DETERMINER SHARING IN SPANISH: DET & DET Foc

Naiara Centeno University of Tennessee

1. Introduction

Determiner sharing is present in coordinate sentences where, in languages like English or Spanish, the verb is gapped in non-initial conjuncts and a determiner is also missing from such conjuncts. A determiner sharing sentence in Spanish is (1).

(1) Ni demasiados chicos fueron al cine ni (-) chicas (-) al neither too.many boys went to.the movies nor (-) girls (-) to.the parque park

'Neither too many boys went to the movies nor too many girls went to the park.'

The second conjunct in (1) is missing both the verb 'went' and the determiner 'too many'. This type of sentence is the focus of this article. There are two possible major analyses to this kind of sentence: the large conjunct approach and the small conjunct approach. In the large conjunct approach analysis, conjuncts are sentential and missing words are accounted for by processes such as PF deletion. Consider (2).

(2) $[_{TP}$ neither too.many boys went to.the movies] nor $[_{TP}$ (–) girls (–) to.the park]

The two conjuncts in (2) are sentential, whole TPs, and missing words are deleted. On the contrary, in the small conjunct analysis, conjuncts can be smaller than sentences and there is a part of the structure that is located above conjunction and is shared by the conjuncts. This is represented in (3).

(3) $[_{TP}$ neither too.many boys $[_{vP}$ went to.the movies] nor $[_{vP}$ girls to.the park]

This structure (3) is different from (2) in that conjuncts are smaller (they are vPs) and the part of the structure where the string 'neither too many boys' is present is shared by the vP conjuncts. In this article, I defend a specific analysis inside the small conjunct approach and I rethink its structure so that (i) the theory becomes simpler and (ii) I widen the set of data that I can account for.

I assume Arregi and Centeno's (2005) and Centeno's (2007) analyses which follow Lin (2002). This is a small conjunct analysis to determiner sharing sentences that postulates a number of determiner related positions in the structure, DETs, to which DPs move obeying restrictions that I explain in section 2.1. A preliminary representation of this kind of analysis is (4). This is the structure of the Spanish determiner sharing sentence (1) as in Arregi and Centeno (2005).

(4) [$_{\text{TP}}$ neither too.many boys $_i$ went [$_{\text{DET1}}$ t $_i$ [$_{\text{vP}}$ [$_{\text{vP}}$ t $_i$ t $_v$ to.the movies] nor [$_{\text{vP}}$ girls t $_V$ to.the park]]]]

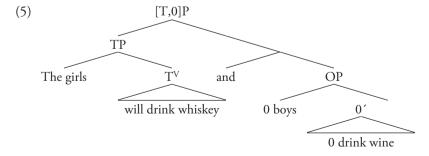
Because conjuncts are not sentential in (4), they are small conjuncts. Some of the missing elements are accounted for via different types of movements to the shared part of the structure that are explained in section 2. Finally, there is a DET position right above the coordination of vPs. DETs are positions that are separate from common D positions. In this article, I give further evidence for DETs and I specify the positions they occupy in more detail than in previous analyses.

In order to do this, I analyze information structure assuming Rizzi (1997), where the complementizer system is split. With more projections now present in the structure, the locations of high DETs can be better specified. Furthermore, by assuming a proposal like Jayaseelan's (2001), where TopPs and FocPs are also present below IP, lower DETs' locations can also be better specified. I show in this article that DET positions can only be of two types: DET and DET $_{Foc}$. With the analysis of information structure both at the CP level and the IP level in determiner sharing sentences, I account for more empirical data.

This article is organized as follows. In section 2, I explain the background to the analysis. First, I provide the major features of the small conjunct analysis that I assume here (Lin 2002). I also discuss its extension onto Spanish and I provide evidence in favor of DETs as in Centeno (2007). In section 3, I rethink the structure by including small desirable changes to this determiner sharing analysis and by analyzing information structure at the CP and IP levels. In section 4, I conclude the article explaining how the picture is set for subsequent research.

2. Background: The Determiner Sharing Analysis

There are two major approaches to determiner sharing: the large conjunct approach and the small conjunct approach. I briefly discuss them and I focus on the small conjunct approach that I develop here. The large conjunct approach in determiner sharing is represented by Ackema and Szendroi (2002). This analysis postulates that conjuncts are sentential. Here, the missing words are elided: ellipsis per se affects the missing verb, and 'dependent ellipsis' affects the missing determiner (5).



¹ Both labels, large and small conjunct approach, come from the literature on gapping (sentences were only the verb is missing in part of the conjuncts). Main representatives of the large conjunct approach in gapping are: Neijt (1979), Wilder (1994, 1997), Hartmann (2000), among others.

These authors follow Williams (1997) in assuming double headed phrases in coordination contexts. These phrases are labeled as represented at the top of the structure in (5): [T,0]P. When heads are not pronounced and are affected by ellipsis, they are represented by 0. Although there is a large number of interesting details in Ackema and Szendroi's (2002) analysis, I continue with small conjunct analyses, the focus of this paper.

Representative works that analyze determiner sharing by means of small conjuncts are McCawley (1993), Johnson (2000), Lin (2002), Citko (2006), Arregi and Centeno (2005), and Centeno (2007).² The analysis in Lin (2002) can be represented as in (7), which is the structure of the English determiner sharing sentence (6). Conjuncts are smaller than sentences and there is a part of the structure that is above coordination, and hence, is shared by the conjuncts. The words that are missing from conjuncts mainly result from movements.

- (6) The girls will drink whiskey, and boys drink wine.
- (7) $\left[_{TP} \text{ The girls}, \text{ will } \left[_{DFT} \text{ t}, \left[_{vP} \left[_{vP} \text{ drink whiskey} \right] \& \left[_{vP} \text{ boys drink wine} \right] \right] \right] \right]$

In (7), the conjuncts are vPs and there is a DET position above coordination which the DP in the first conjunct moves to. This type of movement is normally considered to be asymmetric, ruled out by the CSC, Coordinate Structure Constraint (Ross 1987). However, Lin (2002) assumes a different version of the CSC and provides evidence that this type of movement is only apparently asymmetric, and hence, grammatical.

In this article, I follow this kind of approach because evidence in favor of these analyses is conclusive across the existing literature. Among the arguments that are used in these small conjunct analyses, one is related to cross-conjunct binding sentences. These sentences are exemplified in (8).

(8) Not every student, [bought a hat] and [her, brother a sweatshirt]

The interest of this sentence (8) is that the quantifier 'not every student' can bind the pronoun 'her'. Because binding is only possible when there is a c-commanding relationship between two elements, the only way the quantifier can bind the pronoun is if the former c-commands the latter. For this to happen, the quantifier needs to be outside the first conjunct because, if not, it could not c-command any element in the second conjunct. This means that there needs to be a shared c-commanding part of the structure, as represented in (8), from which some elements can c-command the material in the conjuncts. This is strong evidence that small conjuncts are needed in coordinate structures.

In order to be more specific now, I explain the major features of the small conjunct analysis that I assume in two subsections. In the first one, I provide some main features of Lin's (2002) analysis which is focused on English. In the second subsection, I explain how this approach can be expanded to capture Spanish facts.

² Other small conjunct approaches in the gapping literature are Siegel (1987), Johnson (1996, 2003), Lin (2000).

2.1. Determiner Sharing in English

The small conjunct analysis of Lin (2002) which postulates the determiner related positions, DETs, is illustrated in (7), repeated here as (9).

(9) [TP The girls, will [DFT t, [VP [VP drink whiskey] & [VP boys drink wine]]]]

I now explain the nature of DETs and the restrictions that affect their position in the structure.

Lin assumes Sportiche's (1996) DP-Partitioning Hypothesis by which determiners are divided in two positions in the tree. In Lin (2002), these positions are D, which is the determiner position per se; and DET, which is a position to which D normally moves (10).

(10)
$$[_{TP} \dots DET [_{vP} \dots DET [_{VP} \dots]]]$$

In Lin's analysis, these DETs exist in the structure under specific requirements which need to capture a generalization that applies to determiner sharing phenomena. This generalization is expressed in McCawley (1993) and more accurately in Lin (2002) and Siegel (1984, 1987). McCawley (1993) provides empirical evidence that it is not possible to have determiner sharing if the verb is not gapped. This is illustrated in (11-12). The verbal form 'are named' in (11) needs to be gapped in non-initial conjuncts for the sentence to become grammatical. If it is not gapped, like in (12), the result is ungrammatical. Lin (2002) explains that in order to have determiner sharing, it is Tense that needs to be gapped. Examples (13-14) illustrate this.

- (11) Too many Irish setters are named Kelly, German shepherds Fritz, and huskies Nanook.
- (12) *Too many Irish setters are named Kelly, German shepherds are named Fritz, and huskies are named Nanook.
- (13) The boys will wash the dishes and (-) girls (-) mop the floor.
- (14) *The boys will wash the dishes and (-) girls will mop the floor.

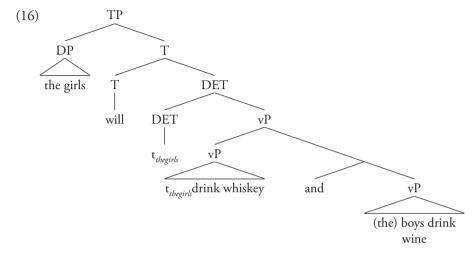
Determiner sharing is possible in (13) because T, the auxiliary 'will', is gapped in the second conjunct. On the contrary when 'will' is not gapped the sentence becomes ungrammatical (14). Lin's analysis captures this contrast by means of the positions that DETs occupy and the requirements that specify their location.

The conditions that regulate the relation between the D positions and the DET positions are the following (15).

- (15) a. D must be within the c-command domain of DET at LF.
 - b. DET must be adjoined to a DP headed by D by Spell-Out.
 - c. D needs to be adjoined to DET to be spelled-out.

Lin states in these conditions (15) that the DET position needs to c-command D and the latter normally adjoins to DET by Spell-Out. The result of this is that D is spelled-out when adjoined to DET. Hence, if D is not in DET it does not get to be

pronounced. In order to illustrate the DET-D relationship, the determiner sharing structure in (9) is represented here in more detail in (16).



In the first place, the DPs that share DET are inside the conjuncts. Since D gets spelled-out when D moves to DET, the DP in the first conjunct moves there so that its D is pronounced. However, the DP in the second conjunct does not have any available DET position to move to. This is why, the determiner in the second conjunct does not get to be pronounced.

Because the DET position is right above coordination, and hence, it delimits the coordinated material, everything above DET should be shared. Tense is generated above DET and this means that it needs to be shared, and because of that, gapped in the conjuncts. Hence, the Tense that is in the form of an auxiliary or as part of a tensed verb is located in the shared part of the structure. This is the reason why determiner sharing forces Tense to be also shared, because it is above DET. I briefly schematize this in (17).

(17)
$$[_{TP} T [_{DET} DET [_{vP} [_{DET} DET [_{VP}]]]]]$$

The incorporation of DETs to the structure makes possible to capture the generalization that Tense needs to be always shared for determiner sharing to be present in the structure. This is another reason why I assume this analysis. Also, because of two aspects that I develop in what follows: (i) there is more evidence for DETs, empirical and theoretical, (ii) the relation between T and DET allows to capture more data than what is covered in Lin (2002).

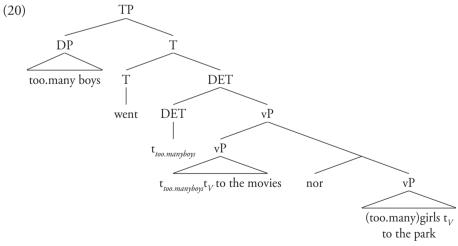
Although Lin (2002) provides other important aspects to the theory, I only reproduce here the ones that are crucial for the goal of this article. In the next subsection, I explain a way in which this analysis can be extended onto Spanish. I discuss further on the nature of the relation between T and DET, and on further evidence in favor of DETs.

2.2. Determiner Sharing in Spanish

The first aspect to notice is that both subject determiner sharing (example (1) repeated here as (18)) and object determiner sharing (example (19)) are possible in Spanish.³

- (18) Ni demasiados chicos fueron al cine ni (-) chicas (-) al parque neither too.many boys went to.the movies nor (-) girls (-) to.the park 'Neither too many boys went to the movies nor too many girls went to the park.'
- (19) Ni Juan leyó demasiados libros ni Pedro (–) revistas. neither Juan read too.many books nor Pedro (–) magazines 'Neither Juan read too many books nor Pedro read too many magazines.'

In both sentences (18, 19), DPs in different conjuncts are sharing a determiner 'too many'. In the case of (18), the DPs sharing DET, 'too many boys' and 'too many girls' are in subject position. In the case of (19), the DPs that share DET, 'too many books' and 'too many magazines' are in object position. Determiner sharing in (18, 19) is possible because T is gapped in non-initial conjuncts in both cases. The syntax of DETs in these Spanish cases is the same as in Lin (2002). This is illustrated in (20), the structure of sentence (18).



The determiners are within their conjuncts and DETs are shared. Same as above, the requirements between DETs and Ds apply, and because of that the determiners

 $^{^3}$ For a better understanding of object determiner sharing in Spanish, I refer the reader to my dissertation (Centeno 2011). Also see footnote 1.

in the non-initial conjuncts are not pronounced. The verb is gapped from the conjuncts and is present in the shared part because it has moved Across The Board to T, in the shared part.

Wh-determiner sharing sentences are also possible. These are cases where the DPs sharing DET are wh-phrases. In (21) the wh-phrases that share DET are 'how many books' and 'how many magazines'.

(21) ¿Cuántos libros ha leído Juan y revistas revisado Pedro? how.many books has read Juan and magazines reviewed Pedro? 'How many books has Juan read and how many magazines has Pedro reviewed?'

Because T is shared, the conjuncts need to be smaller than TPs. Still, the whphrase that share DET in the second conjunct 'how many magazines' has moved upwards above vP (22). This is considered to be an intermediate copy of wh-movement in Arregi and Centeno (2005) and evidence in favor of cyclicity in wh-movements as in Chomsky (1986, 2000), Fox (2000) and Nissembaum (2000). This evidence suggests that another projection between TP and vP is needed in this type of Spanish determiner sharing cases. The overt intermediate copy of the phrase that both undergoes wh-movement and is involved in DET sharing appears in this intermediate projection that is labeled Agr_OP (22).

(22) ... [
$$_{Agr_OP}$$
 (how many) magazines $_i$ reviewed [$_{vP}$ Pedro t $_{V}$ [$_{VP}$ t $_{V}$ t $_{i}$]]

Because of that, Arregi and Centeno (2005) postulate another DET position at that height (23).

(23)
$$[_{TP} \dots DET [_{Ar_{O}P} \dots DET [_{vP} \dots DET [_{VP} \dots]]]$$

Apart from this intermediate position, other examples suggest the need of another DET position, a higher one. Consider the following examples (21) repeated here as (24) and (25).

- (24) ¿Cuántos libros ha leído Juan y revistas revisado Pedro? how.many books has read Juan and magazines reviewed Pedro? 'How many books has Juan read and how many magazines has Pedro reviewed?'
- (25) ¿Cuántos libros ha leído Juan y revistas ha revisado Pedro? how.many books has read Juan and magazines has reviewed Pedro? 'How many books has Juan read and how many magazines has Pedro reviewed?'

Examples (24, 25) are wh-determiner sharing sentences whose only difference is that 'has' is present in both conjuncts in the second sentence (25). Since both sentences are grammatical, it can be seen that the gapping of T in non-initial conjuncts is optional in this type of question.⁴ Notice that this goes against the generalization that T gapping is mandatory in order to have determiner shar-

 $^{^4}$ The existence of this type of examples in English is already noticed in Ackema and Szendroi (2002).

ing. However, this is not a problem for the theory assumed and developed in this work.

In the theory that is assumed here, DET is the delimiting element between the conjoined material and the shared part. Hence, as seen before, when DET is low in the structure, everything above it is shared, and that is why T is gapped from non-initial conjuncts. So according to this, if T is not shared (present in both conjuncts) in this wh-determiner sharing example, (25), DET should be above the Tense projection. The structure that is needed is (26), where conjuncts are CPs and the DET position is above them. This DET position is labeled DET $_{Wh}$.

(26) $[_{DET_{Wb}}$ how.many books $_i$ $[_{CP}$ $[_{CP}$ t_i has read Juan] and $[_{CP}$ magazines has reviewed Pedro]]]

After CPs are completely formed with their corresponding movements in (26), another movement is done by the wh-phrase to DET_{Wh} from the first conjunct. The determiner in this phrase gets spelled-out this way. Although conjuncts are CPs, there is still a part of the structure, the DET_{Wh} position, that is shared by the conjuncts. Because of this, conjuncts are smaller than whole sentences.

This structure is not only suggested by the grammaticality of sharing a determiner with out sharing T. It is also supported by the following evidence. Before I provide this evidence, observe a natural consequence to this analysis. Normally, in the determiner sharing cases that are analyzed, the grammatical functions of the DPs involved in DET sharing are the same. Notice the grammatical functions of the DPs in (19) repeated here as (27).

(27) Ni Juan leyó demasiados libros ni Pedro (–) revistas. neither Juan read too.many books nor Pedro (–) magazines 'Neither Juan read too many books nor Pedro read too many magazines.'

The DPs 'too many books' and 'too many magazines' are both objects and the sentence is grammatical. However, when DPs with different grammatical functions share DET, the sentence becomes ungrammatical (28).

(28) *Ni María ha dado demasiados caramelos a Pedro ni niños comido la tarta neither Maria has given too.many candies to Pedro nor boys eaten the cake 'Neither Maria has given too much pizza to Pedro nor too many boys have eaten the cake.'

The first DP in the determiner sharing relationship 'too many candies' is an object and the second DP 'too many boys' is a subject. These different grammatical functions make the conjunction be of different categories. This is so because each grammatical function corresponds to different positions at different heights. Coordination of different categories is not possible. In coordination contexts, conjuncts of same category need to be conjoined. The structure of the ungrammatical example (28) is (29).

(29) $[_{TP} M. has [_{vP} given [_{DET} too many candies_i [_{VP} t_i to P.]_{VP} nor [_{vP} boys eaten the cake]_{vP}]]$

The categories of the conjuncts in (29) are different. The first conjunct is a VP because the DP sharing DET is an object, and the second conjunct is a vP because the subject is present in the conjunct. This yields to ungrammaticality in (28).⁵

Evidence for a structure where DET_{Wh} is present comes from looking further into grammatical functions of DPs and their positions. I consider sentences where DPs with different grammatical functions are involved in wh-movements and in DET sharing. These sentences are therefore evidence not only in favor of DET_{Wh} but also in favor of DETs in general.

Consider the following contrasts (30-31, 32-33).

- (30) ¿Cuántos ejemplos has creado y profesores te han dicho que eran incorrectos?

 how.many examples have.2SG created and teachers you.ACC have said that were incorrect

 'How many examples have you created and how many teachers have told you that they were incorrect?'
- (31) *¿Cuántos ejemplos has creado y profesores dicho que eran incorrectos?

 how.many examples have.2SG created and teachers said that were incorrect

 'How many examples have you created and how many teachers have told you that they were incorrect?'
- (32) ¿Cuántas flores han florecido y plantas has metido en el invernadero? how.many flowers have blossomed and plants have-2-SG put in the greenhouse 'How many flowers have blossomed and how many plants have you put in the greenhouse?'
- (33) *¿Cuántas flores han florecido y plantas metido en el invernadero? how.many flowers have blossomed and plants put in the greenhouse 'How many flowers have blossomed and how many plants have you put in the greenhouse?'

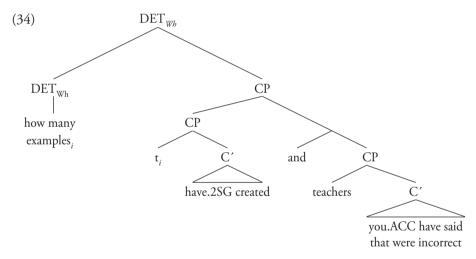
The difference between grammatical sentences (30, 32) and their counterparts (31, 33) is the gapping vs. no gapping of T. Hence, the only source for the grammatical contrast is the presence/absence of T in non-initial conjuncts. In example (30), the auxiliary 'have' is present in the second conjunct and this makes the sentence grammatical. Notice that the grammatical functions of the DPs sharing DET are different: the first DP is an object and the second DP is a subject. This can only happen because T is present in both conjuncts. The same applies to example (32).

⁵ This kind of reasoning is well established in the coordination literature and it can be considered legitimate. However, I am well acquainted with the literature of unbalanced or asymmetric coordination, according to which conjuncts of different categories can be conjoined. For a more suitable potential explanation of the ungrammaticality of this example (28), which is not based on the categories of the conjuncts, I refer the reader to my dissertation, Centeno (2011).

However, in examples (31, 33), the auxiliary 'have' is not present in the second conjunct and determiner sharing by two DPs that have different grammatical functions is not possible because they are in different positions.

The different behavior between the grammatical sentences and the ungrammatical ones can only be understood if the DPs sharing DET are in Spec, CP in the grammatical sentences. This is so because Spec, CP is one position where elements with different grammatical functions can occupy the same position from conjunct to conjunct. This way, coordination of same categories (coordination starting at same height in each conjunct) is achieved: coordination of CPs. Notice that this is forced by the presence of T in both conjuncts. If T is present in both conjuncts, the DET position should be above it and the wh-phrases sharing DET should be in Spec, CP.

Since this is the only explanation for the grammaticality of these sentences (30, 32), this is evidence that a DET position above CP, DET_{Wb}, is needed in the structure. This is illustrated in (34) which corresponds to example (30).



The DPs 'how many examples' and 'how many teachers' need to be in Spec, CP and they are sharing a DET, DET_{Wb}. Finally, because Tense is not present in the conjuncts in the ungrammatical sentences (31, 33), coordination of CPs is not forced, and hence, there is conjunction of elements of different categories because the DPs involved in sharing are in different positions. The analysis of this kind of sentences is already given in (29), which is a structure that illustrates coordination of different categories.

So far, the structure assumed for Spanish determiner sharing is (35), which comprises the four DET positions that have been justified above.

(35)
$$\operatorname{DET}_{Wh}\left[_{\operatorname{CP}}\dots\left[_{\operatorname{TP}}\dots\operatorname{DET}\left[_{\operatorname{Ar_OP}}\dots\operatorname{DET}\left[_{\operatorname{vP}}\dots\operatorname{DET}\left[_{\operatorname{VP}}\dots\right]\right]\right]\right]$$

In the next section, I maintain these DET positions but I rethink the structure so that I locate the positions of DETs more accurately. In doing so, the empirical basis of this study becomes wider and the theoretical basis simpler.

3. A Preferable Change: DET and DET_{Foc}

So far, I have assumed a structure for determiner sharing in Spanish where DET positions are situated above VP, vP, Agr_OP, and CP. My goals here are (i) to be more specific in positioning DETs, (ii) to simplify the determiner sharing theory, and (iii) to capture more data. In order to do so, I propose to assume Rizzi's (1997) CP-split in the analysis of determiner sharing structures. The complementizer system splits into the following projections in that work (36).

(36)
$$\begin{bmatrix} \\ ForceP \end{bmatrix} \begin{bmatrix} \\ Top \cdot P \end{bmatrix} \begin{bmatrix} \\ FocP \end{bmatrix} \begin{bmatrix} \\ Top \cdot P \end{bmatrix} \begin{bmatrix} \\ FinP \end{bmatrix} \end{bmatrix} \end{bmatrix}$$

This higher split system is partly devoted to the final landing sites of A'-movements. By atomizing the complementizer system, I am able to be more specific about the positioning of the higher DETs.

Lower landing sites of A'-movements are postulated to be also present internally to the IP projection in Jayaseelan (2001). I propose to also assume these IP-internal TopP and FocP that are postulated in analyses like Jayaseelan's (2001). By adopting this proposal, I can make the theory simpler. And, finally, by considering determiner sharing sentences with A'-movements, I can consider a set of data that, to my knowledge, has not been considered before.

In order to illustrate this proposal, consider (37).

(37) ¿Cuántos libros ha leído Juan y revistas ha revisado Pedro? how.many books has read Juan and magazines has reviewed Pedro 'How many books has Juan read and how many magazines has Pedro reviewed?'

This is a regular wh-determiner sharing sentence that has already been analyzed with a DET_{Wh} at the top of the structure. However, with the new positions that are now in the structure, the analysis should be (38), where wh-phrases sharing DET naturally stop at Spec, FocP. As a consequence, DET_{Wh} is now labeled DET_{Foc} .

(38) [DET_{Foc} how many booksi + DET_{Foc} [$_{FocP}$ [$_{FocP}$ t $_i$ has read Juan] and [$_{FocP}$ magazines has reviewed Pedro]]]

Both wh-phrases 'how many books' and 'how many magazines' are on Spec, FocP, sharing DET_{Foc} . This DET position is needed because T, the auxiliary 'have' is present in both conjuncts.

The same kind of logic can be used in the analysis of a different type of sentence where Tense is shared (gapped from the second conjunct) and wh-determiner sharing is present (39).

(39) ¿Cuántos libros ha leído Juan y revistas revisado Pedro? how.many books has read Juan and magazines reviewed Pedro 'How many books has Juan read and how many magazines has Pedro reviewed?'

⁶ See the work by Jonny Butler (2004) also.

Because Tense is gapped, the conjuncts need to be smaller than T. In the theory so far, these examples are $\mathrm{Agr}_O\mathrm{P}$ coordinations, where the elements in the second conjunct stop moving at that height and the ones in the first conjunct can keep on moving up to the shared structure. My proposal adopts Jayaseelan's (2001) IP-internal FocP to account for this kind of example (39). In this case, the wh-phrases that move up to Spec, FocP in the complementizer system, start moving up to Spec, FocP beneath IP. Consider the structure of both conjuncts (40).

(40) ...
$$[_{FocP} t_i \text{ read } [_{vP} \text{ Juan } t_V t_i]]]$$

... $[_{FocP} \text{ magazines}_i \text{ reviewed } [_{vP} \text{ Pedro } t_V t_i]]]$

Because the wh-phrases share DET and DET is above FocP for both conjuncts, this is a DET_{Foc} projection. The wh-phrase in the first conjunct adjoins to DET_{Foc} so that its determiner is spelled out and it keeps on moving up to the higher FocP (41).

(41) $[_{FocP}$ how.many books $_i$ $[_{TP}$ has $[_{FocP}$ $[_{FocP}$ t_i read $[_{vP}$ Juan t_V t_i]]] & $[_{FocP}$ magazines $_i$ reviewed [vP Pedro t_V t_i]]]]

With the new analysis, I can be more specific about the positioning of both higher DETs because the structure also displays the information structure projections. Consider (42).

(42) Now:
$$\begin{bmatrix} T_{\text{opP}} & T_{\text{pocP}} & T_{$$

I have shown that higher DETs, DET_{Foc}, need to be located above FocPs because so far phrases sharing DET are wh-phrases. Notice that because of the changes I propose, the DETs theory is simpler. Before, DETs were of three different types: the DETs that corresponded to thematic positions, the DET that was above Agr_OP , and the DET_{Wh} above CP. In the analysis I propose, DETs are of two kinds only: DET_{Foc} and DETs. Consider the new structure (43).

$$(43) \ \left[_{\text{TopP}} \ \text{DET}_{\textit{Foc}} \left[_{\text{FocP}} \left[_{\text{TopP}} \ \text{DET}_{\textit{Foc}} \left[_{\text{FocP}} \ \text{DET} \left[_{\text{vP}} \ \text{DET} \left[_{\text{VP}} \ \right] \ \right] \ \right] \ \right] \right] \right]$$

DETs are the ones that correspond to thematic positions. And DETs $_{Foc}$ are the ones that correspond to the landing sites of wh-movements, either final or intermediate landing sites. The DETs theory is simpler this way and it can account for the different sets of data in a more logical way. The structure for determiner sharing in declarative sentences has a DET position above thematic positions; and the structure for wh-determiner sharing sentences has a DET $_{Foc}$ position above FocP.

In addition, with this kind of analysis, I can account for the following contrasts (44-45, 46-47). These are examples where DPs sharing DET are in Spec, FocP or Spec, TopP.

(44) *Demasiados chicos cuándo han comprado el pan y chicas dónde comido?

too.many boys when have eaten the bread and girls where

'When have too many boys bought bread and where have too many girls eaten?'

- (45) Demasiados chicos cuándo han comprado el pan y demasiadas chicas dónde han comido? too.many boys when have eaten the bread and too.many girls where have eaten 'When have too many boys bought bread and where have too many girls eaten?'
- (46) *Demasiados libros Pedro los ha leído y revistas María revisado too.many books Pedro them has read and magazines María reviewed 'Pedro has read too many books and María has read too many magazines'.
- (47) Demasiados libros Pedro ha leído y revistas María revisado too.many books Pedro has read and magazines María reviewed 'Pedro has read too many books and María has read too many magazines'.

In sentences (44-45), the DPs 'too many boys' are in Spec, TopP position. There is a grammaticality contrast between the two sentences. The difference between them is that the ungrammatical sentence (44) is a determiner sharing sentence. The DPs that enter the DET-D relationship are in Spec, TopP position and this ungrammaticality suggests that DPs in that position cannot share DET.

This aspect is reinforced by the second pair of sentences (46-47). These two determiner sharing sentences are a minimal pair whose only difference is the presence of the clitic pronoun 'them' in (46). This pronoun makes sentence (46) be an example of Clitic Left Dislocation (CLLD). In these CLLD sentences, the element displaced to the left is normally considered a topic. When this clitic is not present, the dislocated element is normally considered a focused element (Rizzi 1997). It is the dislocated elements in these sentences (46-47) that are sharing DET. Now, if the grammaticality contrast is taken into account, it is only the focused element that can share DET because the sentence with the focused element is grammatical (47). In example (46), where the dislocated element sharing DET is a topic, the sentence is ungrammatical. This is evidence that higher in the structure, other than in thematic positions, the elements sharing DET should be in Spec, FocP, and therefore, that these DET positions should be DET of Consequently, there is evidence that the structure should be (43), repeated here as (48).

(48)
$$[T_{\text{TopP}} DET_{Foc}]_{\text{FocP}} [T_{\text{P}} T_{\text{TopP}} DET_{Foc}]_{\text{FocP}} DET [T_{\text{VP}} DET [T_{\text{VP}} T_{\text{D}}]]]$$

A further step that can be taken with this proposal is to consider both topicalized and focused elements in the same determiner sharing sentence. This is possible (49).

(49) ¿Pedro cuántos libros ha leído y Juan revistas revisado?
Pedro how.many books has read and Juan magazines reviewed
'How many books has Pedro read and how many magazines has Juan reviewed?'

In example (49), there are elements both topicalized and focused in both conjuncts. 'Pedro' and 'Juan' are topics, and 'how many books' and 'how many magazines' are foci. The analysis of this sentence brings some complications to this analysis but I solve them in subsequent work. Still, it is clear from also considering this

example (49) that the analysis of information structure is necessary in the understanding of these structures.

4. Conclusion

In this article continue my research on determiner sharing in Spanish by slightly changing the structure that has been published so far. In doing this, two important goals are achieved. First, I make the determiner sharing theory simpler and more logical. Second, the set of Spanish determiner sharing sentences accounted for is wider than before. The approach adopted is a small conjunct analysis which postulates that some determiner related positions need to be present in the structure. This is postulated in Lin (2002) and extended onto Spanish by Arregi and Centeno (2005) and Centeno (2007). In the latter works, further evidence in favor of DETs is provided and I dedicate part of this article to expand such evidence.

I also account for A'-movements of different types in determiner sharing sentences and I include more projections in the structure assuming analyses like Rizzi (1997) and Jayaseelan (2001). This atomizes the structure and makes it possible to define the locations of DET positions in a more accurate way. In doing so, I show that there needs to be only two types of DET positions; DETs_{Foc} and DETs. This makes the theory simpler and accounts for data not accounted for before. It also makes possible to consider a further set of data that I analyze in my subsequent research.

5. References

- Ackema, Peter & Kriszta Szendroi, 2002, «Determiner sharing as an instance of dependent ellipsis», *Journal of Comparative Germanic Linguistics* 5, 3-34.
- Arregi, Karlos & Naiara Centeno, 2005, «Determiner Sharing and Cyclicity in Wh-movement». In *Theoretical and Experimental Approaches to Romance Linguistics* ed. by Randall Gess and Edward Rubin. Amsterdam & Philadelphia: John Benjamins.
- Benmamoun, Elabbas, 1992, Functional and Inflectional Morphology: Problems of Projection, Representation, and Derivation. Ph.D. Dissertation, University of Southern California.
- Butler, Jonny, 2004, *Phase Structure, Phrase Structure, and Quantification*. Ph.D. Dissertation, University of York.
- Centeno, Naiara, 2007, A Determiner Position above CP. LSRL 37, Pittsburgh.
- —, 2011, Gapping and Determiner Sharing in Spanish. PhD dissertation, University of the Basque Country, Vitoria-Gasteiz.
- Chomsky, Noam, 1986, *Barriers* (=Linguistic Inquiry Monographs, 13). Cambridge, Mass.: MIT Press.
- —, 2000, «Minimalist Inquiries: The Framework». *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik* ed. by Roger Martin, David Michaels and Juan Uriagereka, 89-155. Cambridge, Mass.: MIT Press.
- Citko, Barbara, 2006, «Determiner Sharing from a Crosslinguistic Perspective», *Linguistic Variation Yearbook*, ed. by Pierre Pica. John Benjamins, Amsterdam.
- Corbett, Greville, 2006, Agreement. Cambridge: Cambridge University Press.
- Fox, Danny, 2000, *Economy and Semantic Interpretation* (=Linguistic Inquiry Monographs, 35). Cambridge, Mass.: MIT Press, MIT Working Papers in Linguistics.

- Hartmann, Katharina, 2001, Right Node Raising and Gapping: Interface Conditions on Prosodic Deletion. Amsterdam & Philadelphia: John Benjamins.
- Jayaseelan, K. A., 2001, «IP-Internal Topic and Focus Phrases», *Studia Linguistica* 55(1), 39-75.
- Johannessen, J. B., 1998, Coordination. Oxford: Oxford University Press.
- Johnson, Kyle, 2004, In Search of the English Middle Field. Ms., University of Massachussetts, Amherst.
- Lin, Vivian I-Wen, 2002, *Coordination and Sharing at the Interfaces*. Ph.D. Dissertation, MIT, Cambridge, Mass.
- McCawley, James D., 1993, «Gapping with Shared Operators». In the *Proceedings of the Nineteenth Annual Meeting of the Berkeley Linguistics Society* (BLS 19), Berkeley, Calif., 12-15 February 1993: General Session and Parasession on Semantic Typology and Semantic Universals ed. by Joshua S. Guenter, Barbara A. Kaiser and Cheryl C. Zoll, 245-254. Berkeley Linguistics Society, University of California, Berkeley.
- Munn, Alan, 1993, *Topics in the Syntax and Semantics of Coordinate Structure*. Ph.D. Dissertation, University of Maryland, College Park.
- Neijt, Anneke, 1979, Gapping: A Contribution to Sentence Grammar (=Studies in Generative Grammar, 7). Dordrecht: Foris.
- Nissembaum, Jonathan, 2000, *Investigations of Covert Phrase Movement*. Ph.D. Dissertation, MIT, Cambridge, Mass.
- Rizzi, Luigi, 1997, «The Fine Structure of the Left Periphery». In *Elements of Grammar. Handbook of Generative Syntax*, ed. L. Haegeman. Dordrecht, Kluwer.
- Siegel, Muffy E. A., 1987, «Compositionality, Case and the Scope of Auxiliaries», *Linguistics and Philosophy* 10, 53-75.
- Sportiche, Dominique, 1996, «Clitic Constructions». In *Phrase Structure and the Lexicon* eds. Johan Rooryck & Laurie Zaring. Dordrecht/Boston: Kluwer.
- Wilder, Chris, 1997, «Some Properties of Ellipsis in Coordination». In *Studies on Universal Grammar and Typological Variation (=Linguistik Actuell/Linguistics Today*, 13) ed. by Artemis Alexidou and T. Alan Hall, 59-107. Amsterdam and Philadelphia: John Benjamins.