPCs lack an internal argument. If we focus on CPCs, we do have the internal argument realized, so the *Slifting* analysis does not seem to account for them.<sup>10</sup> On the other hand, if the host clause were generated as the complement of the parenthetical verb, we would expect selectional requirements of the alleged matrix verb to be fulfilled and some connectivity effects. As shown in (18-20), a construction with the PC in final position is very different from one with a fronted embedded clause, which, in fact, is derived by movement. In a sentence with a fronted embedded clause, the expected selectional requirements of the matrix verb have to be fulfilled (18b-19b) and connectivity effects are found (20b).

- (18) a. “ Juan va a llegar tarde”, *lamentó su madre*.  
 Juan is going to arrive late regretted his mother  
 b. \* Juan fuera a llegar tarde, *lamentó su madre*.  
 Juan was.SUBJ to arrive late regretted his mother  
 ‘Juan is going to arrive late, regretted his mother.’
- (19) a. Que sea tonto, no lo crees realmente.  
 that is.SUBJ fool not it believe.2SG actually  
 b. \* Sea tonto, *no crees realmente*.  
 is SUBJ fool not believe.2SG actually  
 ‘That he is a fool, you don’t believe so actually.’
- (20) a. \**pro*<sub>i</sub> será despedido, cree [todo el mundo]<sub>i</sub>.  
 will-be.3SG fired thinks all the world  
 b. Que *pro*<sub>i/j</sub> será despedido, cree [todo el mundo]<sub>i</sub>.  
 that will-be.3SG fired thinks all the world  
 ‘That he will be fired, thinks everybody.’

The rest of analyses that advocate for a syntactic integrated account necessarily propose some kind of adjunction procedure (Jackendoff 1972, Corver y Thiersch 2002, Matos 2013, Potts 2002). For instance, Potts (2002, 2005) claims that parentheticals are adjoined to different syntactic projections, but, crucially, they are teased apart from other type of adjuncts by a *comma feature*. The need to promote some special feature or operation in the grammar is a constant in the majority of approaches to parentheticals, as we will see below.

We turn now to the proposals classified as unintegrated approaches. Another useful distinction can be made into this group between *radical* and *non-radical orphanage analyses* (Heringa 2011). Radical orphanage analyses (Haegeman 1988, Fabb 1990, Peterson 1999) assume that there is no syntactic relation of any kind between

<sup>10</sup> Some version of the *Slifting* analysis would be possible, but it would be necessary to assume a big DP analysis of clitics and their doubles (cf. Uriagereka 1988, 1995). We will not follow this line of analysis because it has at the end the same problems that any transformational proposal: it works perfectly when the PC appears in final position, but it is more difficult to adapt it when the PC is intertwined inside the host (remnant movements or similar unmotivated operations would have to be assumed).

parentheticals and their host. Haegeman treats parentheticals as *orphan constituents*, never adjoined to the host, whose semantic interpretation comes from general discursive principles. As we will argue in the next section, this is the proposal that aligns better with the new data presented in this paper about CPCs.

The problem with non-radical orphanage analyses is that they tend to postulate special mechanisms in the grammar. To cite some examples, Safir (1986) claimed that the relation between a non-restrictive relative clause and its host holds in a special LF level (*LF-prime*). Espinal (1991) proposes a multidominance approach, using different planes in a tridimensional space. One of the most recent analyses of this sort is De Vries (2007, 2012), who claims that parataxis constitutes a primitive in the grammar and, consequently, it requires a different type of Merge. According to this author, besides the standard Merge operation, which sustains an inclusiveness relation and derives c-command, there exists an operation called *par-merge* (of *parenthetical*). *Par-merge* only concatenates two elements, without establishing any kind of hierarchy among them.

De Vries bases his analysis on an empirical reality about parentheticals, which he calls *invisibility*, namely that no connectivity effects exist between PC and host. In (21) we observe that a quantifier in the host clause cannot take scope over a pronoun in a RPC, neither in a CPC (we saw in (20) that the same happens in the inverse situation).

- (21) a. \*[Todo alumno]<sub>i</sub>, cree él<sub>i</sub>, va a aprobar sin problemas.  
Every student thinks he is-going to pass without troubles  
'Every student, he thinks, is going to pass without trouble.'
- b. \*[Todo alumno]<sub>i</sub>, te lo dice él<sub>i</sub>, va a aprobar sin problemas.  
Every student CL it says he goes to pass without troubles  
'Every student, he says so, is going to pass without trouble.'

We will follow the intuition behind De Vries' analysis, in particular, that the relationship between CPCs and their host is paratactic in nature. Nonetheless, we will assume a more standard view of parataxis, namely that it is not a syntactic relation, but a linear one. To do so, we do not need special mechanisms in the grammar, only to accept that syntactic derivations are transferred cyclically to the interfaces, their outcomes being paratactically arranged at PF. It will be during the Transfer process when CPCs and host are intertwined, not before.

#### 4. The derivation of Complete Parenthetical Clauses

CPCs constitute root domains and show no connectivity effects with their host clause. These facts make us suspect that these constructions are built independently from their host in syntax and, even more radically, that they are never intertwined with it in the syntactic derivation. We will follow precisely this line of analysis, since we claim that CPCs constitute paratactic domains. The key idea is that they have their own derivational workspace in syntax and their linear interpolation into the host occurs during the Transfer process. Before developing this proposal in detail, we discuss the theoretical framework adopted and how it applies to the overall analysis.

##### 4.1. The framework: cyclic Transfer

The hypothesis of cyclic Transfer is standard in the minimalist literature (cf. Chomsky 2000, 2001, 2004, Uriagereka 1999). One of the most prominent arguments in favour of this notion is the reduction of computational burden, in accordance with

the strong minimalist thesis. When the operation Transfer applies to a chunk of syntactic structure, it is sent to the two interfaces and eliminated from the derivational workspace: thus, it reduces memory load. Phase theory is the most recent version of this conception of derivations and it provides a good framework to analyse (some of) the positional restrictions of parentheticals (as noted in section 2.3). Interestingly for the purposes of this paper, cyclic Transfer has also been proposed in relation to linearization (Uriagereka 1999 et seq, Fox & Pesetsky 2005). Remember that parentheticals challenge the common assumptions about linearization, since they seem to be syntactically unattached to their host but appear linearly within it.

This section is devoted to specify the version of phase theory adopted in our analysis of CPCs. It includes also a little incursion into Uriagereka's model of cyclic Transfer (Multiple Spell-Out), since it makes some predictions that are found in CPCs.

#### 4.1.1. Phase theory

Phase theory (Chomsky 2000 et seq.) implements cyclic Transfer relating it to properties like locality, efficiency and interface demands. In this approach, phases make transfer points correlate with the closure of local domains where certain operations must be carried along in order for syntactic objects to be readable by the two interfaces. In Chomsky's (2000, 2001) formulation, phase heads are the loci of uninterpretable features (uFF), which must be valued before Transfer takes place, otherwise the derivation would crash at the interfaces.

Although there has been much fruitful research in the framework of phases, its details have been a matter of intense debate. We will concentrate here on three specific points, whose definition is crucial to develop an analysis for CPCs in terms of cyclic Transfer:

- (22) a. The identification of phase heads
- b. The size of the transferred unit (phasal domain)
- c. The timing of transfer of the phasal domain

Issue (c), the timing of transfer, will not be object of inquiry in this paper, since we will follow fairly standard assumptions. In particular, we accept the strong version of the *Phase Impenetrability Condition* (Chomsky 2000), in the sense that we will assume that Transfer takes place as soon as possible, when the uFF on the phase head are valued.

Regarding the question in (a), what are the phase heads, we will consider the two standard ones, C and v, in line with Chomsky (as suggested in section 2.3.) In addition, the naturalness of examples like the following (23), where the parenthetical appears between a preverbal subject and the verb -which we assume to be in T- forces us to consider T as a phase head too (it is not surprising, given its A-bar properties in null-subject languages; cf. Gallego 2010<sup>11</sup> and references therein).

- (23) María, *lo prometo*, es una buena profesora.  
       María it promise.1SG is a good teacher  
       'María, I promise, is a good teacher'

---

<sup>11</sup> We depart from Gallego's analysis in two crucial points. According to him, T is a phase by virtue of *phase-sliding* of v and this is related to the process of verb movement. By contrast, for us, both v and T are different phases (as suggested by the interpolation sites of parentheticals) and we consider that v-to-T movement occurs at PF (see footnote 11).

Since it exists a lot of controversy about what constitutes a phase and that is not the object of this paper, we will assume for the time being that *v*, T and C are phase heads, without further discussion.

The point in (b) deserves further attention because we will adopt a non-standard option, forced by the empirical evidence shown in section 2.3. It is usually upheld that, when Transfer applies, only the complement of the phase head is shipped out to the interfaces. By contrast, we will assume that not only the complement is transferred, but also the head, being the edge of the phase the only part accessible for further computation.<sup>12</sup> This assumption explains why parentheticals never interrupt the relationship between a phase head and its complement. We rely on the crucial contrast of (16) repeated below as (24).

- (24) a. Dice, *creo* / *te lo aseguro*, que Juan tiene tres hijos.  
 Says.3SG believe.1SG CL it assure.1SG that Juan has three sons  
 b. \*Dice que, *creo* / *te lo aseguro*, Juan tiene tres hijos.  
 Says.3SG that believe.1SG CL it assure.1SG Juan has three sons  
 ‘(S)he says, I believe / I assure, that Juan has three sons.’

One could think that (24b) involves a different problem, since we are trying to put a speaker-oriented parenthetical inside an embedded clause, but notice that the following sentence is perfect:

- (25) Dice que Juan, *creo* / *te lo aseguro*, tiene tres hijos.  
 Says.3SG that Juan believe.1SG CL it assure.1SG has three sons  
 ‘(S)he says, I believe / I assure, that Juan has three sons.’

It seems that parentheticals tend to appear between specifier and head and are ruled out between head and specifier. In particular, compare the two relevant configurations corresponding (24b) and (25) in (26).

- (26) a. \*C *creo* SpecTP → (24b)  
 b. SpecTP *creo* T → (25)

This restriction is straightforward if we take into account Chomsky’s phase theory. In particular, the idea that the specifier of a given phase head is transferred with the higher phase. In (24b) the PC cannot be inserted because *Juan* (in SpecTP) is part of the next transfer domain (it is sent with the CP phase). By contrast, in (25) the border of the transfer domain is respected. The same situation happens in other contexts. Take, for instance, the following deviant configuration, where a PC is interpolated (linearly) between a unacusative verb and its postverbal subject.

- (27) a. \*Vendrán, *creo* / *te lo digo yo*, niños a las seis.  
 will-come.3PL think CL it say.1SG I children to the six  
 b. Los niños, *creo* / *te lo digo yo*, vendrán a las seis.

Let us assume, as has been claimed before (Richards 2012, Legate 2012), that non-transitive *v* is also a phase and its subject must raise to Spec-vP to receive case. If the

<sup>12</sup> It could be argued that this claim makes impossible the operation of verb raising to T, but this is not a problem if we assume that the process of head-movement (without semantic effects) is phonological (cf. Chomsky 2001, Boeckx & Stjepanovic 2001, Hall 2015).

specifier of the lower phase head ( $v$ , in this case) is transferred with the next phase, it follows that a PC cannot be interpolated between the verb, in T, and the subject (*niños*), in the specifier of  $vP$ , because  $vP$ 's specifier is transferred with the next phase (T). By contrast, the PC in (27b) appears between SpecTP (*los niños*) and T (*vendrán*). This kind of data suggests that the border between a specifier and its head signals a transfer point.

The idea that a phase head is transferred together with its complement is not new. Ott (2011) proposes an asymmetry for the size of the transferred material depending on the existence of iFF in the relevant phase head. Essentially, the phase head is transferred if it lacks iFF, while it stays in the derivation until the next transfer if it contains iFF. This proposal can be extended to parentheticals. Consider the subtle contrast in (28):

- (28) a. Dijo, te lo digo yo, que si venía Juan.  
 said.3SG CL it say.1SG I that if came.3SG Juan  
 '(S)he said (asked), I say so, if Juan was coming.'
- b. ??Preguntó, te lo digo yo, si venía Juan.  
 asked.3SG CL it say.1SG I if came.3SG Juan  
 '(S)he asked, I say so, if Juan was coming.'

In (a), The C head *que* can be transferred along with its complement due to its lack of iFF. That is precisely why we can have the CPC in that position. By contrast, in (b), the complementizer *si* has an iFF [+interrogative], which means that it is not transferred, because it has to be available to satisfy the selectional requirements of the matrix verb *preguntar*,<sup>13</sup> hence, we cannot have the CPC in that position.

To sum up, in this paper we will follow a version of phase theory characterized by the next three assumptions: (a) the three functional elements of the clausal spine ( $v$ , T and C) are phase heads, (b) the phasal domain (transferred unit) includes the phase head plus its complement, and (c) a phase is transferred as soon as possible (when the uFF on the phase head are valued, that is, normally, when the specifier is merged).

#### 4.1.1. Radical Spell-Out

Uriagereka (1999, 2002, 2004) proposes a *Multiple Spell-Out* model (MSO), whose major claim is that specifiers and adjuncts must be spelled-out separately in order to be linearized. Besides, head and complement units can be linearized without resorting to Spell-Out (until the end of the derivation), because the problem begins when we leave a *command unit* (the space where c-command relations hold without further stipulation, see (29)) in order to derive a complex specifier.

- (29) a. **Command unit:** *formed by continuous application of Merge to the same object*

$$\begin{aligned} & \{\alpha, \{\delta, \{\alpha, \{\alpha, \{\beta \dots\}\}\}\}\} \\ \delta & \rightarrow \uparrow \leftarrow \{\alpha, \{\alpha, \{\beta \dots\}\}\} \\ & \alpha \rightarrow \uparrow \leftarrow \{\beta \dots\} \end{aligned}$$

<sup>13</sup> We are assuming that s-selection can be (sometimes) affected by Transfer, while c-selection is not. The idea is that, when a phase head without iFF features (only available for c-selection, not for s-selection) is transferred, its label remains in the derivation and, hence, can be object of c-selection. By contrast, if a phase head with iFF is transferred, the derivation would crash, because the iFF would not be available for selection, only the label is preserved (categorial information).

b. *Not a command unit*: formed by discontinuous application of Merge to two separately assembled objects

$$\begin{array}{l} \{\alpha, \{\{\gamma, \{\gamma, \{\delta\dots\}\}\}, \{\alpha, \{\alpha, \{\beta\dots\}\}\}\}\} \\ \{\gamma, \{\gamma, \{\delta\dots\}\}\} \rightarrow \uparrow \leftarrow \{\alpha, \{\alpha, \{\beta\dots\}\}\} \\ \gamma \rightarrow \uparrow \leftarrow \{\delta\dots\} \qquad \alpha \rightarrow \uparrow \leftarrow \{\beta\dots\} \end{array}$$

[Uriagereka 2002a: 46]

In a nutshell, Uriagereka proposes two options for specifiers to be related to the main derivation, once transferred. The first option, *conservative Spell-Out*, is the simpler: specifiers are attached normally to the left of the relevant head, but without hierarchical structure, flattened (their terminal nodes being previously linearized). The second option, *Radical Spell-Out*, is less standard and more interesting for us, since it can be applied straightforwardly to CPCs. The idea is that linearized specifiers (or adjuncts) are never attached to the main derivation. Behind this claim lies the intuition that parallel workspaces may not be intertwined in some cases. In Uriagereka’s words, Spell-Out may be “sensitive to the systematic application of Merge in a given derivational workspace, moving to a separate space entails a different spell-out cascade” (2004).

We can say that the radical spell-out model suits CPCs perfectly, since they represent root domains built in a parallel workspace, different from the one of the host clause. Thus, according to Uriagereka’s intuitions, we can say that they constitute separated “spell-out cascades”, integration with the host occurring after syntax.

Therefore, in order to formalize our hypothesis about CPCs we adopt a cyclic Transfer model, following an idea put forth in Uriagereka (1999) until its final consequences, together with the version of phase theory sketched in the previous section.

#### 4.2. Step by step: three derivational scenarios

Now we will see how the idea that CPCs are not intertwined with the host clause in the syntactic derivation can be formalized exactly. We will consider the three general possibilities of linearization of the CPC with respect to the host: initially, finally or medially. As for the third possibility, we will deal with the interpolation of CPCs in two standard points: above v and T.<sup>14</sup> We represent the four possibilities below.

- |      |                                                             |                       |          |
|------|-------------------------------------------------------------|-----------------------|----------|
| (30) | a. <i>Lo prometo</i> : Juan tiene tres hijos. <sup>15</sup> | INITIAL INTERPOLATION |          |
|      | b. Juan tiene tres hijos, <i>lo prometo</i> .               | FINAL INTERPOLATION   |          |
|      | c. Juan tiene, <i>lo prometo</i> , tres hijos.              | INTERPOLATION ABOVE v | } MEDIAL |
|      | d. Juan, <i>lo prometo</i> , tiene tres hijos.              | INTERPOLATION ABOVE T |          |

As we will see in the next sections, the two first cases (initial and final interpolation) can be grouped together and analysed in a simpler way than the medial

<sup>14</sup> We will also say something about the interpolation above C, the other phase head (see especially section 4.2.2 and note 14).

<sup>15</sup> Since the examples only vary in the order between CPC and host, we include the gloss and the translation one single time here, to facilitate the comparison of the examples in the main text.

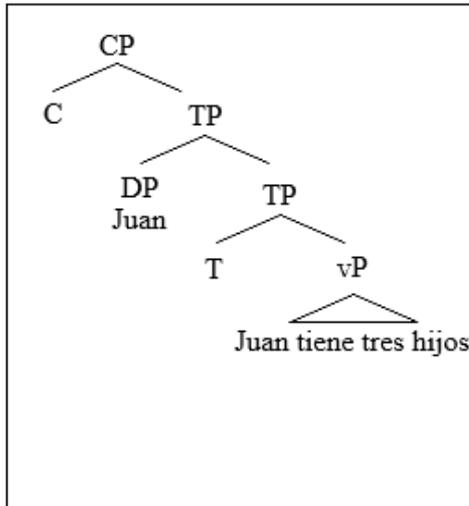
(i) *Lo prometo*: Juan tiene tres hijos.  
 it promise.1SG Juan has three sons  
 ‘I promise: Juan has three kids.’

interpolation ones, which deserve further attention. Before going into the details of each case, let us introduce some general considerations.

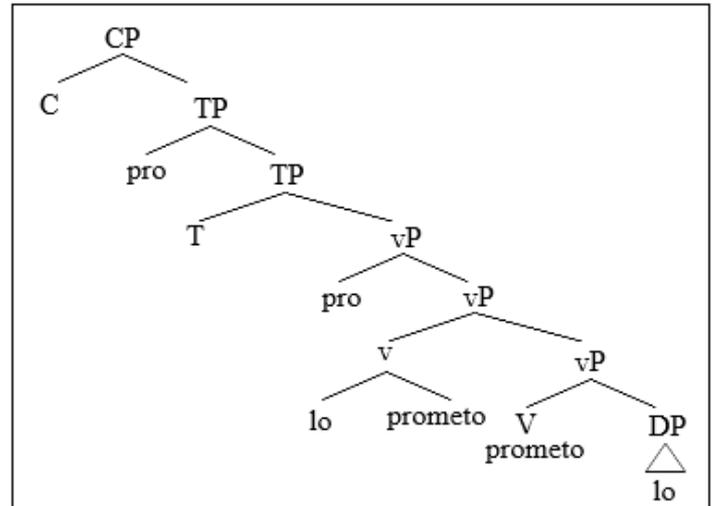
In any case, having a CPC preceding, following or intertwined into the host clause, the situation in the syntax should be the same: there are two parallel derivational workspaces,<sup>16</sup> whose final outcome is represented in (31).

(31)

**DERIVATIONAL WORKSPACE 1:  
HOST CLAUSE**



**DERIVATIONAL WORKSPACE 2:  
PARENTHETICAL CLAUSE**

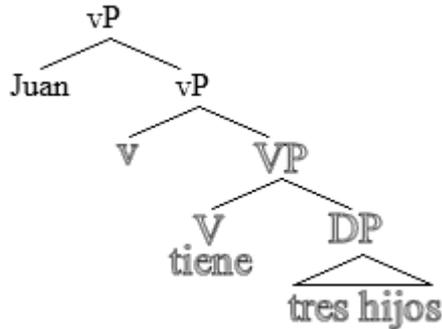


To go from the representations in (31) to the PF outcomes in (30) within the framework sketched in section 4.1, we have to assume that Transfer permits access to a different workspace: when a cycle is finished (a phase), we can move to another workspace and transfer its cycles, not before. If the system waits until the transfer of the higher phase of workspace 1 to move to workspace 2, we will obtain sentences with initial or final interpolation (see section 4.2.2 for discussion). On the other hand, the system can move from workspace 1 to workspace 2 precisely when a phase of workspace 1 is transferred; that is how we will get medial interpolation, which is expected if we accept the existence of parallel workspaces and conceive Transfer as a cyclic operation.

Imagine that we are deriving the simple clause *Juan tiene tres hijos*. The derivation proceeds normally until the first phase: vP. When all the relevant operations of the phase have occurred (valuation of uF, Case assignment), Transfer applies, as we represent below (with outline letters):

<sup>16</sup> In fact, there can be more derivational workspaces. In the MSO model, even in a single clause (without parenthetical interpolation) each specifier is built in a different workspace. In order to ease the exposition, we will present the analysis considering only two big workspaces: PC and host.

(32)

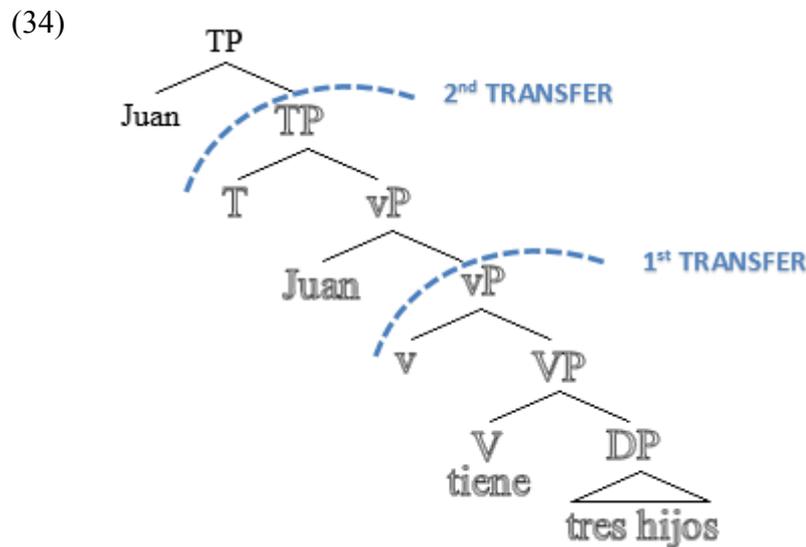


We want to pursue the idea that the transferred material does not go to the two interfaces right away, instead, it is stored in a memory buffer (cf. Uriagereka 1999), which in practice entails keeping a representation within the derivation. Loading the phases in a memory buffer until the whole derivation is transferred has the advantage of maintaining an order between the transferred chunks. We assume that the order of arrival to the buffer matters for linearization, which means that, in a standard bottom-up model, we have a “last-in, first-out” situation, that is, what is stored first is pronounced last. The need of some stipulation to maintain the order after Transfer (a mirror-image of the derivational history) is important in general, but even more crucial for the cases we are dealing with, where the system must keep track of two different derivational workspaces, each with its own cycles.<sup>17</sup> Returning to the derivation of *Juan tiene tres hijos*, the memory buffer will keep the following information in the first step (when the vP phase is transferred):

(33) [tiene [tres hijos]]

As the reader can see, the hypothesis is that hierarchical relations are not lost when Transfer occurs. We need to maintain the information about the head-complement relationship in order to apply Kayne’s LCA when the time of linearization arrives. To see what happens with specifiers, we return to the derivation of (32). It proceeds merging T and moving the subject to its specifier and, at this point, Transfer occurs again (due to the phase-head status of T that we are assuming). Then, the second phase is stored in the memory buffer in the order of arrival, as depicted below (35).

<sup>17</sup> The postulation of a memory buffer helps us also to account for chain reduction and, specifically for our purposes, to assign interpretation to the clitic in CPCs, as we will explain in section 4.2.1.



(35) [T] [Juan], [v tiene [tres hijos]]

Following the main claim of Uriagereka's MSO model, but combining it with Chomsky's phase theory, we assume that vP's specifier is sent with the higher phase (T), but constitutes its own domain in the memory buffer. Uriagereka (1999) claims that the linearization of left branches constitutes a stipulation under Kayne's LCA. If specifiers form its own domain in the memory buffer, they only have to be linearized with respect to the rest of the structure and, crucially, not with respect to the head they are attached to in syntax. Since we assume that the "order of arrival" counts, specifiers can be linearized with the rest of the structure without further stipulations.

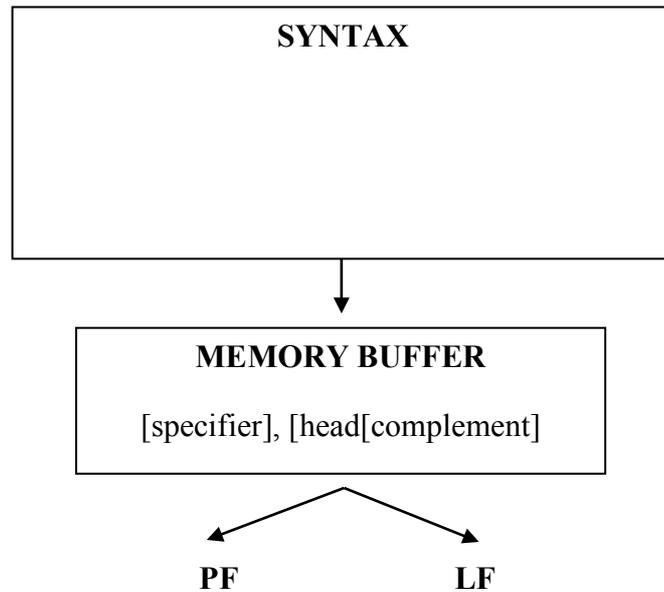
The last step of the derivation will be to merge a null C head (since we are dealing with a matrix clause) and transfer it (together with T's specifier). The final outcome in the memory buffer would be as follows:

(36) [C] [Juan], [T] [Juan], [v tiene [tres hijos]]  
 3<sup>rd</sup> TRANSFER 2<sup>nd</sup> TRANSFER 1<sup>st</sup> TRANSFER  
 CP phase TP phase vP phase

At this moment, when all the derivation has been transferred cyclically, the result kept in the memory buffer is sent to the two interfaces. Notice that, in the memory buffer, we have the two copies of *Juan* represented: the one in its base-generated position and the raised copy. We claim that chain reduction occurs at this moment, at PF. Hence, there is phonological deletion of the lower copy of the subject and only the head of the chain is pronounced. This is possible because the memory buffer keeps part of the syntactic structure intact (c-command can be detected by the interfaces from the information kept in the memory buffer). In addition, head-movement of the verb to T also occurs at PF (see footnote 10). On the other hand, LF interprets the derivation as a declarative root clause, thanks to the presence of the null C head.<sup>18</sup> We summarize the general process in the following diagram:

<sup>18</sup> This is only one way to consider the process: it could be the case that no null C head is needed, being the unmarked option. We leave this general issue aside, since it does not affect the overall analysis.

Diagram 1. The assumed architecture of grammar



We have shown how the system proceeds all the way from the derivation to the interfaces in a simple clause. Now we are prepared to consider the complex cases, when two parallel workspaces are in the picture.

#### 4.2.1. Interwined CPCs

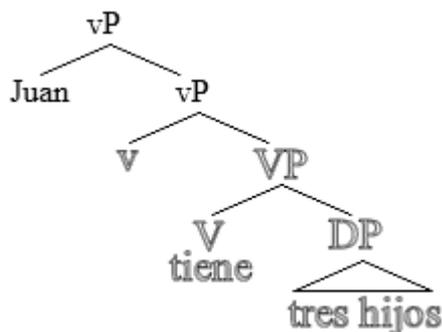
In this section, we will focus on the trickiest situation, when a CPC is interrupting linearly a derivation. As we mentioned before, we will analyse two cases, the more common ones given the sensitivity of PCs to phase boundaries: their appearance above *v* and above *T*.

- (37) a. Juan tiene, *lo prometo*, tres hijos. INTERPOLATION ABOVE *v*  
 b. Juan, *lo prometo*, tiene tres hijos. INTERPOLATION ABOVE *T*

We will proceed step by step, trying to make clear our idea of how these examples are derived.

All begins, necessarily, in the workspace of the host clause (workspace 1). To derive an example like (37a) we only need to pay attention to three steps. Firstly, the derivation proceeds normally until the *vP* phase. Exactly as in the simpler case of the previous section, Transfer applies and the chunk of structure is stored in a memory buffer (we repeat the representations below for convenience).

(38)

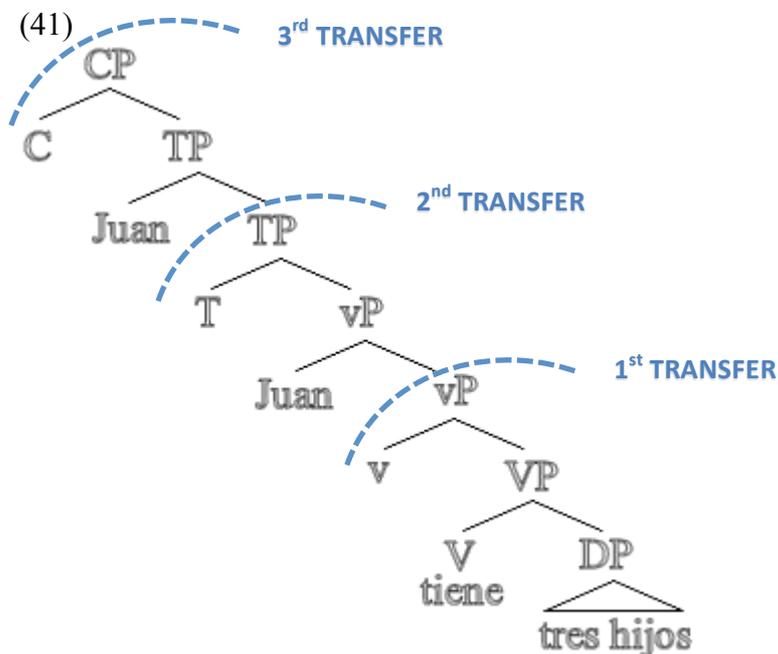


(39) [tiene [tres hijos]]

At this point, the crucial step happens. The system can have access to the parallel derivation (workspace 2) and transfer the CPC cyclically, until it arrives to the end of this derivation. The result is stored in the memory buffer, together with the vP phase of the host clause. We offer now a simplified representation (we represent the CPC as a unitary domain for expository reasons, even though it is also transferred cyclically; see section 4.3):

(40) [C [T *pro* [lo v prometo]]], [v tiene [tres hijos]]

When the whole CPC is transferred or, in other words, when the workspace 2 is exhausted, the system returns to workspace 1 (the host clause). The derivation proceeds normally and transfers, cyclically, the TP and the CP phase. In (41) the final result of the derivation in workspace 1 is depicted. More importantly, in (42) we represent the final outcome of both derivations (host and CPC) within the memory buffer.



(42) [C] [Juan], [T] [Juan], [C [T *pro* [lo v prometo]]], [v tiene [tres hijos]]  
 4<sup>th</sup> TRANSFER 3<sup>rd</sup> TRANSFER 2<sup>nd</sup> TRANSFER 1<sup>st</sup> TRANSFER  
 CP phase (WS1) TP phase (WS1) CPC (WS2) vP phase (WS1)

Since both parallel workspaces have been transferred, the information of the memory buffer can be sent to the interfaces. Remember that at PF there is chain reduction of *Juan* and raising from *v* to *T*; hence, we get the desired outcome (*Juan tiene, lo prometo, tres hijos*).

When there is a CPC, LF plays a special role, since it must assign reference to the clitic characteristic of these constructions. To do so, it needs to reconstruct the

derivation of the host, given that the clitic normally refers to the whole host clause. We propose that this mechanism of reconstruction is possible due to the representation of phase heads in the memory buffer. LF is aware of the basic cartography of the clausal spine ( $C > T > v$ ) and, thus, if this hierarchy is interrupted, it can detect the interpolation of another clause. Crucially, the “interruptions” should be complete, in the sense that all the cycles of an intertwined clause must be one after another into the memory buffer. In other words, the intertwined clauses must be sent completely before returning to the main clause, otherwise, interpretation would be very difficult (see section 4.3 for discussion).

To derive the other medial scenarios, the system proceeds in the same way. Take, for instance, the PF form where the CPC is linearly after the subject (*Juan, lo prometo, tiene tres hijos*). All begins again transferring the vP phase and storing it in the buffer. The crucial difference this time is that the derivation proceeds in the host clause (workspace 1), it does not go to workspace 2 yet. There is transfer of the TP phase and it is after that when the system moves to workspace 2 and transfers the CPC. The process finishes with the transfer of the CP phase of workspace 1 (the host), as in the previous case. The derivational history can be read off the result in the memory buffer, represented below.

(43)

[C] [Juan],	[C [T pro [lo v prometo]]],	[T] [Juan],	[v tiene [tres hijos]]
4 <sup>th</sup> TRANSFER	3 <sup>rd</sup> TRANSFER	2 <sup>nd</sup> TRANSFER	1 <sup>st</sup> TRANSFER
CP phase (WS1)	CPC (WS2)	TP phase (WS1)	vP phase (WS1)

As the reader may have noticed, the differences between the medial scenarios are just a consequence of the transfer order. If the CPC is sent to the memory buffer early, after transferring the first phase (vP) of the host clause, we obtain *Juan tiene, te lo prometo, tres hijos*. By contrast, if the system waits until transferring the second phase of the host clause (TP) to move to workspace 2, the resulting PF form will be *Juan, te lo prometo, tiene tres hijos*. The last option is sending the CPC after the CP phase of the host, which, by hypothesis, would give us the following outcome: *Te lo prometo, Juan tiene tres hijos* (see section 4.2.2 for discussion of this kind of examples).<sup>19</sup> The linearly different examples of intertwined CPCs depend on when the shift from workspace 1 to workspace 2 occurs, specifically, after which phase. As we will explain in the following section, this general conclusion about the transfer order holds in the cases where the CPC precedes or follows the host too.

#### 4.2.2. CPCs preceding or following the host clause

In this section, we will consider the cases where the CPC is interpolated in initial or final position into the host. Remember that we should obtain each sentence in (44) from the two syntactic representations in (31).

- (44) a. *Lo prometo*: Juan tiene tres hijos. INITIAL INTERPOLATION  
 b. Juan tiene tres hijos, *lo prometo*. FINAL INTERPOLATION

Notice that obtaining these examples may seem easier (in computational terms) than obtaining the ones with medial interpolation, where the Transfer process of workspace 1 is interrupted to transfer the whole workspace 2. Remember that Transfer

<sup>19</sup> The examples from (16) to (18), with elements in the CP edge, would also be derived in this way. The only difference is that a transformation would occur in the host before transferring the CP phase.

allows to access a different workspace: when a cycle is finished (a phase), we can move to another workspace and derive its cycles. In the cases at hand here (initial and final interpolation), the system waits until transferring the whole derivation of workspace 1, for instance, and then moves to the other and does the same; there is no back and forth from workspace 1 to workspace 2 and again from 2 to 1. Therefore, once accepted Uriagereka's assumption that parallel workspaces entail different Spell-Out cascades, to obtain the PFs in (44) it seems straightforward that we finish the derivation of workspace 1, transfer it, and then do the same with workspace 2 (or in the inverse order, depending if we are dealing with CPCs preceding or following the host).

To be fair, there are two different options to derive these examples with initial or final interpolation. While it is clear that we are dealing with two different workspaces, the question is if they are derived in parallel. In the cases where there is medial interpolation, we need parallel workspaces, but the ones with initial and final interpolation are different. It could be the case that these examples represent instances of pure parataxis and, thus, the two clauses are sent simply in the order of pronunciation, because they are derived separately, not in parallel. In fact, the sole possibility of having these two scenarios (the PC following or preceding the host) can be interpreted as an argument for a radical paratactic analysis.

On the other hand, due to the presence of the clitic<sup>20</sup> and the fact that PC and host can be intertwined, one could think that a sentence like (35a), where a CPC precedes the host clause,<sup>21</sup> is derived in parallel and then obtained by transferring the whole host clause and then transferring the CPC (as we suggested at the end of section 4.2.1). The order of Transfer (first the host or the CPC) will give us the two examples. Given a bottom-up system, they will be sent in the inverse order of pronunciation and loaded in a memory buffer, before actually going to the interfaces, as we have proposed for intertwined CPCs. For now, we follow this second option of analysis, precisely because it is the same than the one proposed for intertwined CPCs, although these constructions deserve more careful research.

Let us sum up. In this section, we have offered a detailed proposal to analyse the three general derivational scenarios involving CPCs, all the way from two separated workspaces to a single PF outcome. Non trivial assumptions have been made, since the analysis of this kind of constructions necessarily touches on big questions of linguistic theory. One of the crucial points of the proposal is the postulation of a memory buffer, which stores the transferred chunks of structure. Although this option could seem less economical than a more standard one (where Transfer sends syntactic phases directly to the interfaces), we have shown that it has the potential to solve some open questions that affect any derivation, not only one with parentheticals. For instance, it is a way to explain how the system orders the transferred chunks, which is a pervasive question for a theory of linearization (both generally and in the specific case of chain reduction). The next section will evaluate the proposal in the light of some of its predictions.

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<sup>20</sup> If we assume that host and PC are not derived in parallel in those contexts and, hence, they are never together in the memory buffer, the interpretation process of the clitic would be governed by the same (poorly understood) discursive principles that guide coreference across sentence boundaries (cf. Haegeman 1988).

<sup>21</sup> Notice that we use the term "host clause" only for convenience, since in these cases there is not a host, the two clauses being truly paratactic. In fact, according to our analysis, the two clauses are always at the same syntactic level (both are independent of each other), but when they are linearly intertwined, we can talk more accurately in terms of (linear) *host* and *PC*.

## 4.3. Predictions

The analysis presented above accounts for the two most salient properties of CPCs: their behaviour as root domains and the lack of connectivity effects with their host clause. If we accept that parallel workspaces can remain separated in syntax and cross their paths only during the linearization process, it is straightforward that CPCs occupy their own workspace in the derivation and, thus, they can project a full-fledged CP and have no syntactic relation whatsoever with their host clause. This proposal makes some predictions that can be tested.

The freedom of the system described in the previous section predicts that we can find more than one PC into a single host clause, since they can be inserted every time that Transfer occurs (after every phase). As the reader can see below, this prediction is borne out for CPCs (45a) and RPCs (45b). It is also possible to have one CPC and one RPC into a single host clause (45c).

- (45) a. Juan, *me lo ha dicho tu madre*, va a venir, *te lo ha prometido él mismo*, mañana a primera hora.  
 Juan CL it has said your mother is-going to come CL it has promised himself tomorrow at first hour  
 ‘Juan, your mother said so, is going to come, he promised, first thing in the morning.’
- b. Juan, *dice tu madre*, va a venir, *creo*, mañana a primera hora.  
 Juan says your mother is-going to come think.1SG tomorrow at first hour  
 ‘Juan, your mother says, is going to come, I think, first thing in the morning.’
- c. Juan, *me lo ha dicho tu madre*, va a venir, *creo*, mañana a primera hora.  
 Juan CL it has said your mother is-going to come think.1SG tomorrow at first hour  
 ‘Juan, your mother said so, is going to come, I think, first thing in the morning.’

In the same vein, nothing in the system prevents to have a PC inside another one, since both the host and the PC are in parallel workspaces and, in principle, can be intertwined through Transfer. This prediction is also correct, as shown in (46a) with two CPCs, in (46b) with two RPCs and with a combination of both in (46c).

- (46) a. Juan, [*me lo ha dicho*, [*te lo prometo*], *tu madre*], vino ayer.  
 Juan CL it has said CL it promise.1SG your mother came.3SG yesterday  
 ‘Juan, your mother, I promise, said so, came yesterday.’
- b. Juan, [*dice*, [*creo*], *tu madre*], vino ayer.  
 Juan says think.1SG your mother came.3SG yesterday  
 ‘Juan, your mother, I think, says, came yesterday.’
- c. Juan, [*me lo ha dicho*, [*creo*], *tu madre*], vino ayer.  
 Juan CL it has said think.1SG your mother came.3SG yesterday  
 ‘Juan, your mother, I think, said so, came yesterday.’

Besides its correct predictions, one could think that our hypothesis could lead to overgeneration, due to the freedom for changing from one workspace to another in a cyclic fashion. It is true that, in a system as the one described until now, nothing prevents examples like (47b), with *discontinuous* parentheticals.

- (47) a. Mañana, (lo) ha dicho el presentador en el telediario, lloverá.  
 Tomorrow it has said the presenter in the news will-rain.3SG  
 ‘Tomorrow, the presented said in the news, it will rain.’  
 b. \*Mañana, (lo) ha dicho el presentador, lloverá, en el telediario.  
 Tomorrow it has said the presenter will-rain.3SG in the news  
 ‘\*Tomorrow, the presented said, it will rain, in the news.’

An example like (47b) is completely out. One can think that there is a syntactic restriction that prevents the second accessed workspace (the PC) from being split during the Transfer process, warranting that the PC is sent completely before returning to the first derivation. However, we have seen that a PC can be interrupted by another PC, which would be unexpected under this restriction. Another possibility could be that processing constraints have an effect here, because the hearer should keep track of two different derivations and, then, reconstruct all the chunks in their place in order to interpret the utterance. In any case, it seems to exist a restriction concerning the access to different workspaces. Note that we can go from workspace 2 to workspace 1 and either return to workspace 1 or access workspace 3, but, crucially, we cannot return to workspace 2 after the second access to workspace 1. In other terms, there seems to be a recursive hierarchy: the most “embedded” (the last accessed) workspace must be closed before the others, then the second, and, finally, the first. The system can access two times to a given workspace only if it is intertwined by a different workspace, otherwise, Transfer proceeds where it starts.

Consider now the ungrammaticality of examples like the ones in (48), where the construction is reversed: the PC acts like the host and the host interrupts the PC.

- (48) a. \*Dijo, mañana lloverá, Juan.  
 said.3SG tomorrow will-rain.3SG Juan  
 b. \*Creo, mañana lloverá, yo.  
 think.1SG tomorrow will-rain.3SG I  
 c. \*Te lo ha prometido, mañana lloverá, Juan.  
 CL it has promised.3SG tomorrow will-rain.3SG Juan

In this case, one can say that there is an interpretation problem. It seems quite straightforward that the relationship between parenthetical and host cannot be reversed due to interpretative reasons. It is the main assertion (expressed by the host) the one that can be interrupted by the speaker in order to specify his degree of commitment towards it (with a parenthetical) and not the other way around. However, the semantics of CPCs should be studied more carefully to explain the contrasts in (48) in these terms.

This section has shown that the analysis of CPCs in terms of cyclic Transfer might be on the right track, since some of its predictions are borne out. On the other hand, one could think that it overgenerates, but the possibility for processing constraints to have an effect here is consistent with our framework.

## 5. Conclusions and further research

This paper has presented a detailed analysis of CPCs, a class of parentheticals poorly studied in the literature, establishing a connection between Transfer points and the insertion of parenthetical constructions. To do so, we need a precise model of cyclic Transfer, which, in this case, combines Chomsky's phase theory (with some minor adjustments) and Uriagereka's radical MSO. In a nutshell, we have proposed that CPCs are derived in a parallel workspace and are never attached to the host clause in syntax. Their linear interpolation into different points of the host is a consequence of the Transfer order of phases (from one workspace or the other), which we have proposed is relatively free: the shift from one workspace to another is possible every time that a phase is closed, when Transfer applies. The behaviour of CPCs as root domains and some contrasts about their linear interpolation into the host suggest that the proposal might be on the right track. However, these constructions deserve further research, both in theoretical and empirical grounds. For instance, the positions where CPCs (and parentheticals, more generally) can appear should be studied more carefully, because prosodic factors could play an important role.

We started the paper presenting CPCs in opposition to RPCs, but we have remained silent about how to analyse the latter. Remember that RPCs are syntactically "reduced" in more than one sense (lack of internal argument, lack of a full-fledged CP<sup>22</sup> and grammatical restrictions in the expression of the subject or negation), while CPCs constitute their own root domain and do not present special grammatical restrictions. The most relevant grammaticality contrast between RPCs and CPCs is related to the distinction weakly/strongly assertive and the use of the verb conjugated in first person singular of the present, as shown below (49).

- (49) a. Juan, {creo/ supongo/ imagino}, es un gran profesor.  
 Juan think.1SG suppose.1SG imagine.1SG is a great teacher  
 'Juan, I think/ suppose/ guess, is a great teacher.'
- b. Juan, \*(lo) {prometo/ juro/ aseguro}, es un gran profesor.  
 Juan it promise.1SG swear.1SG assure.1SG is a great teacher  
 'Juan, I promise/ swear/ assure, is a great teacher.'
- c. Juan, (lo) {prometió/ juró/ aseguró} uno de sus alumnos,  
 Juan it promised.1SG swore.1SG assured.1SG one of his students  
 es un gran profesor.  
 Is a great teacher  
 'Juan, one of his students promised/ swore/ assured, is a great teacher.'

Notice that strongly assertives can appear without the clitic, in a RPC configuration, only if the host is interpreted as a report (or a quotation), as in (c). By contrast, when the same predicates are conjugated in first person singular of the present the clitic emerges (a). We think this contrast can be explained recurring to evidentiality (cf. Rooryck 2001 and Griffiths 2015 for an analysis of RPCs in terms of evidential modifiers). It seems that there is a correlation between the possibility of having an evidential meaning and the presence of the clitic. The RPC in (c) can be

<sup>22</sup> An anonymous reviewer asks why root-like properties are not possible in RPCs. In the case of CPCs, we have proposed that they are derived in their own derivational workspace and can project all the way to the CP, like a canonical matrix clause. RPCs could be built in their own derivational workspace too, but, surely, they cannot project a CP. Moreover, it could be the case that RPCs are simply vPs, since restrictions on verbal tense are also found. However, we have nothing deep to say about the analysis of RPCs for the time being.

interpreted either as a *hearsay* evidential modifier of the host clause (without the clitic) or as a separated statement (with the clitic; intended reading: *Juan is a great professor and that promised one of his students*).

Rooryck (2001) divides evidentiality into two categories: *source of information* and *evidence type*. He claims that the source of information is instantiated in RPCs as the subject and the evidence type corresponds to the lexical meaning of the verb. The evidence type includes the three most accepted categories in the field: direct observation, inference and hearsay, but also other less clear ones, as the evaluative. Only the three first cited types of evidence can be found in RPCs in Spanish (50), the rest are conveyed with CPCs.

- (50) a. Juan ha pegado un portazo, {he visto/ he oído}.  
 Juan has hit a slam have.1SG seen have.1SG heard  
 ‘Juan has slammed the door, I’ve seen/ I’ve heard.’
- D.Observation*
- b. Juan ha pegado un portazo, {creo / supongo / pienso}.  
 Juan has hit a slam think.1SG suppose.1SG think.1SG  
 ‘Juan has slammed the door, I think/ suppose/ guess.’ *Inference*
- c. Juan ha pegado un portazo, dice Laura.  
 Juan has hit a slam says Laura  
 ‘Juan has slammed the door, Laura says.’ *Hearsay*

When conjugated in first person singular of the present, strongly assertive verbs can only form CPCs, that is, they must be in a root domain. This restriction could be related to the performative use of these verbs: they cannot be evidential modifiers, but separated speech acts with their own illocutionary force and performative function. The contrast is very clear with *say*, the only strongly assertive verb that can appear in both configurations (RPC and CPC), even in the first person of the present:

- (51) a. Juan,  *digo yo*, es un gran profesor.  
 Juan say.1SG I is a great teacher
- b. Juan,  *te lo digo yo*, es un gran profesor.  
 Juan CL it say.1SG I is a great teacher  
 ‘Juan, I say (so), is a great teacher’

When inside of a RPC, as in (51a), *say* loses part of its lexical meaning, being interpreted as *I believe*. By contrast, into a CPC (51b), the normal performative interpretation of the verb (in matrix contexts, in 1<sup>st</sup> person sing. of the present) arises.

We think that RPCs could be analysed as evidential modifiers of the host clause, while CPCs convey other types of pragmatic functions --which may not be subsumed under the category of evidentiality-- that arise from their status as separated speech acts. This intuition about the semantic interpretation of both types of PCs should be correlated with the structural differences pointed out at the beginning of this paper. Further research into these constructions should take into account parametric variation too. We know that the contrasts with the clitic do not exist, at least on the surface, in English, but it could be the case that the difference is manifested somehow in marked contexts (even though there are no clitics, the contrast may exist with proforms, as *so*). For instance, Fortmann (2007) indicates in a footnote that some of the grammatical restrictions of RPC are overcome in German if the demonstrative pronoun *es* appears (negation is licensed, for instance).

To sum up, this paper opens new questions about parentheticals and, more generally, about some theoretical issues regarding cyclic Transfer. If cyclic Transfer is related to linearization, the positional distribution of parentheticals could be taken as evidence to identify when Transfer applies. Under this point of view, parentheticals are perhaps one of the most suitable phenomena to study the interaction between syntax and the interfaces.

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