

Ph.D. Dissertation

AGREEMENT, BINDING AND THE STRUCTURE OF SPANISH CLITICS

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Abstract

This thesis investigates in detail the semantic and syntactic properties characterizing the wide variety of clitic doubling structures existing in modern Spanish. Like subject agreement, *clitic doubling* refers to the ability of an agreement morpheme (in this case, a clitic) to co-occur with an associated DP in an argument position. Similar to what happens with subject agreement, the Spanish Direct Object (DO) and Indirect Object (IO) clitics can co-appear with a wide variety of argumental DPs (pronominal, anaphoric, definite and quantificational DPs). However, unlike subject agreement, which is always mandatory in finite clauses in Spanish, clitic doubling presents a more complex pattern: it can be optional, obligatory or impossible, depending on complex factors concerning the nature of both the doubled DP and the DO/IO clitic itself.

In minimalism and its predecessors, the study of the syntactic properties characterizing the wide variety of clitic doubling structures existing in Spanish have played a fundamental role in the developing of the two main hypotheses concerning the syntactic status of DO/IO clitics: the *agreement* vs. the *pronominal* hypotheses.

According to the *agreement* hypothesis, DO/IO clitics should be analyzed as the morphological reflex of an Agree relation holding between a verbal-like functional head and an argumental DP inside the VP. In contrast, under the *pronominal* hypothesis, DO/IO clitics are best analyzed as pronominal clitics: i.e., as argumental (DO/IO) pronouns which for independent reasons must undergo syntactic head-movement to a verbal-like functional head.

These two hypotheses make opposite predictions regarding the behavior that DO/IO clitics will display at the syntax-semantics interface.

The *pronominal* hypothesis predicts that in Spanish DO/IO clitics will display the hallmarks of (object) pronouns: i.e., like their non-clitic counterparts, pronominal clitics (i) should be ruled by Principle B of the Binding Theory, and (ii) should have

the referential/semantic features allowing them to ‘affect’ the semantic interpretation available for the referential DPs that they double.

In opposition to the *pronominal* hypothesis, however, the *agreement* hypothesis argues that DO/IO clitics should best analyzed as verbal agreement morphemes lacking referential properties. Following this line of reasoning, this hypothesis predicts (i) that the Spanish DO/IO will be invisible to Binding Theory and (ii) that they will not ‘affect’ (or interfere with) the semantic interpretation of the referential DPs that they double (because verbal agreement morphemes lack the referential features necessary to do so).

In order to evaluate these two hypotheses, in this thesis I offer the results of comprehensive study of the binding relations that DO/IO clitics can establish with the doubled DP and with different noun phrases in a clause, as well as the structural conditions under which such relations are licensed in this language. In addition to the paradigms already discussed in the literature, I introduce a whole set of new paradigms of clitic doubling in configurations that had never been reported or discussed before, with special attention to the referential interpretations that are available for both DO/IO clitics and doubled DPs in each configuration, a question that had been neglected in most of the works on this topic.

The study of these properties will prove crucial to evaluate the empirical and theoretical adequacy of previous versions of the *agreement* and the *pronominal* hypotheses in accounting for the whole range of syntactic and semantic properties DO/IO clitics display in Spanish. To this end, I will extend Büring’s (2005) analysis of Binding Theory (BT) in English to the analysis of the whole range of clitic doubling configurations existing in Spanish.

On the basis of this analysis, I will conclude (i) that, unlike alternative competing analyses of BT, Büring’s version of BT (provided with some new theoretical extensions I will introduce and defend) is able to account in principle way for the whole range of binding properties that DO/IO clitics display in Spanish, and (ii) that in Spanish clitics do not form an unitary class; rather, they split into two different subclasses, which I refer to as *φ-clitics* vs. *D-clitics*.

- (i) The class of **φ -clitics** is made up of the 1st/2nd person DO/IO clitics *me/te/nos/os* and the so-called reflexive clitic *se*. All these clitics display the hallmarks of object agreement: (i) they are invisible to Binding Theory, and (ii) lack the referential/semantic features necessary to affect the semantic interpretation of the argumental DPs that they double.
- (ii) On the other hand, the 3rd person DO/IO clitics *lo(s)/la(s)/le(s)* (which I dub **D-clitics**) display all the hallmarks of pronominal clitics: (i) they are ruled by Principle B, and (ii) are able to affect the interpretation of the doubled DP.

Thus, one of the main theoretical contributions of this thesis is to show that in Spanish the *pronominal* and *agreement* hypothesis are both correct, but account for a different group of clitics. The new *mixed* (or *heterogeneous*) analysis I will propose of Spanish clitics not only accounts for the binding properties that the different subclasses of clitics display in this language, but also explains why these two different subclasses of clitics are not allowed to double the same range of argumental DPs. While φ -clitics are verbal agreement morphemes and do not impose any restriction on the type of argumental DPs that they can double, D-clitics are clitic pronouns and, as such, they are not allowed to double DPs whose binding requirements are in contradiction with the binding requirements or the referential interpretation of the pronominal clitic itself.

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Glossary of Abbreviations

1	First Person
2	Second Person
3	Third Person
ACC	accusative
BIER	Binder Index Evaluation Rule
BR	Binder Rule
CL	Critic
DAT	dative
D	Determiner
DO	Direct Object
DOM	Differential Object Marking
Eur	European
fem	feminine
HM	Head-Movement
IO	Indirect Object
MIR	Movement Interpretation Rule
msc	masculine
NOM	Nominative
non-p	non pronominal
PAST	Past
pl	plural
PLD	Primary Linguistic Data
QR	Quantifier Raising
refl	reflexive
Rio	Rioplatense
sg	singular
SUBJ	Subject
Sp	Spanish

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CHAPTER 1

Towards a new Typology of Spanish Clitics

Cltic doubling refers to the ability of object clitic pronouns (henceforth, just object clitics) to co-occur with an argumental DP that shares with the clitic the same φ-features, grammatical function and Case properties.

In minimalism and its predecessors, the study of the syntactic link existing between the clitic and its associated DP in clitic doubling structures has played a fundamental role in defining i) the morpho-syntactic status of the clitic, and ii) the syntactic conditions that differentiate clitic doubling from other similar phenomena like (subject) agreement.

It is, however, impossible to develop a coherent analysis of the complex nature of the relation holding between the clitic and its associated DP in clitic doubling, as well as the asymmetries found between clitic doubling and related phenomena like (subject/object) agreement, if we do not first have a clear understanding of some basic facts concerning the binding properties and the referential interpretations available for the

clitic and the doubled DP. Without a comprehensive analysis of these semantic properties, it will be impossible to elucidate (and subsequently account for) the restrictions observed in clitic doubling. This will be especially important if, as I defend in this dissertation, the impossibility of certain clitic-DP combinations in Spanish come from the incompatibility of the binding requirements or referential properties that are independently available for the clitic and the doubled DP.

From this perspective, it is surprising that, although clitic doubling has been extensively studied in Spanish, there is not yet a comprehensive study accounting for the referential and binding properties that the different types of clitics exhibit in the set of clitic doubling constructions available in this language.

In order fill this important gap, this thesis offers a thorough study of the binding and the referential properties that characterize not only clitics, but also the wide variety of argumental DPs that clitics can combine with and double in this language.

The research I present here is based on a solid empirical ground. It offers a wealth of new data, and introduces for the first time new paradigms and new empirical generalizations on clitic doubling in Spanish that had gone unnoticed in the literature. In order to analyze all these data, I offer a carefully designed methodology to tease apart the semantic and syntactic properties of the different clitic doubling constructions found in Spanish.

On the basis of this study, I develop a novel analysis of clitic doubling in this language which accounts:

- i) for the syntactic properties of clitics and clitic doubling,
- ii) for the semantic and syntactic asymmetries found between clitic doubling and (subject/object) agreement,
- iii) for the intricate set of semantic and syntactic properties underlying the licensing of clitic doubling with different types of argumental DPs —pronouns, anaphors, R-expressions and quantificational expressions (wh-phrases or quantifiers) —.

Finally, the analysis of clitic doubling I develop here has interesting consequences for Binding Theory. This is so because, when we test some of the versions of the Binding Principles which were modeled (largely) on the basis of English (a language with a relatively small repertory of pronouns and without clitic doubling) in Spanish (a language with a complex and extensive pronominal paradigm and a wide variety of clitic doubling structures) it becomes evident that some theoretical adjustments are necessary to make binding principles compatible with the properties exhibited by the Spanish clitic system.

1.1. Introduction.

It is well-known that in all Spanish dialects pronouns cannot be licensed in object position unless they co-occur with an object clitic¹ attached to the verb or the auxiliary. This is illustrated in (1a) with a Direct Object (DO) pronoun. Here, the 1pl accusative pronoun *nosotros*² appears in complement position and must be obligatorily doubled by the 1pl DO clitic *nos* for the sentence to be well formed. As shown in (1b), the same is true for the 3sg Indirect Object (IO) pronoun *él*, which bears dative case and must be obligatorily cross-referenced by a IO clitic (the 3sg IO clitic *le*). This phenomenon, where a pronominal object DP (be it a DO or an IO) must be doubled by an overt clitic, is known as *clitic doubling*.

(1)	a.	Juan	*(nos)	vio	a nosotros.	(all dialects)
		J.(NOM)	1pl.DO	saw.3sgSUBJ	A us(ACC)	
‘Juan saw us.’						

¹ In Spanish clitics can function as objects but not as subjects or as prepositional adjuncts. The term object clitic is employed here (and elsewhere in literature) as a convenient label to refer to both Direct and Indirect Object clitics (see e.g., Woolford 1999). Similarly, the term object position will be used to refer to both DO and IO positions.

² The accusative preposition *a* preceding the strong DO pronouns in (1) illustrates the phenomenon of Differential Object Marking (DOM) in Spanish. Roughly speaking, the accusative preposition *a* precedes DOs that are [+specific, +human] (see Laca 1995, Torrego 1998, Leonetti 2004, Rodríguez-Mondoñedo 2007, López 2012, Zdrojewski 2013, Ormazabal & Romero 2013, and much related work). Given the well-known fact that in Spanish the accusative preposition *a* is homophonic with the dative preposition *a* ('to'), which precedes all dative DPs irrespective of whether they are [±specific, ±human], I will gloss the accusative preposition *a* as *A* in the examples in Spanish, and its homophonous dative preposition as the dative preposition *to* in English.

- b. Juan *(le) regaló el libro a él. (all dialects)
 J.(NOM) 3.IO gave the book(ACC) to him(DAT)
 ‘Juan gave the book to him.’

- c. Nosotros corri-*mos. (all dialects)
 we(NOM) run.PAST-1plSUBJ
 ‘We ran.’

What we observe in (1a-b) is in fact similar to what happens with pronouns in subject position: they must be obligatorily cross-referenced by a subject agreement marker attached to the finite verb/auxiliary, as shown in (1c), where the 1pl subject pronoun *nosotros* must obligatorily co-occur with the corresponding 1pl subject agreement marker, *-mos*, attached to the finite verb.³

Ctic doubling is, however, more restricted than subject agreement: while all nominative DPs (fully referential ones and pronominal ones) that appear in subject position must be obligatorily cross-referenced by a subject agreement morpheme on the finite verb, not all DPs that appear in object position must be doubled by a DO/IO clitic. Whether clitic doubling is obligatory or not depends on the nature of the DP; more specifically, it depends on whether it involves a full-referential DP or a pronoun, for instance, and whether this DP is a DO or an IO. Thus while, as shown in (1a-b) above, accusative and dative pronouns must be obligatorily doubled by an object clitic in all dialects of Spanish, clitic doubling is optional in the case of full-referential DPs bearing dative case (2a). As for full referential DPs bearing accusative case, there is a well-known dialectal split: while in European Spanish (Spain) these DPs cannot be doubled by a DO clitic (2b), they can be optionally doubled by a DO in Rioplatense Spanish (Argentina),

³ In Spanish, the clitic and the verb/auxiliary form a morphological unit that cannot be interrupted by any element (except by other clitics). The position of the clitic with respect to the verb/auxiliary is determined by the finiteness of the latter: i.e., clitics attach to the right of the finite verb/auxiliary (*proclisis*) and to the left of the non-finite (and imperative) forms of the verb/auxiliary (*enclisis*). For conventional reasons, in the written language, *proclitics* are separated from the verb, while *enclitics* are written as forming a single word with the verb.

- (i) a. *enclisis* b. *proclisis*.
 ¡Cógealo! Lo he comprado.
 take.IMP.3mscsgDO 3msc.sg.DO have.1sgSUBJ bought
 ‘Take it!’ ‘I have bought it.’

as illustrated in (2c) (Jaeggli 1982, Bleam 1999, Ormazabal & Romero 2012, Zdrojewsky 2013 and references cited therein).

- (2) a. Juan (le) dio un regalo al chico/a Pedro. (all dialects)
J.(NOM) 3.sg.IO gave.3sg.SBJ a gift(ACC) to.the boy(DAT)/to P.(DAT)
'Juan gave a gift to the boy/Pedro.'
- c. Juan (*lo) vio al chico/a Pedro. (Eur Sp)
J.(NOM) 3.msc.sg.DO saw.3sg.SUBJ A.the boy/a P.(ACC)
'Juan saw the boy/Pedro.'
- c. Juan (lo) vio al chico/a Pedro. (Rio Sp)
J.(NOM) 3.msc.sg.DO saw.3sg.SUBJ A.the boy/a P.(ACC)

Summarizing the discussion so far in Spanish, both clitic doubling and subject agreement involve a morpheme bearing φ -features (person, number and/or gender), which attaches to the verb/auxiliary and co-varies in φ -features with a DP in an argument position. However, while subject agreement is always obligatory, clitic doubling displays a more complex pattern: it can be either obligatory, optional or impossible, depending on the nature of the associated DP and its syntactic function (DO vs. IO clitics).

In generative grammar, the similarities, as well as the differences, found between clitic doubling and subject agreement have led to the development of two opposite hypotheses regarding the morpho-syntactic status of Spanish clitics: the so-called *agreement hypothesis* and the *pronominal hypothesis*.

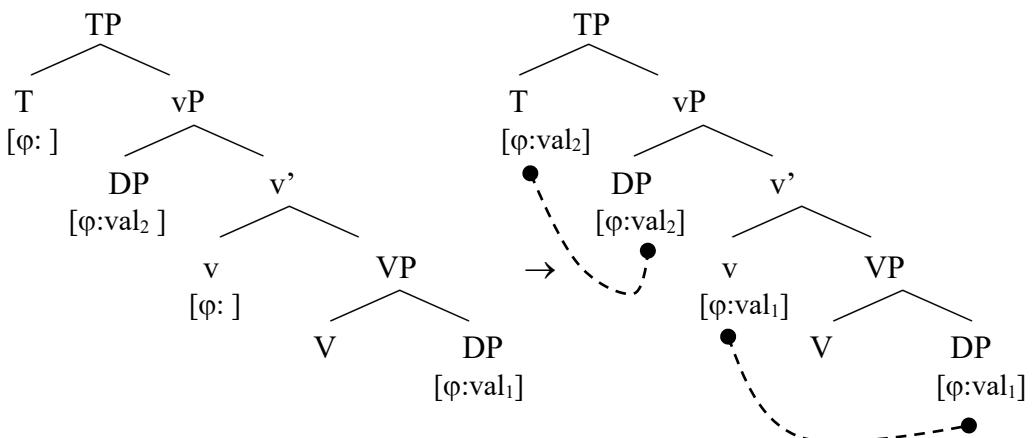
- i) The *agreement hypothesis* claims that both subject agreement markers and object clitics are verbal agreement morphemes. Consequently, both subject agreement morphemes and object clitics should be analyzed in a unified way (Strozer 1976; Aoun 1981; Jaeggli 1982, 1986; Borer 1986; Saltarelli 1987; Suñer 1988; Fernández Soriano 1989; Franco 1993, 2000; Sportiche 1993, 1996; Fontana 1993; Landa 1995; Barbosa 2000; Anderson 2005 and references cited therein).

ii) By contrast, the *pronominal* hypothesis contends that in Spanish object clitics are a special subclass of pronouns which for independent reasons need to cliticize to the verb (i.e., they are pronominal clitics) and, as such, these elements should not be analyzed in the same way as subject agreement morphemes (Kayne 1969/1975, 1989, 1994; Rizzi 1986; Uriagereka 1988, 1995; Roca 1992; Torrego 1995, 1998; Cardinaletti 1998; Cardinaletti & Starke 1999; Roberts 2010; Nevins 2011; Ordóñez 2012, among others).

But how specifically does a verbal agreement morpheme differ from a pronominal clitic? What are the syntactic and the semantic properties that tell apart *verbal agreement morphology* from *pronominal clitics*?

In the Minimalist Program, object agreement morphemes and pronominal clitics are commonly considered to be the morphological reflex of two different syntactic operations: Agree and Movement, respectively. While verbal agreement morphemes are analyzed as the morpho-phonological reflex of the φ -features values associated with an inflectional head as a result of Agree (Chomsky 1998, 2001a, 2001b et seq.), pronominal clitics are argued to be D(eterminer)-heads which start in a lower argument position inside the VP and then move up to adjoin to an inflectional head within the clausal spine (Uriagereka 1988, 1995, Torrego 1988, Roca 1992, Bleam 1999, Vicente 2007, Gallego 2010 and references cited therein).

Figure 1. Verbal agreement morphology: Agree

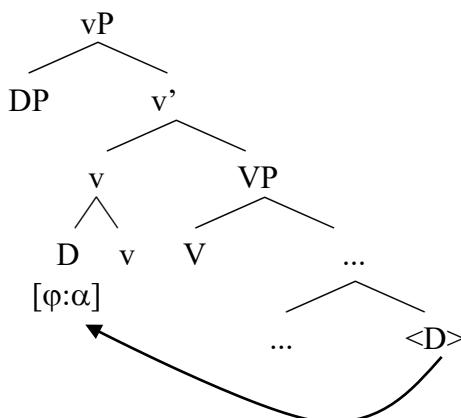


As shown in Figure 1, the head v is selected from the lexicon and enters the derivation with a set of unvalued φ -features. As part of the syntactic derivation, the

unvalued φ -features of v look down into v 's c-command domain in search of a DP argument with valued and matching φ -features. Once v finds a suitable *goal* DP, the valued φ -features of the latter are copied to v as a result of Agree. Later on, at the interface with phonology (i.e. PF), the newly φ -feature values associated with v as a result of Agree can be, and typically are, realized as an object agreement morpheme. This is similar to what happens with the higher head T (in a later stage of the syntactic derivation). As shown in Figure 1, like v , the head T is selected from the lexicon and enters the derivation with a set of unvalued φ -features, which must get a value in the course of the syntactic derivation. Thus, the unvalued φ -features of T probe T 's c-command domain in search of the closest DP with matching and valued φ -features. Once T finds a suitable goal DP, the φ -features of the latter are copied into T as a result of Agree. At the interface with phonology, the newly valued φ -features of T are realized as a subject agreement morpheme. Thus, like subject agreement morphemes, their object agreement counterparts are analyzed as the morphological reflex of an Agree relation holding between a functional head (like v or, for some authors, also the Applicative head in the case of dative arguments; see fn. 9 below) and a DP in its original argument position.

In contrast to object agreement morphemes, pronominal clitics are commonly analyzed as D-heads which merge first in an argument position inside the VP and later on move up to adjoin to the head v , as roughly represented in Figure 2a (cf. Kayne 1969/1975, 1989, 1994; Rizzi 1986; Uriagereka 1988, 1995; Roca 1992; Torrego 1995, 1998; Cardinaletti 1998; Cardinaletti & Starke 1999; Roberts 2010; Nevins 2011; Ordóñez 2012, among others).

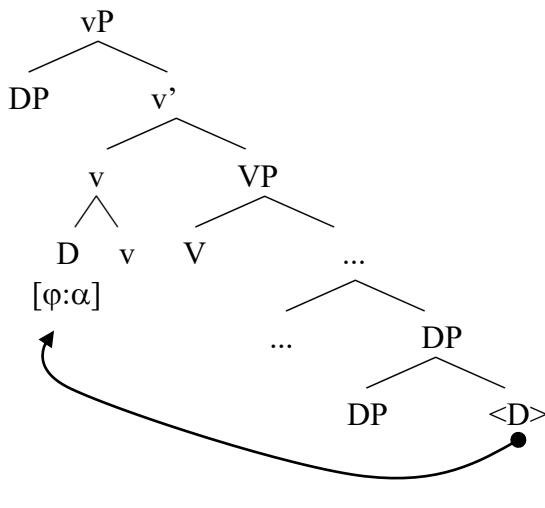
Figure 2a. Pronominal Clitics: Movement approach



The syntactic structure and derivation depicted in Figure 2. account for those cases where the object (DO/IO) is a single clitic. But how do we incorporate those cases where the clitic co-appears with a DP (that is, which structure do we assume for clitic *doubling*?)

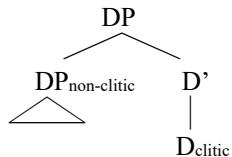
To incorporate clitic doubling, I will adopt what is usually known as the Big-DP hypothesis (notably Uriagereka 1988, 1995 based on unpublished work by Torrego; but also Vicente 2007, 2010, Nevins 2011, Roberts 2012, Gallego 2010 and references cited therein). Following this analysis, there is another structure available to D-clitics, in addition to that schematized in Fig 2a. Specifically, the D-head can be optionally merged with a fully-articulated DP, giving rise to a Big-DP structure, as represented in Figure 2b⁴. In this configuration, the doubled DP is merged as the specifier of this Big-DP, whose head correspond to the pronominal clitic (i.e., the D-head). When as a result of head-movement the D-head raises to v, it leaves the doubled DP argument stranded inside the Big-DP (see Uriagereka 1995). In what follows I will adopt this proposal and assume that this is the structure and derivation that underlies structures involving clitic doubling with pronominal clitics in Spanish.

Figure 2b. Pronominal Clitics: Movement approach + Big-DP hypothesis.



⁴ According to Uriagereka's *classical* Big-DP hypothesis, the D-clitic is the head of a Big-DP, while the doubled pronoun corresponds to a full-articulated DP inserted in the specifier of the Big-DP, as shown in (i).

- (i) Uriagereka's (1995) Big-DP hypothesis



A further difference between pronominal clitics and object agreement morphemes concerns the semantic interpretation of the φ -features associated with each category. It is a widely-accepted assumption that φ -feature values like number, gender and person can only receive a semantic interpretation in pronouns and nominals (Chomsky 1998, 2001a, 2001b and much related work). This assumption plays in fact a fundamental role in the semantic interpretation of the φ -features associated with *pronominal clitics* and *verbal agreement morphemes* (D-heads vs. T/v-heads, respectively). This is so because D-heads are commonly considered to be pronominal-like categories (Postal 1966, Abney 1986, Elbourne 2005 and much related work), whereas T/v heads are functional heads within the clausal spine and do not count either as pronouns or nominals for the purposes of semantic interpretation (Kratzer 1996, Chomsky 1998, 2001a, 2001b and much related work). If so, unlike the φ -features of D-heads, the φ -features values associated with the heads v/T as a result of Agree are semantically uninterpretable on these categories. That is, the φ -features associated with T/v are uninterpretable and, as their name indicates, cannot be part, by definition, of the formal representation that is handed over to the interface with the semantics (LF). But how exactly are the φ -features of v/T removed from the syntactic representation that is handed over to the LF interface?

What Chomsky (1998, 2001a, 2001b) contends is that as a by-product of Agree, the newly valued φ -features of the heads v/T are deleted for the purposes of LF, but remain visible for the external interface with phonology (PF), where these features are realized as verbal agreement morphemes. Thus, according to the *standard* theory of Agree (Chomsky 1998, 2001a, 2001b, Rezac 2003, Béjar 2003, Preminger 2011 and much related work), Agree not only provides the unvalued φ -features of v/T with a value, but also removes these features from the formal representation that reaches the external interface with semantics (LF).

Summarizing, in the Minimalist Program (henceforth MP), *object pronominal clitics* and *object agreement* are analyzed as two different syntactic phenomena. In the first case, *pronominal clitics*⁵ are analyzed as pronominal-like D-heads which start in their

⁵ What clitic and non-clitics pronouns have in common is that they are Determiner heads which are specified for φ -features (Postal 1966, Abney 1986, Elbourne 2005 and much related work). The difference between these two groups of pronouns is that while non-clitic pronouns are commonly considered to be D-

original argument position and later on move up to adjoin to v as a result of head-movement. By contrast, *object agreement* is typically analyzed as the morphological reflex of an Agree relation holding between v and a DP argument. Furthermore, while *pronominal clitics* are mapped to LF, *object agreement* is removed from the syntactic derivation and does not reach LF, being only visible at the PF interface as a reflex of the agreement relation holding between v and the object DP.

Although these two theoretical options are grounded on two different syntactic operations (Agree vs. Move), in practice it is difficult to distinguish one from the other on the basis of empirical evidence (Rezac 2003, Nevins 2011, Preminger 2011, Kramer 2014, Baker & Kramer 2018 a.o.). Consider, for instance, the Spanish examples in (3). In (3a), an object pronoun (*nosotros* ‘us’) must co-occur with an object clitic (*nos*) attached to the finite verb. Similarly, in (3b) we have an overt pronominal object (the 3pl pronoun *ellos*) which must co-appear with a 3pl clitic (*los*).

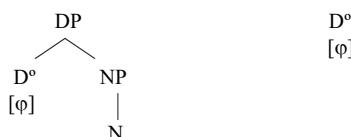
- (3) a. Juan *(nos) vio a nosotros.
 J.(NOM) 1pl.DO saw.3sgSUBJ A us(ACC)
 ‘Juan saw us.’
- b. Juan *(los) vio a ellos.
 J.(NOM) 3msc.sg.DO saw.3sgSUBJ A them
 ‘Juan saw them.’

What we see in these Spanish sentences is that the accusative pronouns that appear in an argument position must be licensed by the co-occurrence of an object clitic: i.e.,

heads that must take a phonetically empty NP as their complement, as in (ia) below, their clitic counterparts are analyzed as intransitive D-heads, which possess φ-features values, but lack a NP complement, as roughly illustrated in (ib) (see e.g., Uriagereka 1988, 1995, Torrego 1995, Vicente 2007, Gallego 2010, Nevins 2011, Roberts 2012, Déchaine & Wiltchsko 2000 and much related work).

(i) *The structure of clitic and non-clitic pronouns.*

- a. ***non-clitic pronouns*** b. ***clitic pronouns***



unless the object clitics are present these sentences are ill-formed. But leaving aside the fact that their presence is obligatory, on which empirical grounds can we determine whether these clitics should be analyzed as pronominal clitics or as object agreement morphemes? What empirical evidence can we use to elucidate whether we should analyze the clitics in (3) as D-heads that start in argument position inside the VP and later on move up to adjoin to the head v, or as the morphological realization of the φ -features associated with the head v as a result of Agree?

More importantly, if (as it is commonly assumed in the MP) Universal Grammar (UG) makes these two theoretical options available for children during the acquisition process, how do Spanish children decide what the structure underlying clitic doubling is on the basis of their Primary Linguistic Data (PLD)? What kind of positive evidence do children find in support of one analysis of Spanish clitics over the other?

In order to address these questions and provide a principled answer to them, in this thesis, I have designed and developed a novel battery of tests aimed to determine which the right analysis of clitic doubling is in Spanish. More specifically, I will offer the results of a detailed investigation I have conducted on the binding relations that Direct Object (DO) and Indirect Object (IO) clitics can establish with the associated DP that they double (and with other DPs in the clause), as well as the structural conditions under which such relations are licensed in this language. As I will show, the study of these properties will play a fundamental role in defining the different (sub)classes of clitics existing in modern Spanish. This empirical study will prove crucial to achieve the first goal of this thesis, which is to evaluate which hypothesis concerning the syntactic status of Spanish clitics (the *agreement* vs. the *pronominal* hypothesis) is able to account for the whole range of properties these clitics display at syntax-semantic interface.

If Spanish clitics are D-heads (as the *pronominal* hypothesis defends), we expect them to count as pronouns for the purposes of semantic interpretation and Binding Theory at LF. If, on the contrary, they are agreement morphemes (as the *agreement* analysis of clitic doubling defends), we expect these clitics to be ‘invisible’ at LF for the purposes of semantic interpretation and Binding Theory. This line of reasoning is grounded on the idea that Binding Theory is an innate component of UG so that, in the acquisition process of Spanish, children will be able to use Binding Theory to decide whether an object clitic

is a *pronominal clitic* having its own referential properties or a *verbal agreement morpheme* lacking referential properties.

In order to address all these questions, in this work I analyze with great care the wide variety of DO and IO clitic constructions present in Spanish. This investigation will be fundamental to accomplish the second major goal of this thesis, which is to offer a theoretically and empirically solid classification of Spanish DO and IO clitics which is able to account for the syntactic and semantic properties they display.

With these goals in mind, the rest of this chapter is organized as follows.

In section 1.1. I will present the well-known (although largely neglected) fact that the class of object clitics existing in modern Spanish do not behave uniformly regarding Principle B. They do not form a unitary class; rather they split into two different subclasses: i.e., some clitics obey Principle B, while others are exempted from obeying this principle. As I will show, these two groups of clitics further differ in the type of argumental DPs that each group must double. More specifically, I will show that in Spanish only those object clitics that are exempted from Principle B must double object anaphors. This new empirical generalization, which to the best of my knowledge has never been discussed in the previous literature, turns out to be, however, of crucial importance: it brings new empirical evidence in support of the idea that the binding and the doubling possibilities that the different subclasses of clitics display in Spanish are tightly interrelated and must not be studied independently, as it has been the case until now.

To account for this new empirical generalization, in section 1.2. I will lay out the main proposal that I will defend and develop in this thesis. In a nutshell, on the basis of a detailed study of the binding properties they exhibit, I will present solid evidence that in Spanish object clitics actually split in two different subclasses: *pronominal clitics* vs. *object agreement*. To be more specific, those object clitics that in Spanish are subject to Principle B are *pronominal clitics*; by contrast, those object clitics that are exempted from Principle B are mere *object agreement morphemes* and lack any referential/semantic properties. Thus, I will defend the hypothesis that in Spanish both the *pronominal* and the

agreement hypotheses are correct, but each hypothesis accounts for different subclasses of clitics.

In section 1.3., I will further extend this proposal to account for the doubling possibilities that the so-called reflexive clitic *se* displays in Spanish. This clitic has been traditionally described as an inherently reflexive clitic and, to the best of my knowledge, its syntactic and semantic properties have never been discussed in the context of the *pronominal/agreement* debate. Although the semantic properties exhibited by this clitic clearly show that *se* cannot be analyzed as a pronominal clitic, I will present some doubling facts (generally ignored in the literature) that are compatible with an alternative analysis of this clitic as a *true* object agreement morpheme. As far as I am aware, the idea that in Spanish *se* is not a reflexive clitic, but a regular object agreement morpheme, has never been seriously considered before in the literature. However, as I will show throughout the development of this thesis, this novel view on the syntax of the Spanish clitic *se* opens new and intriguing lines of research, which I will investigate in the sections that follows.

Finally, in section 1.4., I will outline the overall structure of this dissertation and will explicitly formulate some of the questions that will guide my investigation in the chapters to come.

1. 2. The Binding-Doubling generalization.

It is a well-known (although largely neglected) fact that the structural conditions governing the anaphoric interpretation that different types of DO and IO clitics exhibit in Spanish vary depending on whether the clitic is 1st/2nd person or 3rd person. More concretely, while the 1st and 2nd person DO/IO clitics *me/te/nos/os* must corefer with their clause-mate subject when the latter matches them in φ -features, the 3rd person DO/IO clitics *lo(s)/la(s)/le(s)* cannot corefer with their clause-mate subject under the same structural conditions.

To illustrate this difference, consider the Spanish sentences in (4) and the type of anaphoric relation that the 1sg DO clitic *me* in (4a) and the 3rd DO clitic *lo* in (4b) establish with their clause-mate subject in each sentence.

- (4) a. Yo me vi en el espejo.
 I 1.sg.DO saw.3sgSUBJ in the mirror
 (lit.) ‘I saw myself in the mirror’
- b. Él lo vio.
 He 3.sg.DO saw.3sgSUBJ
 ‘He saw him.’

In (4a), the 1sg DO clitic *me* and the 1sg nominative pronoun *yo* ‘I’ share the same φ-features and must both refer to the same individual (i.e., the speaker of (4a)). Notice that this is exactly the opposite of what happens in (4b), where the 3sg DO clitic *lo* and the 3sg nominative pronoun *él* ‘he’ in (1b) share the same φ-features but must obligatorily refer to different individuals. The conclusion that follows from here is that the 1sg DO clitic *me* and its clause-mate subject in (4a) must be coreferential under the very same structural conditions where the 3sg DO *lo* and its clause-mate subject in (4b) must be disjoint in reference.

Within the framework of the Principles-and-Parameters (P&P) theory (Chomsky 1981, 1986; Lasnik & Uriagereka 1988; Chomsky & Lasnik 1995, among many others), referential relations are ruled by Binding Theory. Binding Theory thus determines the referential relations that can be established between the different noun phrases in a given linguistic context. Principle A establishes the licensing conditions for anaphors, Principle B the licensing conditions for pronouns, and Principle C the licensing conditions for referentially free expression (the so called R-expressions).

- (5) *Binding Theory*
- a. *Principle A*: An anaphor must be bound in its local binding domain.
 - b. *Principle B*: A pronoun must be free (not bound) in its local binding domain.
 - c. *Principle C*: A R-expression must be free.

[Chomsky 1981:188]

(6) *Local Binding Domain (LBD)*

The local binding domain of a DP α is:

- (a) if α is the (genitive) subject of a DP, the smallest DP containing α .
- (b) otherwise, the smallest TP containing α and a DP which c-commands α .

Principle B, summarized in (5b), establishes that a pronoun must be free in its local binding domain (LBD), where the definition of a local binding domain (LBD) is as in (6). Following this definition, a pronoun is bound when c-commanded by a co-indexed DP within its binding domain (LBD); otherwise, the pronoun is free. For concreteness, in this dissertation I will adopt the *classical* definition of LBD given in (6) (cf. Chomsky 1981, 1986, Chomsky & Lasnik 1993, among many others). The LBD in (6) involves reference to two different syntactic domains: DP and TP. While (6a) only involves reference to genitive DPs and says that for this type of DPs their LBD is the smallest DP that contains them, (6b) establishes the LBD of a DP for all other cases. Since the Spanish clitic structures I will discuss in this Chapter (and in most parts of this thesis) do not contain any genitive pronoun, henceforth I will ignore (6a) and refer to it only in those cases where we need to determine the LBD of a genitive pronoun.

In order to illustrate how Principle B in (5b) works in Spanish, let us consider the sentences in (7) and the anaphoric relations that the 3sg DO clitic *lo* and the 3sg IO clitic *le* establish with the subject DP in each of these sentences. Following standard practice (cf. Chomsky 1981, Chomsky & Lasnik 1995, Lasnik 1981, among many others), two (or more) syntactic categories bearing identical indexes (which we represent here as numerical superscripts) should be understood as being coreferential, while two (or more) syntactic categories carrying different indexes must be semantically interpreted as disjoint in reference.

- (7) a. Juan¹ lo^{*1/2} vio.

J.(NOM) 3.smsc.g.DO saw.3sgSUBJ

‘Juan saw him.’

- b. Juan¹ le^{*1/2} compró un libro.

J.(NOM) 3.sg.IO bought.3sgSBUJ a book(ACC)

‘Juan bought a book for him.’

Following Principle B in (5b), both the 3sg DO clitic *lo* in (7a) and the 3sg IO clitic *le* in (7b) must be free in the LBD which contains the clitic and a DP c-commanding the clitic (in this case, the subject DP). Thus, neither *lo* in (7a) nor *le* in (7b) can bear the same index as the subject DP *Juan* that c-commands them in each of these sentences. As a consequence of this, *lo* in (7a) and *le* in (7b) must be obligatorily interpreted as disjoint in reference from their clause-mate subject DP (*Juan*).

Let us next consider the Spanish examples in (8), which illustrate a second configuration relevant for Principle B. In these examples, both *lo* in (8b) and *le* in (8b) are contained within the embedded clause and license a coreferential interpretation with the matrix subject *Juan*. The latter binds these clitics from outside their LBD, allowing the clitics to satisfy their binding requirements (i.e., they are free in their LBD).

- (8) a. Juan¹ dijo que [Pedro² lo^{1/*2} vio].
 J.(NOM) said.3sgSUBJ that P. 3.msc.sg.DO saw.3sgSUBJ
 ‘Juan said that Pedro saw him.’
- b. Juan¹ dijo que [Pedro² le^{1/*2}
 J.(NOM) said.3sgSUBJ that P.(NOM) 3.sg.IO
 compró algo].
 bought.3sgSUBJ something(ACC)
 ‘Juan said that Pedro bought something to him.’

Thus, the anaphoric properties that 3rd person DO/IO clitics *lo(s)/la(s)/le(s)* display in Spanish behave according to what we expect from the *classical* definition of Principle B.

By contrast, the Spanish 1st and 2nd person DO and IO clitics *me/te/nos/os* are exempted from Principle B and may be licensed irrespective of whether they are bound or free in their LBD.⁶ To illustrate this feature, consider the Spanish examples in (9) and

⁶ A similar phenomenon has been observed in non-clitic doubling Romance languages like Italian or French (see e.g., Pica 1987; Burzio 1991, 1996; Safir 2004; Kayne 2009, 2018; Rooryck & Van Wyngaerd 2011 and references cited therein). However, even though this phenomenon is well-known in Spanish, it has never been considered before in the previous literature, let alone discussed in relation with other syntactic properties characterizing Spanish clitics, like e.g., clitic doubling (the reader is referred to sections 2.3 and

the type of anaphoric relation established between the 1st person DO clitic *me* and its clause-mate subject in each of these sentences.

- (9) a. Yo¹ me¹ vi en el espejo.
 I.(NOM) 1sg.DO saw.1sgSUBJ in the mirror
 ‘I saw myself in the mirror’
- b. Juan¹ me² vio en el espejo.
 J.(NOM) 1sg.IO saw.3sgSUBJ in the mirror
 ‘Juan saw me in the mirror’

In (9a), the 1sg DO clitic *me* and the nominative subject *yo* ‘I’ share the same φ-features and must obligatorily refer to the same individual. This means that in (9a) the clitic is bound by the subject DP *yo* in its LBD (i.e., in the smallest TP that contains the clitic and a DP c-commanding it). By contrast, the 1sg DO clitic *me* and the subject DP *Juan* in (9b) do not share the same φ-features and must be obligatorily interpreted as disjoint in reference. Thus, in opposition to what happened in (9a), the 1sg DO clitic *me* in (9b) turns out to be free (not bound) in its LBD.

What this shows is that unlike the 3rd person clitics in (7)-(8), the Spanish 1sg DO clitic *me* in (9) does not need to be free in its LBD. In other words, this clitic may license a coreferential interpretation with its clause-mate DP subject without causing a Principle B violation. As shown in (10), this property is not exclusive of the Spanish 1sg DO clitic *me*, but extends to the rest of 1st and 2nd person DO and IO clitics found in this language.

- (10) a. Juan¹ te²/nos²/os² vio en el espejo.
 J.(NOM) 2sg.DO/1pl.DO/2pl.DO saw.3sg.SUBJ in the mirror
 ‘Juan saw {you/us/you,pl} in the mirror.’

2..4 of Chapter 2 for a full discussion on the relation between the binding and the doubling properties exhibited by object clitics in Spanish).

b. Tú¹ te¹ viste en el espejo.

You(NOM) 2sg.DO saw.2pl.SUBJ in the mirror

‘You saw yourself in the mirror.’

c. Nosotros¹ nos¹ vimos en el espejo.

We(NOM) 1pl.DO saw.1pl.SUBJ in the mirror

‘We saw ourselves in the mirror.’

d. Vosotros¹ os¹ visteis en el espejo.

You.pl(NOM) 2pl.DO saw.2pl.SUBJ in the mirror

‘You saw yourselves in the mirror.’

In (10a), the 1st/2nd DO clitics must be interpreted as disjoint in reference from the subject DP *Juan*, so the former are free in their LBD. In contrast, in the examples in (10b-d), these very same DO clitics must corefer with their clause-mate subject; that is, all the DO clitics in (10b-d) are bound in their LBD. In short, in contrast to the 3rd person DO/IO clitics *lo(s)/la(s)/le(s)*, in Spanish the 1st/2nd DO/IO clitics *me/te/nos/os* are exempted from Principle B: i.e., the latter do not need to be free in their LBD.

What we have seen so far is that the class of Spanish clitics is not unitary with regard to Principle B but splits into two different subclasses. While the 3rd person DO/IO clitics in Table 1. are governed by Principle B in (5b), the 1st/2nd person DO/IO clitics in Table 2. are exempted from this principle. For reasons that will become clear shortly, from now on, I will refer to the clitics in Table 1.1 as D-clitics and to the ones in Table 1.2 as φ-clitics (a final version of the clitics that belong to this group will be provided below, in Table 1.3).

Table 1.1. CLITICS GOVERNED BY PRINCIPLE B.

	IO	DO	
		msc	fem
SG	le	lo	la
PL	les	los	las

3rd person DO/IO D-clitics (final)

Table 1.2. CLITICS EXEMPTED FROM PRINCIPLE B

	DO/IO	
	SG	PL
1st	me	nos
2nd	te	os

1st/2nd person DO/IOφ-clitics (non-final)

These two subclasses of clitics not only differ in their binding-theoretic properties, but also in the type of DPs that they must double. While D- and φ-clitics must obligatorily double object pronouns, only φ-clitics must also double object anaphors⁷ like the reflexive pronouns *mí/ti/sí mismo* etc. Crucially, D-clitics cannot double object anaphors.

- (11) a. Juan *(lo) criticó a él.
 J.(NOM) 3sg.msc.DO criticized.3sgSUBJ A him(ACC).

‘Juan saw him.’

- b. Juan *(me) criticó a mí.
 J.(NOM) 1sg.DO cricitized.3sgSUBJ A me(ACC)
 ‘Juan criticized me.’

- (12) a. *Juan lo criticó a sí mismo.

J.(NOM) 3sg.msc.DO cricized.3sgSUBJ A himself(ACC)

(int.) ‘Juan criticized himself.’

⁷ Beside the reflexive pronouns *mí/ti/sí mismo* etc., the reciprocal (*el*) *uno a(l) otro* ‘one another’ and the distributive adjective *sendos* ‘each’ count also as anaphors in Spanish (see Bosque & Gutiérrez-Rexach 2009). Since in this thesis I will only discuss reflexive pronouns, I will occasionally use both terms to refer to these reflexive DPs when it makes no harm (that is, when reflexive pronouns behave as anaphors, as in the examples in the text). This is not always the case, though, since reflexive pronouns do not always behave as anaphors. This is so because, as I will show in section 3.4.2 reflexive pronouns exhibit the properties of logophoric pronouns in configurations involving long distance binding. The reader is referred to Chapter 3 (sections 3.4.1 and 3.4.2) for a full discussion of the properties of logophoric pronouns in Spanish.

- b. Yo me critiqué a mí mismo.
 I(NOM) 1sg.DO cricized.1sgSUBJ A myself(ACC)
 'I criticized myself.'

As illustrated in (11a), the 3sg accusative pronoun *él* must co-occur with the 3sg DO D-clitic *lo* attached to the finite verb. In other words, it requires clitic doubling. The same happens in (11b) with the 1sg accusative pronoun *mí*: this pronoun must be obligatorily doubled by the 1sg DO φ-clitic *me*; clitic doubling is obligatory in this configuration. However, in the case of object anaphors, D- and φ-clitics differ: while in (12b) the 1sg DO φ-clitic *me* must obligatorily double the 1sg accusative anaphor *mí mismo*, in (12a) the 3sg DO D-clitic *lo* cannot double the 3sg accusative anaphor *sí mismo*, as attested by the ungrammaticality of this sentence.

What all this shows is that in Spanish there exists a (previously unnoticed) relation between the binding and the doubling properties that the different subclasses of object clitics display in Spanish, which I descriptively formalize as in (13):

- (13) *The Binding-Doubling Generalization* (Spanish)
- a. If a clitic α is exempted from Principle B, then α must double pronouns and anaphors in DO/IO position.
 - b. If a clitic α is governed by Principle B, then α must double pronouns, but cannot double anaphors in DO/IO positions.

The facts emerging from the new empirical generalization in (13) immediately raise the following two questions:

- *Question 1:* Why do the different object clitics present in Spanish show different binding properties? In other words, why is the class of Spanish clitics not unitary in terms of Binding Theory?
- *Question 2:* Why must object anaphors be doubled by only those object clitics that are exempted from Principle B?

Although these questions regard some very basics facts concerning the syntax and the semantics of Spanish clitics, to my knowledge they have never been discussed before in the literature.

In order to address these two questions, in the following section, I will lay the empirical and the theoretical foundations underlying the novel analysis of the syntax and semantics of Spanish clitics that I will defend and develop in this thesis.

1. 3. A new Heterogeneous Typology of Spanish clitics.

In the preceding section I have shown that:

- (i) While Spanish **D**-clitics are subject to Principle B, φ -clitics are exempted from this principle, and
- (ii) φ -clitics must double object anaphors (that is, reflexive pronouns), but D-clitics cannot double this type of objects.

As mentioned in the previous section, neither (i) nor (ii) have been previously reported or discussed in the literature, so one of the major goals of this dissertation will be to put forth an empirically and theoretically solid account of Spanish D- and φ -clitics, able to provide a principled explanation of the whole set of semantic and syntactic properties exhibited by these elements in all the configurations where these two different subclasses of clitics are licensed (not only those paradigms previously discussed in the literature but also the novel ones I introduce for the first time in this dissertation).

With this goal in mind, and in order to capture the different behavior exhibited by D-clitics and φ -clitics, in this thesis I will defend a new *heterogeneous* approach to the syntax and semantics of Spanish DO and IO clitics.

More specifically, I will defend the hypothesis that φ -clitics are true object agreement morphemes lacking referential properties, while **D**-clitics are pronominal-like

D-heads, which for independent reasons need to cliticize to the verb. In a nutshell, what I will contend is that the D-clitics in Table 1.1. are the morphological realization of the φ -features located on a pronoun-type category like the head D. Recall that as illustrated in Figure 2, repeated here as Figure 3a for convenience, D-clitics undergo head-movement from its original argument position inside the VP to the head v. By contrast, I will argue that the Spanish φ -clitics in Table 1.1. are the morphological exponent of the φ -features associated with v as a result of Agree; the operation Agree values the φ -features of v and deletes these φ -features values for the purposes of LF. This derivation is illustrated in Figure 1, repeated here as Figure 3b.^{8,9}

⁸ In abstract terms, the *heterogeneous* analysis I will defend in this thesis of Spanish clitics may be succinctly defined as follows:

- (i) The Spanish D-clitics *lo(s)/la(s)/le(s)* are D-heads that undergo head movement to a functional head H (which is commonly identified as light v in the MP).
- (ii) By contrast, the φ -clitics *me/te/se/nos/os* are argued to be the morphological realizations of an Agree relation holding between an argument DP and a functional head H (which in the MP is typically taken to be light v).

⁹ For ditransitive structures like (1b) and (2b) in Spanish, I will adopt Pylkänen's (2002) *low applicative* analysis, as roughly represented in (i). According to this analysis, the IO (namely, the DP_{IO} in (i) below) is merged as the specifier of a low Applicative Phrase (ApplP), whose complement corresponds to the DP_{DO} (see also Cuervo 2003, 2010, 2020 and Pineda 2014 for an in-depth analysis of the different types of ditransitive structures in Spanish within Pylkänen's approach to datives).

- (i) [vP DP_{SUBJ} [v' [VP V [ApplP DP_{IO} [Appl⁰ DP_{DO}]]]]]

Leaving aside the question as to how the two internal DP arguments (i.e., DP_{IO} and DP_{DO}) of the ditransitive predicate in (i) are able to license their Case features (a question that goes far beyond the scope of this dissertation), the distinction between D-and φ -clitics can be extended to the IO argument that appears in the low applicative structure in (i), as follows:

- (i) The IO D-clitics *le(s)* start in their original argument position inside the VP (in this case, the specifier of ApplP) and from that position, they move up to adjoin to v as a result of head-movement.
- (ii) By contrast, the IO φ -clitics *me/te/nos/os* come as the morphological reflex of an Agree relation holding between a functional head (v^0 or Appl⁰) and a DP argument within the VP (in the case of (i), the DP_{IO} merged as the specifier of the ApplP).

Finally, it is also worth mentioning that the analysis I will defend of Spanish clitics does not necessarily depends on Pylkänen's approach to datives, and could be easily extended to other competing alternative analyses of the syntax of ditransitive structures in Spanish (see e.g., Larson 1988, Baker 1988, Ormazabal & Romero 2007, 2012, 2013 and references cited therein). This is, however, a topic that I will leave for further research.

Figure 3a. D-clitics *lo(s)/la(s)/le(s)*

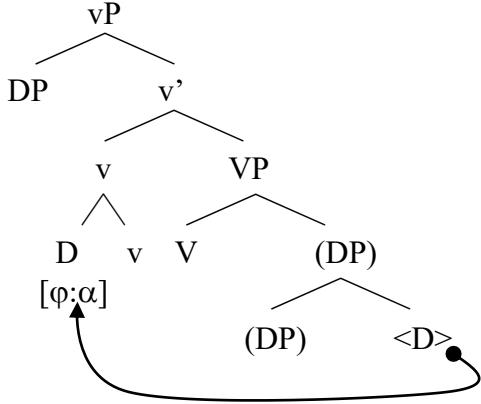
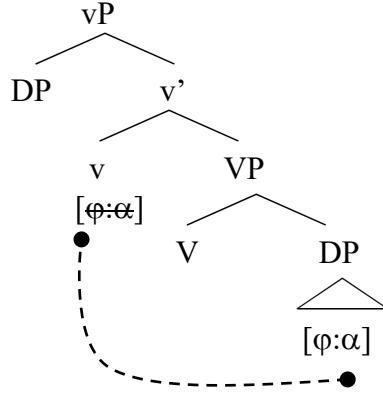


Figure 3b. φ-clitics *me/te/nos/os*



As shown in Figure 3b, the head v is selected from the lexicon and enters the derivation with a set of unvalued φ-features. As part of the syntactic derivation, the unvalued φ-features of v look down into v's c-command domain in search of a DP argument with valued and matching φ-features. Once v finds a suitable goal DP, the valued φ-features of the latter are copied to v as a result of Agree. Later on, at the interface with phonology (i.e. PF), the newly φ-feature values associated with v as a result of Agree are overtly realized as a φ-clitic in Spanish.

In contrast, D-clitics are D-heads¹⁰ that merge in an argument position inside the VP and later on head-move to v, as shown in Figure 3a.

In order to account for clitic doubling, following Uriagereka's Big-DP hypothesis (Uriagereka 1988, 1995, Torrego 1988, Nevins 2011, Roberts 2012 and much related work), I will assume that a full-articulated DP argument can be optionally merged with the D-head contained inside the VP. Within this configuration, when the D-head raises to v it leaves the doubled DP stranded, giving rise to a D-doubling configuration.¹¹

¹⁰ It is commonly assumed that just like their non-clitic counterparts (i.e., *él/ella/ellos/ellas*) D-clitics must check (or be assigned a Case value) by a Case-assigning head during the course of the syntactic derivation (see, however, Ormazabal & Romero 2012 for an alternative view). However, since the case properties of the D-clitics do not seem to play any role in the referential interpretation of these elements, in this work I will leave this question aside and I will not discuss the way in which D-clitics license their Case properties, since it is a topic that falls outside the scope of this dissertation.

¹¹ Under this proposal, nothing prevents D-clitics from entering into an Agree relation with the head v. However, in this case, I will assume that the φ-features values assigned to v as a result of Agree are not phonetically realized as an object agreement morpheme. This assumption is independently adopted by Preminger (2011) (see also Kalin 2014). Specifically, what Preminger claims is that the adjunction of a D-head with the inflectional head H with which the former enters into an Agree relation blocks the phonetic

As we will see now (and in greater detail in the sections that follow), the split of Spanish clitics that I propose here and the new typology that derives from it, will prove crucial in accounting for all the binding properties and the doubling possibilities that both φ - and D-clitics exhibit in Spanish, both in those paradigms we have already seen above (which are well known in the literature) and in new ones I will introduce and discuss in what follows.

With all this in mind, let us consider in more detail the *heterogeneous* analysis of clitics I will advocate for in this dissertation. The basic tenets of this analysis can be summarized as follows.

- i) Under the *heterogeneous* analysis I have just proposed, the D-clitics *lo(s)/la(s)/le(s)* (Table 1.1) are pronoun-type categories (i.e., D-heads) subject to Principle B of the Binding Theory. Thus, this principle prevents them from being coreferential with an antecedent DP whenever this nominal category binds them from within their LBD. The examples in (14) illustrate this construction.

- (14) a. Juan¹ lo^{*1/2} vio.
 J. 3.msc.sg.DO saw
 ‘Juan saw him.’
- b. Juan¹ le^{*1/2} compró un libro.
 J. 3.sg.IO bought a book.
 ‘Juan bought a book for him.’

- ii) In addition to this, the fact that Spanish D-clitics are not allowed to double DO/IO reflexive pronouns *sí mism(o/a)(s)* (see section 1.1.1.) can be easily explained within Binding Theory as follows.

realization of the φ -features assigned to H as a result of Agree. An alternative possibility will be to assume that in those cases where a D-head enters into an Agree relation with v, the φ -features values assigned to the head v are realized as a phonetically null agreement morpheme. In either case, what interests to us here is that irrespective of whether D-heads are allowed to Agree with the head v, only the φ -features located on the D-head (but not in the head v) will count for the purposes of semantic interpretation and Binding Theory at LF.

First, the Spanish D-clitics *lo(s)/la(s)/le(s)* are object pronouns (which, for independent syntactic reasons, must cliticize to the verb) and, as such, they are consequently subject to Principle B. Second, the reflexive pronouns *sí mism(o/a)(s)* are subject to Principle A in (5a) and, as such, must be bound in the same LBD where non-reflexive pronouns must be free. Thus, under the assumption that the D-clitic and the doubled anaphor share the same index¹², D-doubling of an object anaphor will give rise to syntactic configurations where the binding requirements of the D-clitic and the doubled anaphor cannot be simultaneously satisfied (see e.g., Rizzi 1990, Woolford 1999, Baker & Kramer 2018 a.o.). To be more specific, this will happen when an object anaphor is doubled by a D-clitic; in this case, the former must be bound in the same LBD where the latter must be free. As a consequence of this, the D-clitic ends up being bound in its LBD, in violation of Principle B.

To illustrate how this analysis works, consider Uriagereka's (1988, 1995) Big-DP hypothesis, which I have adopted for D-clitic doubling structures. The structure that under the Big-DP analysis would correspond to the D-doubling sentence in (15a) in Spanish is as roughly given in (15b).

- (15) a. *Juan lo vio a sí mismo.
 J. 3.sg.DO saw A himself
 (lit.) 'Juan saw himself.'
 b. [VP Juan¹ [V [V lo^{1+V}] [VP vio [DP a sí mismo¹ [<lo>]]]]]

¹² The idea that a pronominal morpheme on the verb coindexed with a reflexive pronoun will cause a Principle B violation is an old one and can be traced back to Rizzi's (1990) work on the syntax of anaphors in Italian. Woolford (1999) further extends Rizzi's proposal to the analysis of (what I refer to in this thesis as) D-doubling constructions in languages like Swahili, Inuit or Greek.

In the same vein, Baker & Kramer (2018) examine the syntactic and semantic properties characterizing D-doubling structures in Amharic and conclude that the inability of Amharic D-clitics to double anaphors is due to the opposite binding requirements exhibited by these two elements.

However, what makes Spanish special and differentiates it from the rest of clitic doubling languages discussed by Rizzi, Woolford and Baker & Kramer is that in Spanish the inability of doubling anaphors is restricted to a subclass of clitics (namely, D-clitics), but it is still possible with φ -clitics. By contrast, in other clitic doubling languages like Swahili, Inuit, Greek or Amharic object anaphors cannot be doubled by any clitic. That is, what makes Spanish so special is that it presents a *hybrid* clitic paradigm, which offers us the possibility of exploring the distinction between *pronominal clitics* and *object agreement* within the same language.

Let us consider how we account for the ill-formedness of this example. Under the coreferential reading of (15), roughly represented in (15b), the 3sg DO D-clitic *lo* and the doubled 3sg reflexive pronoun *sí mismo* share the same referential index. The reflexive pronoun *sí mismo* in (15b) is bound by the DP *Juan* in its LBD, in accordance with Principle A. However, as a consequence of being coindexed with the doubled reflexive pronoun *sí mismo*, the 3sg DO D-clitic *lo* in (15b) ends up being bound by *Juan* in its LBD, thereby causing a Principle B violation. Hence, the illicit reading that corresponds to the indexing illustrated for the D-doubling structure in (15b) is correctly ruled out by Principle B.

If an analysis along these lines is correct, we can straightforwardly explain the binding and the doubling properties of D-clitics in Spanish in a unified way. This is so because, under this analysis, the restriction preventing Spanish D-clitics from being bound in their LBD by a coreferential DP and the restriction preventing these very same D-clitics from doubling 3rd person reflexive pronouns like *sí mism(o/a)(s)* in Spanish would be exactly the same one: namely, Principle B of the Binding Theory (cf. Rizzi 1990, Woolford 1999, Rezac 2010a, Baker & Kramer 2018).

iii) Under the *heterogeneous* analysis of Spanish clitics defended in this thesis, the φ -clitics in Table 1.2 are not pronominal clitics, but object agreement morphemes: i.e., the morphological realization of an Agree relation holding between v and a DP located inside the VP. Consequently, we expect Binding Principles not to apply to φ -clitics (see Table 1.2), but rather to the DP that the verb agrees with. Bearing this in mind, consider a grammatical example of φ -doubling; I have illustrated one such case (in this case, involving the 1sg DO φ -clitic *me*) in (16).

(16) *φ -doubling*

- | | | | |
|--------------------|--------|-----|------------------------------|
| a. Yo ¹ | *(me) | vi | a mí mismo ^{1/*2} . |
| I | 1sg.DO | saw | A myself |
- ‘I saw myself.’

b.	Juan ¹	*(me)	vio	a mi ^{2/*1} .
	J.	1sg.DO	saw	A me
“Juan saw me.”				

In (16a), the 1sg DO φ-clitic *me* doubles the 1sg DO reflexive pronoun *mi mismo* ‘myself’, which must be bound in its LBD by the 1sg nominative pronoun *yo*. In (16b), in turn, the 1sg DO φ-clitic *me* doubles the 1sg DO non-reflexive pronoun *mi* ‘me’, which needs to be free in its LBD. That is, contrary to what happened with the 3sg DO D-clitic *lo* in (15a), in (16) the 1sg DO φ-clitic *me* doubles NPs which are subject to different (and contradictory) Binding Principles i.e., in (16a) *me* doubles a reflexive pronoun, which is ruled by Principle A, and in (16b) a non-reflexive pronoun, which obeys Principle B.

Thus, the hypothesis that Spanish φ-clitics are object agreement morphemes not only derives the fact that, unlike D-clitics, φ-clitics are exempted from Principle B, but also accounts for the different doubling possibilities exhibited by φ-clitics: that is, for the fact that the NPs that φ-clitics must double can have opposite binding needs (namely, they can double both object pronouns and anaphors). Crucially, this stands in stark contrast to what happened with D-clitics, which count as pronouns for the purposes of Binding Theory and cannot double NPs whose binding requirements are in contradiction with the binding requirements of the doubling D-clitic.

I have said above that I will defend a *heterogeneous* approach to Spanish clitics, according to which we need to distinguish two different types of clitics: a) true *pronominal clitics* and b) mere *agreement morphemes*. The proposal that Spanish clitics split into agreement morphemes and pronominal clitics is not new (Bleam 1999, Ormazabal & Romero 2013 and references cited therein). However, what differentiates these previous proposals from the new *heterogeneous* proposal I defend here is that the former restrict their analysis to the doubling possibilities that object clitics display in this language, but do not study and leave unexplored the correlation between the doubling possibilities available for each type of clitic and the binding properties that characterize the different types of object clitics in this language.

For instance, as we will see in Chapter 4 in more detail, Ormazabal & Romero (henceforth O&R) (2013), propose a *mixed* approach to the syntax of Spanish D-clitics. Specifically, what O&R contend is that 3rd person IO D-clitics *le(s)* are object agreement morphemes with non referential properties, but their corresponding 3rd person DO D-clitics *lo(s)/la(s)* are object pronouns (which cliticize to the verb) and are consequently subject to Principle B (see also Bleam 1999). To support this proposal, O&R argue that 3rd person IO D-clitics *le(s)* must be analyzed as object agreement morphemes because they do not impose “any restriction on the argument type that they can double” (O&R 2013: 311). However, as I have explained before, this claim is not empirically correct in Spanish for the following reasons.

i) First, sentences where a reflexive pronoun is doubled by, and coindexed with, a 3rd person IO D-clitic *le(s)* yield a violation of Principle B, exactly the same we find in sentences in which a reflexive pronoun is doubled by, and coindexed with, the 3rd person DO D-clitic *lo(s)/la(s)* in Spanish. Thus, contrary to what O&R claim, there exists “a restriction on the argument type” that the 3rd person IO D-clitics *le(s)* can double: these clitics cannot double object anaphors (see Chapter 3, sections 2 and 3).

ii) Second, O&R’ (2013) proposal that Spanish 3rd person IO D-clitics *le(s)* are agreement elements with non referential properties cannot account for one of the basic facts concerning the anaphoric interpretation of 3rd person IO D-clitic *le(s)* in Spanish: namely, the fact that they count as pronouns for the purposes of semantic interpretation and Binding Theory in LF, exactly the same as their corresponding 3rd person DO D-clitics *lo(s)/la(s)*, and exactly the opposite of what happens with 1st and 2nd person DO/IO φ-clitics *me/te/nos/os* (see discussion in Chapter 2, section 2.3).

By contrast, the novel *heterogeneous* approach to the syntax of Spanish DO/IO clitics I defend in this dissertation can account in a unified way for the binding and the doubling properties that φ- and D-clitics exhibit in this language. This is because, under my proposal, we can explain why there exists a tight correlation between the binding properties and the doubling possibilities that the two different subclasses of clitics (D- vs. φ-clitics) display in Spanish: while D-clitics are *true* clitic pronouns and cannot double DPs whose binding requirements are in contradiction with the binding requirements of

the pronominal D-clitic itself, φ -clitics are verbal agreement morphemes: unlike D-clitics, they do not have any binding requirement to meet and, as a consequence of this, they are able to double any type of argumental DPs (irrespective of the binding requirements of the latter).

1.3. Extending the φ -class.

In the extensive literature on clitic doubling in Spanish, the doubling properties that the so-called reflexive clitic *se* displays in this language have never been seriously discussed, or in some cases even mentioned (Jaeggli 1982, 1986, Roca 1992, Gallego 2010, Uriagereka 1988, 1995, Bleam 1999, Ordóñez 2012, Ormazabal & Romero 2013 just to name a few). However, the study of the syntax of Spanish φ - and D-clitics would be incomplete without investigating the doubling possibilities that the so-called reflexive clitic *se* exhibits in this language. This is so because like the φ -clitics in Table 1.2., the Spanish clitic *se* must double object anaphors (i.e., *sí mism(o/a)* ‘himself/herself’) in DO/IO position.

(17) *Doubling of DO anaphors (clitic se)*

- | | | | |
|-------------------------------|-------|------------|----------------|
| Juan | *(se) | criticó | a sí mismo. |
| J. (NOM) | 3.DO | criticized | A himself(ACC) |
| ‘Juan criticized to himself.’ | | | |

(18) *Doubling of IO anaphors (clitic se)*

- | | | | | |
|------------------------------------|-------|---------|----------------|-----------------|
| María | *(se) | entregó | el premio | a sí misma. |
| J.(NOM) | 3.IO | gave | the award(ACC) | to herself(DAT) |
| ‘María gave the award to herself.’ | | | | |

Traditionally, the clitic *se* has been analyzed as an “uncontroversially reflexive element”. However, this traditional view on the clitic *se* has been based on the binding behavior that reflexive clitics display in non-clitic doubling languages like French or Italian. For instance, Burzio (1991:399), who studied the reflexive clitic *se* in Spanish and in French and its corresponding reflexive clitic *si* in Italian, claims that in these three

different Romance languages the reflexive clitic should be analyzed in a unified way: namely, as an object anaphor that must be bound by a coreferential DP in its LBD (cf. Burzio 1991; Rizzi 1986; Charnavel & Sportiche 2016; Charnavel 2019 and much related work). But, as just mentioned, the fact that, like the rest of φ-clitics, the Spanish clitic *se* must double true reflexive DPs like *sí mism(o/a)(s)* has never been taken into account for the analysis of this clitic in the literature on Spanish clitics.

However, on the basis of the clitic doubling examples in (17)-(18) above (and new ones that I will discuss throughout this thesis), there exists an alternative analysis of the Spanish clitic *se* which, as far as I know, has never been entertained before: i.e., to analyze the clitic *se* as a mere object agreement morpheme, rather than as a reflexive clitic. Under this new alternative analysis, the Spanish clitic *se* would not be an inherent reflexive clitic (as it has been proposed for its corresponding reflexive clitic in non-clitic doubling languages like French or Italian), but a φ-clitic: i.e., the morphological reflex of an Agree relation holding between the head v and an DP anaphor inside the VP.

This proposal is, in fact, compatible with the binding properties that “uncontroversially reflexive elements” like the reflexive DPs *sí mism(o/a)(s)* show in Spanish (see e.g., Bosque & Gutiérrez-Rexach 2009). It is well-known that these reflexive DPs count as anaphors for the purposes of the Principle A and, as such, they must be bound in their LBD (but see fn. 7 above). Importantly, this is so irrespective of whether the reflexive pronoun is doubled or not by the clitic *se*, as illustrated in (19a) and (19b) respectively.

- (19) a. Trump¹ solo *(se) votará a sí mismo¹.
T.(NOM) only 3.DO will.vote.3sgSBUJ A himself(ACC).
- b. Trump¹ solo (*se) votará por sí mismo¹.
T.(NOM) only 3.DO will.vote.3sgSBUJ for himself(OBL)
‘Trump will only vote (for) himself.’
- c. Trump λx. (x will vote (for) x)

In (19a), the accusative reflexive pronoun *sí mismo* needs to be doubled by the clitic *se* and must be obligatorily interpreted as coreferential with the DP subject in its LBD (the DP subject *Trump* that c-commands this reflexive DP); so, in (19a) the doubled reflexive DP *sí mismo* must be bound in its LBD. The same goes in (19b); in this sentence, the oblique reflexive DP *sí mismo*, which surfaces inside a Prepositional Phrase (PP) and cannot be doubled by any clitic, must obligatorily corefer with the DP subject *Trump* in its LBD (i.e., in the smallest TP containing the anaphor and a DP c-commanding it). Thus, as a result of the binding requirements of the reflexive pronoun *sí mismo*, the two sentences in (19a) and (19) give rise to the quasi-synonymous reflexive reading represented in (19c). The only difference between (19a) and (19b) is that while in (19a) the accusative reflexive DP *sí mismo* appears in DO position and must be doubled by the DO clitic *se*, its homophonous oblique reflexive DP in (19b) is embedded into a PP and cannot be doubled by *se* (or by any other clitic). If so, what causes the sentence in (19a) to have the reflexive interpretation in (19c) is not the occurrence of the clitic *se*, but the presence of the reflexive DP *sí mismo* in DO position.¹³

¹³ Notice also that, like the reflexive pronouns *mi/ti/sí mismo* etc, the reciprocal DPs (*el/la uno/a/l otro* ‘one another’ is also an anaphor subject to Principle A and must be doubled by φ-clitics, but not by D-clitics. The only difference between reflexive pronouns and reciprocals is that the latter must obligatorily have a plural antecedent (see e.g., Bosque & Gutiérrez-Rexach 2009).

(i) *Ability of φ-clitics to double reciprocal DPs.*

- a. María y Juan *(se) criticaron el uno al otro.
M. and J. 3.DO criticized.3plSUBJ the one to.the other(ACC)
'María and Juan criticized each other.'

- b. Nosotros nunca *(nos) criticaremos el uno al otro.
We never 1pl.DO criticized.1pl.SUBJ the one to.the other(ACC)
'We will never criticize each other.'

(ii) *Inability of D-clitics to double reciprocal DPs.*

- a. *María y Juan (los) criticaron el uno al otro.
M. and J. 3.msc.pl.DO criticized.3plSUBJ the one to.the other(ACC)
'María and Juan criticized each other.'

- b. *María y Juan (les) entregaron eso el uno al otro.
M. and J. 3..pl.IO sent.3plSUBJ that(ACC) the one to.the other(DAT)
'María and Juan sent that to each other.'

In this thesis, I will advocate the hypothesis that in Spanish the so-called reflexive *se* is not reflexive at all, but a φ -clitic: i.e., the morphological reflex of an Agree relation holding between the head *v* and an 3rd person DP argument¹⁴ inside the VP. To this end, in what follows, I will include the clitic *se* in the discussion of all the types of clitic doubling structures that I will examine throughout this thesis. My goal here will be to bring new empirical evidence in support of the idea that, like the rest of φ -clitics, the Spanish clitic *se* displays the hallmarks of object agreement. Consequently, if as I defend here the clitic *se* is not an inherently reflexive clitic, but rather a 3rd person object agreement morpheme, then we need to modify the set φ -clitics. The final version of the table of Spanish φ -clitics, once we incorporate the clitic *se* should be as follows.

Table 1.3. ***CLITICS EXEMPTED FROM PRINCIPLE B*** (φ -CLITICS) (final version)

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

1st/2nd/3rd person DO/IO φ -clitics

The remainder of this dissertation is organized as follows.

¹⁴ In Spanish, the clitic *se* double two different types of argumental DPs: 3rd anaphors like the reflexive pronouns *sí* (*mismo*) and the reciprocal and non-reflexive pronouns. For ease of argumentation, I will present and discuss the whole clitic doubling paradigms involving the clitic *se* in Chapter 2, where I will carefully examine the conditions under which *se* must double non-reflexive pronouns. Since the discussion of these conditions involve some complex semantic notions that I will fully introduce in Chapter 2, I refer the reader to sections 2.2. and 2.4 of this thesis, where these conditions, as well as the intriguing consequences that arise from them, will be fully addressed.

1.4. Overall Structure of the Dissertation.

- In **Chapter 2**, I will present the results of a detailed investigation that I have conducted on the referential interpretation that the Spanish (non-reflexive) pronouns *mi*, *ti*, *él* etc. exhibit in the two following configurations: (i) in the absence of clitic doubling and (ii) in clitic doubling constructions, where pronouns appear in object position and must be doubled either by a φ -clitic (Table 1.3) or by a D-clitic (Table 1.1).

The goal of this investigation will be to find, describe and classify the different types of referential interpretations available for pronouns in these two different configurations, with the purpose of addressing the following two questions:

- (Q1) In structures involving clitic doubling, do doubled pronouns trigger the same range of semantic interpretations that are independently available for them in the absence of clitic doubling?
- (Q2) If the semantic/referential interpretation exhibited by a pronoun is not the same in these two syntactic constructions (that is, in the presence and in the absence of clitic doubling), how does the object clitic that doubles the pronoun specifically contribute to this change in the semantic interpretation of the latter?

As I will show, the empirical results obtained from this study will play a fundamental role in the theoretical analysis of the two different subclasses of object clitics found in Spanish (i.e., D- and φ -clitics), for the following two reasons:

- i) If an object clitic α is merely a verbal agreement morpheme lacking referential properties (what I have dubbed here a *φ -clitic*), we will not expect α to have the referential/semantic properties necessary to affect the referential interpretations that are independently available for the doubled pronominal DPs elsewhere: i.e., in the absence of clitic doubling.

ii) By contrast, if a clitic α is a pronominal-like category (i.e., a D-head which for independent reasons needs to cliticize to the verb/auxiliary), then α will be a clitic pronoun possessing its own referential/semantic properties and will consequently be able to affect the referential interpretation of a doubled non-clitic pronoun in object position.

On the basis of this investigation, I will provide additional evidence in support of the hypothesis that Spanish **D**-clitics count as pronominal clitics for the purposes of semantic interpretation at LF, while φ -clitics are object agreement morphemes without referential properties.

The main results of Chapter 2 may be summarized as follows:

- i) D-clitics have their own semantic/referential properties, which are similar but not identical to those of the pronominal DPs they double, and affect in fact the referential interpretations that are independently available for the doubled pronominal DP in the absence of clitic doubling.
- ii) In contrast, φ -clitics do not possess any referential properties: the interpretation of the pronouns they double is exactly the same as the semantic interpretation that is independently available for these pronouns in the absence of clitic doubling.
- In **Chapter 3**, I will investigate the referential interpretations available for anaphors (i.e., the reflexive DPs *mi/ti/sí mismo etc.*) in the absence of clitic doubling, with the aim of comparing them with the referential properties that these object anaphors display in the following two clitic doubling structures: i) in **D**-doubling and ii) in φ -doubling constructions.

The goals and the results of this chapter can be summarized as follows.

- i) I will show that in Spanish the referential interpretations that are independently available for anaphors in the absence of clitic doubling are exactly the same

referential interpretations that these anaphors exhibit in φ -doubling constructions, where they must be doubled by a φ -clitic (see Table 1.3). This fact turns out to be crucial: it shows that φ -clitics do not affect the referential possibilities of the object anaphor they double. Together with the result obtained in Chapter 2, where I show that φ -clitics do not make any contribution to the semantic interpretation of the doubled pronoun, these results provide strong empirical evidence in favor of the proposal that Spanish φ -clitics should be best analyzed as object agreement morphemes lacking referential properties.

- ii) In addition, I will provide a new explanation for the well-known (although largely ignored fact) that in Spanish D-clitics are not allowed to double object anaphors. More concretely, I will show that D-clitics and anaphors have opposite binding requirements, which cannot be simultaneously satisfied in the same LBD. In support of this proposal, I will show that in Spanish, D-clitics can in fact double object anaphors, but only if the antecedent of the doubled anaphor is outside the LBD where the D-clitic needs to be free, so that the latter is allowed to satisfy its binding needs (i.e. Principle B).

This fact, which has never been discussed before in the literature, turns out to be in fact crucial: it shows that the inability of D-clitics to double object anaphors is due to the conflicting binding requirements exhibited by these two elements. Moreover, I will show that under the right binding conditions (to be discussed in greater detail in Chapter 3), D-clitics can actually double object anaphors. Thus, one of the goals of this Chapter will be to study in detail the conditions under which D-clitics are licensed to double object anaphors. As just mentioned, in Spanish a D-clitic is able to double an object anaphor only if the latter takes an antecedent from outside its LBD. So, a further goal of this chapter will be to investigate the conditions under which object anaphors can take a long-distance antecedent in Spanish, with the purpose of offering a novel analysis of this (previously unreported) property that anaphors exhibit in this language.

- iii) Finally, I will briefly explore some of the consequences of the *heterogeneous* approach to the syntax of Spanish clitics I defend for the acquisition of φ - and D-clitics. Specifically, I will argue that Binding Theory, conceived as an innate component of Universal Grammar, forces Spanish children to exclude an analysis of the Spanish φ -clitics as pronominal clitics. Rather, on the basis of the clitic-doubling structures that are part of the Primary Linguistic Data (PLD), children are led to analyze φ -clitics as object agreement markers in Spanish. I will further show that, in contrast with φ -clitics, the PLD that is available for Spanish children will lead them to analyze D-clitics only as pronominal clitics (and not as object agreement morphemes).
- In **Chapter 4** I will concentrate on the syntactic and semantic properties characterizing *full-referential* and *quantificational* D-doubling constructions in Spanish. In this thesis, these terms are used as convenient labels to refer to a class of D-doubling structures where the 3rd person D-clitics *lo(s)/la(s)/le(s)* double full-referential R-expressions (what I will refer to as *full-referential* D-doubling) or Quantificational Phrases (wh-phrases and quantifiers), what I have dubbed *quantificational* D-doubling.

On the basis of the syntactic properties exhibited by these D-doubling constructions, Bleam (1999) and Ormazabal & Romero (O&R 2012) have independently proposed that the 3rd person D-clitics *lo(s)/la(s)/le(s)* do not form an unitary class, contrary to what I defend in this thesis. Instead, these authors propose that while the DO D-clitics *lo(s)/la(s)* are pronominal clitics, the IO clitics *le(s)* should best analyzed as object agreement morphemes.

In the light of the results obtained in Chapter 2 and in Chapter 3, I will examine in detail Bleam and O&R proposal and will conclude that, upon closer inspection, their proposal is insufficient to account for the wide variety of clitic doubling structures discussed in this thesis. In addition, I will further show that the syntactic and the semantic properties characterizing all Spanish D-clitic doubling structures —involving not only the DO D-clitics *lo(s)/la(s)*, as Bleam and O&R contend, but rather both the DO D-clitics *lo(s)/la(s)* and the IO D-clitics *le(s)*—, can be explained under the analysis of D-clitics as pronominal clitics I have defended in this thesis. To that end, I will show that in D-

doubling structures the semantic and syntactic properties characterizing R-expressions and quantificational expressions can be satisfied in a way compatible with the syntactic and semantic requirements of the D-clitic. This conclusion will provide strong additional evidence in favor of my proposal that, unlike φ -clitics, **D**-clitics have the hallmarks of pronominal clitics and cannot be analyzed as object agreement morphemes.

Finally, the conclusions and future lines of research follow in Chapter 5.

CHAPTER 2

The Syntax of *Pronominal Doubling* in Spanish

2.1. Goals and Overall Structure of the Chapter.

This chapter gathers the results of a detailed investigation I have conducted on the range of referential interpretations available for the Spanish (non-reflexive) pronouns *mi*, *ti*, *él* etc. in the two following configurations: (i) in the absence of clitic doubling, and (ii) in structures involving clitic doubling, where pronouns surface in object position and must be doubled either by a D-clitic (Table 2.1) or by a φ -clitic (Table 2.2).

Table 2.1 *D(ETERMINER)-CLITICS*
[(3rd person) pronominal clitics]

		DAT/IO	ACC/DO	
		Msc	fem	
SG	le	lo	la	
PL	les	los	las	

Table 2.2 *φ -CLITICS*
[(1st/2nd/3rd person) DO/IO agreement morphemes]

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

The goal of this investigation is to describe and classify the different types of referential interpretations available for pronouns in these two different configurations, with the purpose of answering the following two questions:

- Q1.** In constructions involving clitic doubling, do doubled pronouns have the same range of semantic interpretations that are independently available for them in the absence of clitic doubling?
- Q2.** If the semantic/referential interpretation exhibited by a pronoun is not the same in these two syntactic configurations (clitic doubling vs. non-clitic doubling structures), what is exactly the role that the object clitic plays in the semantic interpretation of the doubled pronoun? Do D-clitics and φ -clitics exhibit the same behavior in this regard?

By conducting this investigation, I aim to determine whether the different subclasses of object clitics found in Spanish (i.e., D- and φ -clitics) can actually affect the referential possibilities that are independently available for the doubled pronoun elsewhere.

That is, the question to answer in this chapter is whether when clitic doubling takes place the interpretation of the doubled pronoun is different from the one it has in the absence of clitic doubling and, if this is the case, whether both types of clitics affect the range of possible meanings available for the pronoun in a uniform way or not.

On the basis of this investigation, I will test some relevant predictions regarding the syntactic, as well as the semantic, status of the two different groups of object clitics present in Spanish: object agreement morphemes (the φ -clitics in Table 2.2) and pronominal object clitics (the D-clitics in Table 2.1).

If, as the so-called *agreement* hypothesis defends, an object clitic α is a verbal agreement morpheme lacking referential properties, we then expect this clitic α not to have the referential/semantic properties required to affect the referential interpretations that the pronoun being doubled by the clitic displays in the absence of clitic doubling. If, on the contrary, as the *pronominal* hypothesis defends, a clitic α is a pronominal-like category that cliticizes to the verb or the auxiliary then, as any other pronoun, this clitic α will

possess its own referential/semantic properties and should therefore be potentially able to affect the referential interpretation of a doubled non-clitic pronoun in object position. So, as a first step to answer this question, my main goal in this Chapter will be to build an empirically solid classification of the different subclasses of object clitics found in Spanish which is able to account for the syntactic and semantic properties they display in the different types of clitic doubling structures in this language.

To this end, this Chapter is organized as follows.

In section 2.2. I introduce the theoretical apparatus necessary to understand the referential interpretations available for pronouns, as well as the structural conditions underlying these interpretations. Here I will focus on English, for two different reasons.

First, as is well known, within generative grammar it was the study of the referential properties exhibited by English pronouns that led to the first formulation of the *classical* analysis of Principle B of the Binding Theory. Moreover, since, within the Principles and Parameters framework, Principle B is conceived as the principle of Universal Grammar (UG) responsible for the structural conditions ruling the referential interpretations available for pronouns, in order to understand the role that the properties of English pronouns have had in the formulation of the different versions of Principle B, it is convenient to have a general perspective of the intricacies underlying this principle in order to evaluate the empirical and theoretical adequacy of some of the most influential versions of this principle proposed in the literature.

Second, as I have just mentioned, the analysis of the binding theoretical properties that pronouns exhibit in English have played a decisive role in the formulation of Principle B. Crucially, however, English is a language that does not license clitic doubling. By focusing first on a language like English which lacks clitic doubling, we will be able to determine the referential properties that pronouns exhibit by themselves when they surface alone, unaccompanied by clitics, and compare them later on in the sections that follow with the binding theoretical properties that their Spanish counterparts display both in the absence and in the presence of clitic doubling.

With this background, in section 2.3., I will examine in detail the binding theoretical properties that the Spanish D-clitics *lo(s)/la(s)/le(s)* and their non-clitic counterparts *mi/ti/él etc.* display in this language. The goal of this study will be to find, describe and classify the similarities, as well as the differences, found between these two subclasses of pronouns in modern Spanish, with the purpose of understanding better the semantic and syntactic properties that D-clitics and their non-clitic counterparts exhibit in this language.

The main empirical contribution of this study will be to show that, in clitic doubling constructions, the semantic relation established between the D-clitic and the doubled (non-clitic) pronoun is not trivial: D-clitics do in fact affect the referential interpretations that are available to the doubled pronoun in the absence of clitic doubling. On this empirical ground, I provide an analysis of clitic doubling that is able to account in a principled way for the syntactic and semantic properties that the D-clitic and the doubled pronoun display in this construction.

In section 2.4. I will examine in detail the binding theoretical properties exhibited by the object pronouns doubled by the φ -clitics in Table 2.2. in Spanish. More specifically, I will show that, in φ -doubling structures, the doubled pronouns that appear in object position exhibit the same referential properties that are independently available for these pronouns in the absence of clitic doubling. This turns out to be a crucial fact: it shows that unlike the D-clitics *lo(s)/la(s)/le(s)* (Table 2.1.), the φ -clitics *me/te/se/nos/os* (Table 2.2.) lack the referential/semantic properties required to affect the referential interpretation of doubled pronouns.

The major conclusions of the discussion in this chapter will follow in section 2.5.

2.2. Preliminary Remarks: Structural Conditions on the Interpretation of Pronouns.

This section introduces the theoretical apparatus necessary to understand the referential interpretations available for pronouns, as well as the structural conditions that rule such interpretations. Specifically, our goal here will be to explore the implications that the semantic interpretation of English pronouns has for the *classical* analysis of Principle B of Binding Theory (see e.g., Reinhart 1976, 1983; Grodzinsky & Reinhart 1993; Heim 1998, 2008; Fox 2000; Büring 2005 and references cited therein).

With this goal in mind, I will first introduce some relevant background on the semantics of pronouns in section 2.2.1, with a focus on the semantic concepts of variable binding and (co)reference (Reinhart 1976, 1983, Higginbotham 1980, Bach & Partee 1980, Evans 1980, Heim & Kratzer 1998, Fox 2000, Büring 2005 and much related work). Then, I will present Büring's (2005) proposal that coreference and variable binding arise from two different binding relations that can hold at LF (i.e., syntactic and semantic binding, to be explained in greater detail in section 2.2.). Finally, I will introduce and discuss the way in which Büring (2005) remodels the classical analysis of Principle B in English. This discussion will provide us with the necessary basis to understand the behavior and interpretation of English pronouns and will allow us to compare these results with the referential interpretation available for their corresponding pronouns in Spanish. This will be the topic of sections 2.3 and 2.4.

2.2.1. Coreference versus Variable Binding

It is a long-standing observation that, from a formal point of view, the anaphoric relations that pronouns establish with other nominals can be semantically interpreted in two different ways: i.e., as deriving from coreference or as deriving from variable binding (cf. Reinhart 1976, 1983, Higginbotham 1980, Bach & Partee 1980, Evans 1980, Büring 2005 and much related work).

In the case involving coreference, the pronoun refers to a salient individual in the context, which happens to be the same individual that another referential NP independently

also refers to in that clause (or in that text). That is to say, in coreference the interpretation of a pronoun α does not depend on the interpretation of another NP β ; instead, α and β establish their own referent independently: these two referents coincide and happen to be the same. In contrast, in the case of variable binding, the pronoun does not pick up a salient individual from the utterance context, but covaries with the meaning of a non-referential, quantificational NP that takes scope over it. This follows because, as discussed extensively in the literature on quantification (cf. Partee & Bach 1980, Evans 1980, Reinhart 1983, and much related work), a pronoun can behave as a variable under the scope of a quantifier whenever it is within the c-command domain of that quantifier.

In order to illustrate the semantic concepts of (co)reference and variable binding, it may be useful to consider some prototypical examples.

- (1) a. John entered the room. He was upset.
 b. No one lost his keys.

In (1a), the subject of the first sentence, the DP *John*, refers to an individual and introduces it in the discourse. The pronoun in the second sentence, the subject DP *he* has to establish its reference. It will do so by referring to a salient individual in the context. This individual can be either ‘John’ (i.e., the same individual that the subject of the preceding sentence, *John*, independently refers to), or it can be another individual that is also salient in the relevant context. If the pronoun *he* picks up as its reference a salient individual that happens to be the same individual introduced by the subject in the first clause, then the DP *John* and *he* in (1a) end up referring to the same discourse individual, and it is said that they corefer. If, instead of picking up that salient reference introduced by the DP *John*, the pronoun *he* picks up a different salient individual, then *John* and *he* end up referring to two different discourse referents. Notice that, whatever referent the pronoun *he* picks up in (1a), the reference of the pronoun *he* is established by picking up a salient individual from the utterance context.

Consider, now, the sentence in (1b), which illustrates a second relevant configuration for the interpretation of pronouns. In this example, the negative quantifier in subject position *no one* c-commands the genitive pronoun *his* contained within the direct object. How is the reference of the pronoun established in example (1b)? Just as in (1a), in

(1b), the pronoun *his* can pick out a salient discourse referent from the utterance context (say, for instance, the individual ‘Peter’). In this case, the interpretation of *his* in (1b) is determined exactly in the same way as the interpretation of *he* was established in (1a). However, in addition to this interpretation, there is an alternative way to establish the referent of this genitive pronoun. More specifically, the pronoun *his* can be interpreted as a variable bound by the negative quantifier in subject position. If so, then the interpretation of *his* in (1b) will vary according to each of the value assignments of the quantifier. In this case, the interpretation of the pronoun is said to covary with the interpretation of the negative quantifier *no one*. Under this construal, the interpretation of (1b) can be roughly paraphrased as follows: “there was no person *x* such that *x* lost *x*’s keys”. To put it in plain words, what this means is that if we have, for instance, a set formed by three individuals, {John, Bill, Paul}, the example in (1b) is interpreted as meaning that John didn’t lose his(=John’s) keys, Bill didn’t lose his(=Bill’s) keys and Paul didn’t lose his(=Paul’s) keys. From a formal point of view, this is the interpretation that follows from the variable binding of the genitive pronoun *his* in (1b).

Finally, consider (2), which illustrates a third possible configuration, different from the previous two ones, which needs to be taken into account when establishing the interpretation of pronouns.

- (2) No one enters the room. He was upset.

The example in (2) is similar to that (1a) in that we have two independent sentences and a nominative pronoun as the subject of the second clause. As in (1a), the first subject (*no one*) does not c-command the pronoun *he* in (2). The only difference between (1a) and (2) relies on the nature of the first subject: in contrast with the DP *John* in (1a), *nobody* in (2) is a quantificational expression, a negative quantifier. What we see in this case is that coreference between the first subject (*nobody*) and the second subject (the pronoun *he*) is not possible in example (2). This is so because quantificational expressions like the negative quantifier *no one* in English do not refer to a particular individual. Rather, standard generalized quantifiers like *no one* denote second order predicates (cf. Barwise & Cooper 1981 et seq.): i.e., they convey information about the set of individuals that a given first order predicate is true of. Thus, the interpretation of the standard generalized quantifier *no one* in (2) is such that it takes the first-order predicate *entered the room* as its argument

(informally speaking, it is said that (2) is true if (and only if) there was no person in the relevant context that entered the room). This being the case, *no one* will not be able to pick up any individual from the context. What follows from this is that it will be then impossible for the pronoun *he* in (2) to pick up the same individual as the quantifier *no one*. That is, it is not possible for *no one* and *he* in (2) to corefer. Hence, the interpretation of *he* must be determined in a different way. Notice, further, that the second strategy to establish the reference of the pronoun (the one discussed for example (1b)) will not be available for the pronoun in (2) either. Different from (1b), in (2), the negative quantifier *no one* does not command the pronoun *he* (they are contained in two independent clauses) and thereby, the pronoun is not under the scope of this negative QP. As a consequence of this, in (2) it is not possible to derive the interpretation of the pronoun via variable binding, as in (1b): in (2) *he* cannot be interpreted as a variable bound by the quantifier *no one*. Thus, the only alternative available for the interpretation of *he* in (2) is in fact the same one available for this pronoun in (1a): it will establish its reference by referring to a salient individual in the context of utterance.

In short, in the examples considered above, the interpretation available for pronouns has been determined by two different means: (i) the pronoun can directly pick up a salient individual from the utterance context, or (ii) it can covary with a quantificational expression when the latter takes scope over it. In the first case, when these two elements independently pick up the same salient individual in the utterance context, the pronoun is said to corefer with a referential NP. In contrast, in variable binding, the pronoun covaries with a non-referential, quantificational, NP that takes scope over it.

With this as background, we will consider in section 2.2.2. how the concepts of coreference and variable binding are semantically and syntactically represented. Later on, in section 2.2.3., I will present the syntactic principles that, according to Büring's (2205) analysis of Principle B, rule the structural conditions under which pronouns license the coreference and the bound variable interpretation.

2.2.2. Syntactic *versus* Semantic Binding.

It is a widely-accepted assumption that in natural languages *assignment functions* play a fundamental role in accounting for the semantic notions of (co)reference and variable binding (see Reinhart 1983, Kratzer & Heim 1998, Büring 2005, and references cited there). For concreteness, I will adopt the formal definition of assignment functions proposed by Büring (2011: 975), which is summarized in (3). According to this definition, an assignment function is a function from natural numbers to regular DP denotations (i.e., individuals), such that a pronoun bearing the index i will denote the individual that the assignment function assigns to i .

- (3) for any assignment function g , $[[[\text{pro } X]]]^g = g(i)$ (\approx the i -th member of g)

[Büring 2011: 975]

To get a better understanding of how (3) works, it may be useful to introduce some relevant background notions before we proceed any further. To that end, I will adopt the semantic framework laid out by Heim & Kratzer (1998), with a special emphasis on those aspects relevant for the semantic interpretation of pronouns (Büring 2005). Since, for ease of exposition, I will keep the technical apparatus to a minimum, I refer the reader to Heim & Kratzer' (1998) work for a much-detailed account of the semantic concepts and the more technical formulations I will introduce here.

Following Heim & Kratzer (1998), we will assume that in the semantic component the interpretation function $[[\cdot]]$ provides every syntactic object α with a denotation: i.e., α is said to denote $[[\alpha]]$. The inventory of possible denotations may be defined as in (4).

- (4) a. e and t are semantic types
b. if x and y are semantic types, then $\langle x, y \rangle$ is a semantic type
c. nothing else is a semantic type [Heim & Kratzer 1998]

The base step in (4a) introduces two basic types: namely, e and t . An element of type e is a member of the set of individuals D_e , while an element of type t is a member of the set of truth values D_t , ranging from 1 (truth) to 0 (false). From these two basic types, the recursive

step in (4b) derives new types of various sorts of functions. In (5), I give some relevant examples.

- (5) a. $[[[_{\text{N}} \text{Jean}]]]$ = the real Jean in the flesh and blood.
- b. $[[[_{\text{V}} \text{run}]]]$ = $\lambda x. [x \text{ runs}]$
- c. $[[[_{\text{V}} \text{lose}]]]$ = $\lambda x \lambda y. [x \text{ lost } y]$
- d. $[[[_{\text{Q}} \text{no one}]]]$ = $\lambda P. \neg \exists x [P(x)]$

In (5a), the proper name *Jean* denotes an individual (i.e., $[[\text{Jean}]] \in D_e$), whereas the intransitive verb *run* in (5b) denotes a predicate: namely, a function from individuals to truth values (i.e., $[[\text{run}]] \in D_{e,t}$). Like *run* in (5b), the transitive verb *lose* in (5c) also denotes a function, but a slightly more complex one: i.e., *lose* denotes a function from individuals to a function from individuals to truth values (i.e., $[[\text{lose}]] \in D_{e<et>}$). Finally, the lexical entry of *no one* in (5d) implements the idea that a generalized quantifier like *no one* denotes a second order predicate (see Barwise & Cooper 1981 et seq.). Specifically, *no one* denotes, according to its lexical entry in (5d), a function (from predicates to truth values) that maps a predicate P to 1 iff there is no person x such that $P(x)=1$.¹ In sum, for terminal nodes like (5), the interpretation function $[[.]]$ assigns them a denotation of the appropriate type.

The interpretation function $[[.]]$ also consists of a set of compositional rules, which determine the denotation of a non-terminal node from the denotation of its daughter(s). In what follows, I will only invoke the compositional rule in (6), called *Function Application* in Heim & Kratzer (1998).²

¹ The lambda expressions in (5b-d) name different types of functions and are employed here according to Heim&Kratzer' (1998:37) λ -Convention, summarized in (i). For more details of the λ -notation employed here, I refer the reader to Heim & Kratzer (1998:34-39).

(i) *λ -Convention:* Read as $\lambda \alpha. [\phi \dots \alpha \dots (\alpha) \dots]$ as
 (a) ‘that function which maps every α to 1 iff $[\phi \dots \alpha \dots (\alpha) \dots]$ ’, if ϕ is a sentence,
 (b) ‘that function which maps every α to $[\phi \dots \alpha \dots (\alpha) \dots]$ ’ otherwise.

² Needless to say, it is necessary to incorporate more compositional rules to get a comprehensive semantic model of a natural language like English. However, offering such a comprehensive and complete model of the semantics of English goes far beyond the scope of this thesis. A simple (although incomplete) model of the semantics of English like the one we have adopted in this thesis will be enough for the purpose of understanding the referential interpretations available for English pronouns.

- (6) If A is a branching node and $\{B, Y\}$ is the set of A's daughters, then A is in the domain of $[[.]]$ if both B and Y are, and $[[B]]$ is a function whose domain contains $[[Y]]$. In this case, $[[A]] = [[B]]([[Y]])$.

By applying this rule to the (rather idealized) phrase marker in (7), we can obtain the truth conditions associated to this phrase marker. Thus, the denotation of the TP in (7), $[[TP]]$, corresponds to the the truth-value 1 iff the denotation of its daughter node $[[\text{comes}]]$ is a function whose domain contains the denotation of the other daughter node of the TP, $[[\text{Jean}]]$. For the sake of simplicity, I leave aside the contribution of semantic concepts like Tense or Aspect to the semantics of (7) which are, however, not relevant for the semantic interpretation of pronominal expressions.

- (7) $[[\begin{array}{c} \text{TP} \\ \diagdown \quad \diagup \\ \text{Jean} \quad \text{VP} \\ \diagdown \\ \text{comes} \end{array}]] = 1 \text{ iff } [[\text{comes}]]([[\text{Jean}]])) = \lambda x.[x \text{ comes}](\text{jean}) = \text{Jean comes}$

Turning to the semantic interpretation of pronouns, the semantic rule in (3) above, repeated here as (8) for convenience, states that the denotation of a pronoun indexed i is given by the value (i.e., the individual) that the assignment function g assigns to i .

- (8) for any assignment function g , $[[[\text{pro } X]]]^g = g(i)$ (\approx the i -th member of g)

Thus, an assignment function g is a function from natural numbers to individuals, such that the denotation of a pronoun bearing the index n corresponds to the n -th member of the sequence of individuals that g assigns to n . As shown in (9) below, the denotation of the pronoun *her* in (9a) corresponds to the first member of the sequence that the assignment function g in (9b) assigns to the index 1: namely, the individual *Jean*.

- (9) a. $[[\text{her}_1]]^g = g(1)$ b. $g = \{\langle 1, \text{Jean} \rangle, \langle 2, \text{Mary} \rangle, \langle 3, \text{Jodie} \rangle\}$

Finally, a brief note on the type of noun phrases (NPs) that can, or cannot, bear an index is in order here. While pronouns rely on the assignment functions to be interpreted, quantificational NPs (QNPs, for short) like *no one* in (5d) are not sensitive to the

assignment functions.³ This is so because the assignment functions assign *referents* to NPs (see fn. 2), but QNPs like *no one* do not *refer*. Rather, the negative quantifier *no one* denotes a second order predicate. Therefore, if a QNP bears an index at LF, this index will not be semantically interpreted as a referential index; rather, it will not be interpreted at all. For this reason, we will adopt the indexing convention in (10), adapted from Büring (2005: 111).

(10) *Indexing convention*

All and only non-quantificational NPs bear index.

With this much as background, let us consider the semantic derivation corresponding to the LF representation in (11) in English, as roughly given in (12).

(11) [_{TP} Jean¹ lost her¹ keys]

$$\begin{aligned}
 (12) \quad \llbracket [\sub{TP} \text{Jean}^1 \text{ lost her}^1 \text{keys}] \rrbracket^{g[<1,\text{Jean}>,\dots]} &= 1 \text{ iff } \lambda y. [y \text{ lost } g(1)\text{'s keys}] (\text{Jean}) \\
 &= 1 \text{ iff } \text{Jean} \text{ lost } g[1 \rightarrow \text{Jean}]\text{'s keys} \\
 &= 1 \text{ iff } \text{Jean} \text{ lost } \text{Jean's keys}
 \end{aligned}$$

In the LF representation in (11), *Jean* c-commands and is coindexed with the pronoun *her* inside the object, so *Jean* binds *her*. Thus, in the semantic derivation corresponding to the LF in (11), roughly represented in (12), the assignment function $g[<1,\text{Jean}>]$ provides the pronoun *her₁* and the DP *Jean₁* that binds this pronoun with the same referent: namely, *Jean* in the flesh and blood. That is, the binding relation between *Jean* and *her* in the LF in (11) leads these two DPs to corefer in the semantic component, as shown in (12).

³ Although referring expressions like names and definite NPs do not rely on the assignment function to be interpreted, they denote individuals and can at least be related to the assignment function. For example, the original lexical entry of the name *Jean* in (9a), repeated here as (i.a), is truth-conditionally equivalent to the denotation of the indexed name *Jean* in (i.b) (see Büring 2005 for additional examples and discussion):

(i) a. [[Jean]] = Jean b. [[Jean₁]]^g = g(1) iff g(1) = Jean

Following Büring (2005:112), I will refer to the type of binding relation exemplified by (11) in English as syntactic binding (or coreference)⁴, defined as in (13):

- (13) *Syntactic binding (or coreference)* (Büring 2005)

NP syn(tactically)-binds NP' if and only if

- (a) NP and NP' are co-indexed
- (b) NP c-commands NP'

If a NP' is not syntactically bound by any NP in a phrase marker P, we say that NP' is *syntactically free* in P.

Following also Büring (2005:260), I will further assume that “if (and only if) two NPs bear different indices, any context will assign different referents to them”. Put it simply, assignment functions cannot assign the same referent to two referential NPs bearing different indices. For illustration, consider the semantic expression in (14) and the two assignment functions in (15).

- (14) $\llbracket \text{Jean}^1 \text{ lost her}^2 \text{ keys } \rrbracket^g$

- (15) a. $g \neq g_1 := \{\langle 1, \text{Jean} \rangle, \langle 2, \text{Jean} \rangle, \langle 3, \text{Mary} \rangle\}$
 b. $g = g_2 := \{\langle 1, \text{Jean} \rangle, \langle 2, \text{Jodie} \rangle, \langle 3, \text{Mary} \rangle\}$

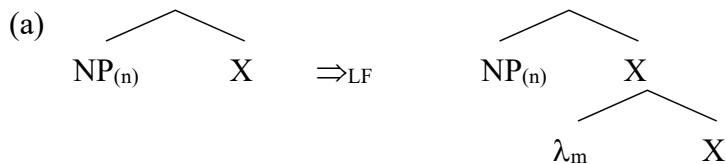
The semantic expression in (14), in which *Jean* and *her* bear different indices, can be evaluated by the assignment function g_2 in (15b), but not by the alternative assignment function g_1 in (15a). This is because the g_1 in (15a) is not a well-formed assignment function: it assigns the same referent to two NPs bearing different indices (i.e., according to g_1 in (15a), the two counter-indexed NPs *Jean*¹ and *her*² refer to the same individual: “Jean”). In contrast, the g_2 in (15b) correctly assigns a different referent to the two counter-indexed NPs *Jean*¹ and *her*²: namely, *Jean*¹ refers to the individual “Jean” and *her*² to another different individual, “Jodie”.

⁴ It is worth mentioning that syntactic binding is just a sub-case of coreference. If some NP α is coindexed with another NP β but neither α c-commands β (not the other way around), we will refer to this coindexing relation simply as coreference. This is not but a convenient terminological distinction that we will make to distinguish the general case (coreference) for the sub-case (syntactic binding).

As for variable binding, I will adopt Büring's (2005) proposal that a pronoun covarying with a quantificational expression is not bound by the quantificational expression itself. Instead, the pronoun is coindexed with a c-commanding binder prefix, which following standard practice I will represent by means of the symbol λ . According to Büring (2005), binder prefixes are introduced at LF by the Binder Rule (BR) in (16). This rule adjoins a binder prefix, λ , to NP's sister constituent and freely assigns an index to the binder prefix λ .

- (16) *Binder rule* (Büring 2005: 109):

Adjoin a binder prefix λ with index m to NP's sister constituent X.



To illustrate how the BR in (16) works, consider the LF representation given in (18), which corresponds to the bound variable interpretation of the quantificational sentence in (2), repeated here as (17). For ease of argumentation, we will ignore the interpretation of (17) in which the pronoun *his* refers to a salient individual in the context.

- (17) No one lost his keys.

(variable binding) There is no person x such that x lost x's keys.

- (18) a. LF: $[_{TP} \text{No one} [_{T'} \text{lost} \text{his}_1 \text{keys}]]$
b. LF: $[_{TP} \text{No one} [_{T'} \lambda_1 [_{T'} \text{lost} \text{his}_1 \text{keys}]]]$ (by the Binder Rule)

In (18a), the negative QNP *no one* does not bear any index. Rather, as shown in (18b), it is the BR in (16) that adjoins the binder prefix λ to *no one*'s sister constituent, T' , and further assigns the index 1 to λ . In the semantic component, the resulting LF representation in (18b), where the pronoun *his*₁ is coindexed inside its c-commanding domain with the binder prefix λ_1 , must be interpreted by the semantic rule in (19). This rule is referred to as the Binder Index Evaluation Rule (BIER) in Büring (2005: 85).

(19) *Binder Index Evaluation rule* (BIER) (Büring 2005:85):

$$\text{For any natural number } n, \boxed{\lambda_n \nearrow Y}^g = \lambda x. [[Y]]^{g[n \rightarrow x]}(x)$$

The BIER in (19) states that λ_n 'sister constituent Y is not to be interpreted relative to the original assignment function g , but to a changed assignment $g[n \rightarrow x]$, “which is like g except that the index n is mapped to the individual x . Since x is also the individual argument to $[[Y]]^{g[n \rightarrow x]}$, this means [...] that any pronoun bearing the index n in Y is bound by the open argument slot of Y” [Büring 2005:85].

In order to see how the BIER in (19) works, let us consider the semantic derivation corresponding to the LF representation in (18b), as roughly given in (20):

$$\begin{aligned} (20) [[\text{No one } \lambda_2 \text{ lost her}_2 \text{ keys}]] &= 1 \text{ iff } [[\text{no one}]] ([[\lambda_2 \text{ lost her}_2 \text{ keys}]]) \\ &= 1 \text{ iff } [[\text{no one}]] ([[\lambda_2 \text{ lost her}_2 \text{ keys}]]) \\ &= 1 \text{ iff } [[\text{no one}]] (\lambda x. [[\text{lost her}_2 \text{ keys}]]^{g[1 \rightarrow x]}(x)) \quad (\text{by BIER}) \\ &= 1 \text{ iff } [[\text{no one}]] (\lambda x. [\lambda y. y \text{ lost } g[2 \rightarrow x](2)'s \text{ keys }](x)) \\ &= 1 \text{ iff } [[\text{no one}]] (\lambda x. [x \text{ lost } g[2 \rightarrow x](2)'s \text{ keys }]) \\ &= 1 \text{ iff } \lambda P. [\text{there is no person } x \text{ such that } P(x)] (\lambda x. [x \text{ lost } x's \text{ keys }]) \\ &= 1 \text{ iff there is no person } x \text{ such that } x \text{ lost } x's \text{ keys} \end{aligned}$$

The binder of the pronoun *her*₂ in (20) corresponds to the binder prefix λ_2 , rather than to the QNP *no one*, for the latter bears no index, by assumption. Yet, the pronoun *her*₂ in (20) ends up covarying with the QNP *no one* as a result of the BIER in (19).

First, the BIER says that in (20) the binder prefix λ_2 is a semantic operator that modifies the assignment function (the assignment, for short) g by way of exchanging one individual in the sequence for another. More concretely, the modified assignment $g[2 \rightarrow x]$ is like g except for the fact that $g(2)=x$. As a result, the denotation of the bound pronoun *her*₂ in (20) thus corresponds to the individual variable x .

Second, the BIER also states that the sister of the binder prefix λ_2 in (20) –i.e., [[lost her₂ keys]]– must be embedded into the lambda expression $\lambda x.[[lost\ her^2\ keys]]^{[2 \rightarrow x]}(x)$. This changes the original denotation of [[lost her² keys]]^g –i.e., the set of people who lost g(2)'s keys– into the denotation of the lambda expression $\lambda x.[[lost\ her_2\ keys]]^{[2 \rightarrow x]}(x)$ –i.e., the set of people who lost their own keys. It is thus the latter that combines by Function Application with the QNP *no one* in (20) and yields the value 1 iff there is no person x such that x lost x's keys. In brief, the pronoun *her₂* is not coindexed with the negative QNP *no one* in (20), but ends up covarying with the latter by virtue of being coindexed with the binder prefix λ_2 .

Following Büring (2005), I will refer to the binding relation holding between a pronoun and a binder prefix at LF as *semantic binding*, defined as in (21). Henceforth, we will use the term *semantic binder* for binder prefixes and, derivatively, for the binder NPs.

(21) ***Semantic binding:***

- A binder prefix λ sem(antically)-binds an NP at LF if and only if
 - (a) λ and NP are coindexed
 - (b) λ c-commands NP
 - (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP is not bound by any binder prefix λ in a phrase marker P, we say that NP is semantically free in P.

[from Büring 2005:130]

So far we have seen that referring, non-quantificational NPs (like the proper name *Jean* in English) can function as a syntactic binder (see e.g., (11) from above), while a quantificational NPs like *no one* can only act as semantic binders in English.⁵ However, the question remains as to whether referring NPs can also function as semantic binders, similar to the way that quantifiers do.

⁵ QNPs do not bear an index and therefore it is impossible for these elements to act as the syntactic binder of any referential NP, such as pronouns, proper names or definite descriptions.

Given the semantic model that we have adopted in this section (Büring 2005), nothing prevents a referring NP like the proper noun *Jean* in the English sentence in (11), repeated here as (22) for convenience, from syntactically or semantically binding the genitive pronoun *her*. The LF representations that correspond to syntactic and semantic binding are given in (23a) and (23b), respectively.

- (22) Jean lost her keys.
- (23)
 - a. LF: $\text{Jean}^1 \text{ lost } \text{her}^1 \text{ keys}$
 - b. LF: $\text{Jean}^1 \lambda^1 \text{ lost } \text{her}^1 \text{ keys}$

In the *syn-binding* LF in (23a), the genitive pronoun *her*¹ is syntactically bound by *Jean*¹, while this very same pronoun is bound by the binder prefix λ^1 in the alternative *sem-binding* LF in (23b). Consider, now, the semantic interpretation produced by the *syn-binding* LF in (23a) and that conveyed by its corresponding *sem-binding* LF in (23b), as roughly given in (24) and (25), respectively.

(24) *Syntactic binding*

$$\begin{aligned} [[[\text{TP } \text{Jean}^1 \text{ lost } \text{her}^1 \text{ keys}]]]^g[<1, \text{Jean}, \dots] &= 1 \text{ iff } \lambda y. [\text{y lost } g(1)\text{'s keys}] (\text{Jean}) \\ &= 1 \text{ iff } \text{Jean lost } g[1 \rightarrow \text{Jean}]\text{'s keys} \\ &= 1 \text{ iff } \text{Jean lost Jean's keys} \end{aligned}$$

(25) *Semantic binding*

$$\begin{aligned} [[[\text{TP } \text{Jean}^1 \lambda^1 \text{ lost } \text{her}^1 \text{ keys}]]]^g &= 1 \text{ iff } [[\lambda^1 \text{ lost } \text{her}^1 \text{ keys}]]^g ([[\text{Jean}]]) \\ &= 1 \text{ iff } \lambda x. [[\text{lost } \text{her}^1 \text{ keys}]]^{g[1 \rightarrow x]}(x) (\text{Jean}) \\ &= 1 \text{ iff } \lambda x. [\lambda y. \text{y lost } g[1 \rightarrow x](1)\text{'s keys}](x) (\text{jean}) \\ &= 1 \text{ iff } \lambda x. [x \text{ lost } g[1 \rightarrow x](1)\text{'s keys}] (\text{Jean}) \\ &= 1 \text{ iff } \lambda x. [x \text{ lost x's keys}] (\text{Jean}) \\ &= 1 \text{ iff } \text{Jean lost Jean's keys} \end{aligned}$$

The *syn-binding* LF in (24), where the genitive pronoun *her*¹ is syntactically bound by the NP *Jean*¹, yields the truth-value 1 iff ‘Jean lost Jean’s keys’. But these are exactly the same truth-conditions corresponding to the *sem-binding* LF in (25), in which *her*¹ is bound by the binder prefix λ^1 . As Büring (2005:111) points out, the meanings produced by the *syn-binding* LF (24) and by the *sem-binding* LF (24) turn out to be indistinguishable in terms

of truth conditions. Thus, we cannot tell from the truth-conditions associated with the two different LFs in (23) and (24) whether *Jean* in the English sentence in (22) acts as a syntactic or as a semantic binder. What Büring contends is that the ambiguity that arises from the two LFs in (24) and (25) comes from the fact that the denotation of the NP *Jean* does not vary, so that we cannot tell from truth conditions whether the meaning of *her* covaries or not with *Jean*.

It is only in contexts where non-quantificational NPs like the proper name *Jean* in English ‘switch’ their reference (similar to the way that quantifiers do) that syntactic and semantic binding produce different meanings. As we will see next, there are two well-studied English constructions in which non-quantificational NPs ‘switch’ their reference: VP-Ellipsis and focus constructions (cf. Partee 1983, Reinhart 1983, Heim & Kratzer 1998, Büring 2005, and references cited there).

With regard to VP-Ellipsis, consider the two prominent readings that the elided VP of the second conjunct in (30) give rise to: namely, the so-called *sloppy* and the *strict* readings. In the strict reading of (26), the rough paraphrase of the 2nd conjunct may be described as follows: “Mary lost Jean’s keys”, as informally represented in (26a). By contrast, in the sloppy reading of (26), the meaning of the 2nd conjunct may be roughly paraphrased as follows: “Mary lost her own keys”, as represented in (26b).

- (26) Jean [_{VPA} lost her keys], and Mary did [_{VPE} Δ], too.
 - a., and Mary $\lambda x(x \text{ lost Jean's keys})$ [strict]
 - b., and Mary $\lambda x(x \text{ lost } x\text{'s keys})$ [sloppy]

Under the standard (although somewhat simplified) assumption that an elided VP (call it V_{PE}) must be syntactically identical to its antecedent VP (V_{PA}) at LF (cf. Hankamer & Sag 1976, Sag 1976, Fiengo & May 1994, Merchant 2001, and much related work), the strict reading in (26a) and the sloppy interpretation in (26b) can be obtained by the two different LFs in (27a) and in (27b), respectively.

- (27) a. Jean¹ [VPA lost her¹ keys] and, Mary² did [VPE lost her¹ keys] (=strict)
 b. Jean¹ [VPA λ^2 lost her² keys] and, Mary³ did [VPE λ^2 lost her² keys]
 (=sloppy)

Let us consider first the *syn-binding* LF in (27a), which produces the strict reading in (26a). In this LF representation, the VP_E contained in the 2nd conjunct is identical to the VP_A of the 1st conjunct. As a consequence, in (27a) we have two occurrences of the genitive pronoun *her*¹ in the VP_A and in the VP_E. Thus, in the VP_E, *her*¹ and *Jean*¹ corefer because in its identical VP_A, *her*¹ is syntactically bound by *Jean*¹. The LF in (27a) thus produces the strict reading represented in (26a).

Consider, now, the alternative *sem-binding* LF represented in (27b). As it happened with the LF in (27a), in (27b) the VP_E of the 2nd conjunct is identical to the VP_A of the 1st conjunct. The difference is that in (27b), the two occurrences of the pronoun *her*² that appear in the VP_E and in the VP_A are bound by the binder prefix λ^2 . Hence, in the VP_E, *her*² is semantically bound by *Mary*³ while in the VP_A, *her*² is semantically bound by *Jean*¹. As a result, in the *sem-binding* LF in (27b), the two occurrences of the genitive pronoun *her*² end up covarying with the subject of each conjunct: *Jean*¹ and *Mary*³, respectively. Thus, the *sem-binding* LF in (27b) does not produce the same interpretation as the *syn-binding* LF in (27a); instead, the former conveys the sloppy reading in (26b), while the latter produces the strict reading in (26a).

In sum, we have seen that in VP ellipsis constructions like (26), semantic binding gives rise to the sloppy reading, but syntactic binding triggers the strict reading (see Partee 1983, Reinhart 1983, Heim & Kratzer 1998, Büring 2005, and references cited there).

Finally, let us examine in detail the interpretations available for the English sentence in (29): namely, the so-called *strict* reading in (29a) and the *sloppy* one in (29b). In (29) the word in capitals bears a prominent pitch accent, which we assume represents focus.⁶ (From here on, the use of capitals will indicate that an element is focused).

⁶ In this dissertation, I employ the (more or less standard) notion of focus proposed and developed in Jackendoff (1972) and Chomsky (1981). According to these authors, the focus part of a sentence S is marked by a peak of prosodic prominence and corresponds to the non-presupposed part of S (Jackendoff 1972, Chomsky 1981, Rooth 1985 and references cited there). However, a detail account of the semantics of focus

- (29) Only JEAN lost her keys.
- Jean is the only person x such that x lost Jean's keys [strict]
 - Jean is the only person x such that x lost x 's keys [sloppy]

In the *strict* interpretation in (29a), *Jean* and *her* corefer; consequently, under this reading *Jean* denotes the only person that lost *her*(=Jean's) keys. Thus, (29a) is true iff no other person (apart from Jean) lost Jean's keys. In contrast, in the *sloppy* reading in (29b), *her* covaries with *Jean*, so that under this reading, *Jean* denotes the only person x such that x lost x 's keys. Thus, (29b) will be true iff no other person (apart from Jean) lost her own keys. That is, the *strict* and the *sloppy* readings that the English sentence in (29) gives rise to associate each with different truth-conditions.

As we will see now, the *strict* reading in (29a) is produced by the *syn-binding* LF in (30a), while the *sem-binding* LF in (30b) conveys the *sloppy* reading in (29b).

- (30) a. *syn-binding*: LF: $[\text{TP} \text{ only } \text{JEAN}^1 \text{ lost her}^1 \text{ keys}]$
 b. *sem-binding* LF: $[\text{TP} \text{ only } \text{JEAN}^1 [\text{T} \cdot \lambda^2 [\text{T} \cdot \text{lost her}^2 \text{ keys}]]]$

The entry for *only* in (31), taken from Heim (2008), delivers the correct truth conditions for the *syn-binding* LF in (30a) and for the *sem-binding* in (30b), as shown in (32) and (33), respectively.⁷

- (31) $[[\text{only}]] = \lambda x. \lambda P. \{y: P(y) = 1\} = \{x\}$

goes beyond the scope of this work (see Rooth 1985, Kadmon 2001, Büring 2005, Beck 2006, and references cited there).

⁷ For the ease of argumentation, I have adopted the analysis of the English adverb *only* put forth in Heim (2008: 44), where *only* adjoins to a focus-marked NP and maps the denotation of the latter (an individual) to a generalized quantifier, as shown in (31). However, as Heim (2008:44) herself points out, an alternative analysis of *only* as a proposition-level operator that associates with focus would also deliver the correct truth conditions for the strict and the sloppy readings (see Büring 2005:111). Although the semantics of focus does not play a fundamental role in Heim's analysis of *only* I will continue using the term *focus* constructions to refer to English sentences like (29).

(32) *syn-binding*

$$\begin{aligned} [[[\text{TP only JEAN}^1 \text{ lost her}^1 \text{ keys}]]] &= \\ [[\text{only}]] ([[\text{JEAN}^1]]) ([[\text{lost her}^1 \text{ keys}]]) &= \\ 1 \text{ iff } \{y: y \text{ lost Jean's keys}\} = \{\text{Jean}\} \end{aligned}$$

(33) *sem-binding*

$$\begin{aligned} [[[\text{TP only JEAN}^1 [\text{T} \lambda^2 [\text{T} \text{ lost her}^2 \text{ keys}]]]]] &= \\ [[\text{only}]] ([[\text{JEAN}^1]]) ([[\lambda^2 \text{ lost her}^1 \text{ keys}]]) &= 1 \text{ iff } \{y: y \text{ lost y's key}\} = \{\text{Jean}\} \end{aligned}$$

The *syn-binding* LF in (32) yields the value 1 iff the set of all the people that lost Jean's keys is equal to the singleton $\{\text{Jean}\}$, while the *sem-binding* LF in (37) yields the value 1 only if the set of all the people that lost their own keys is equal to the singleton $\{\text{Jean}\}$. Thus, the *syn-binding* LF in (32) conveys the meaning that Jean is the only person that lost her(=Jean's) key and no other person lost her(=Jean's) keys, as in the strict reading informally represented in (29a). By contrast, the *sem-binding* LF in (33) produces a different meaning, which may be paraphrased as follows: "Jean is the only person that lost her own keys and there is no other person that lost her own keys". This reading corresponds in fact to the *sloppy* reading in (29b). Thus, in focus constructions like (29) in English, syntactic and semantic binding produce meanings that are not truth-conditionally equivalent (see Büring 2005 for a full discussion of these, and more similar, examples in English).

Summarizing so far, we have seen in this section that, from a logical point of view, the anaphoric relations that pronouns establish with other NPs in the clause (or in the text) can be of two types: i.e., coreference and variable binding. In coreference, the pronoun refers to a salient individual in the context, which happens to be same individual that another referential NP independently refers to. In contrast, in variable binding, the pronoun does not pick up a salient individual in the utterance context, but rather covaries with the meaning of a quantificational NP that takes scope over it.

Following Büring (2005), I have adopted the proposal that coreference and variable binding arise from two different binding relations that can hold at LF: i.e., syntactic and semantic binding, respectively. In syntactic binding, the pronoun is coindexed with a coreferential NP that c-commands it. In contrast, in semantic binding, the pronoun is coindexed with a binder prefix that the Binder Rule (BR) introduces at LF. In essence, what

this rule does is to adjoin a binder prefix, λ , to the sister constituent of a NP (the semantic binder) that c-commands the pronoun. In addition to this, the BR freely assigns an index to the binder prefix it introduces at LF.

Although, according to the BR, both referential and quantificational NPs can act in principle as semantic binders, in most cases the interpretation of those LF structures where the pronoun is semantically bound by a referential NP turns out to be indistinguishable from the interpretation produced by their corresponding *syn-binding* LF structures. In these latter structures, the pronoun is syntactically, rather than semantically, bound by the referential NP. However, in well-known syntactic contexts like VP-ellipsis and focus constructions, referential NPs (similar to the way that quantifiers do) ‘switch’ their reference. It is in these syntactic contexts where syntactic and semantic binding give rise to LF structures that in terms of truth conditions, produce different meanings.

With this much as background, in the next section I will present Büring’s (2005) analysis of Principle B in English, which aims to account for the syntactic principles ruling the structural conditions under which pronouns license the coreference and the bound variable interpretations.

2.2.3. Büring’s (2005) Analysis of Principle B in English.

Büring’s (2005) analysis of Principle B in English hinges on two basic ideas:

- (i) Principle B of the Binding Theory involves reference only to *variable binding*, not to coreference, and
- (ii) Variable binding blocks coreference (or syntactic binding) when the choice between coreference and semantic binding is semantically spurious (that is to say, whenever both construals produce exactly the same semantic meaning; cf. Reinhart 1983; Grodzinsky & Reinhart 1993, Heim 1998, 2009; Fox 2000 and references cited therein).

Büring's definition of Principle B in (34) implements the idea that this Principle regards variable binding alone (that is, it involves reference only to *semantic* binding, not syntactic binding). The definition of semantic binding relevant to Büring's Principle B in (34) is repeated here as (35). The Local Binding Domain (LBD) of a pronoun is defined as in (36) (cf. section 1.2.).

- (34) Principle B (Büring 2005:130):

A pronoun must be sem(antically)-free in its LBD.

- (35) *Semantic binding*:

A binder prefix λ sem(antically)-binds an NP at LF if and only if

(a) λ and NP are coindexed

(b) λ c-commands NP

(c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP α is not bound by any binder prefix in a phrase marker P, we say that

α is semantically free in P.

[from Büring 2005:130]

- (36) *Local Binding Domain (LBD)*

The local binding domain of a DP α is:

(a) if α is the (genitive) subject of a DP, the smallest DP containing α .

(b) otherwise, the smallest TP containing α and a DP which c-commands α .

The only difference between Büring's definition of Principle B in (34) and the definition of this Principle in the *classical* version of Binding Theory (Chomsky 1981 and much related work), summarized in (37), is that the latter does not specify whether the binding relation relevant to Principle B is semantic or syntactic binding, or both. However, except for this difference, (34) and (39) are in essence the same Principle, so I will not compare them here (see Büring 2005 for a full discussion). In what follows, I will just offer the empirical evidence that Büring brings in support of his version of Principle B, in (34).

- (39) Principle B in the G&B Theory (Chomsky 1981:88)
A pronoun must be free in its Local Binding Domain (LBD).
- (40) a NP A binds another NP B only if
(a) A and B are coindexed, and
(b) A c-commands B.

According to Büring's definition of Principle B in (34), this Principle only excludes those LF representations containing a pronoun that is *semantically* bound in its LBD. Hence, an important consequence of the way the Principle B is defined by Büring is that pronouns *syntactically* bound in their LBD would not cause a violation of the Principle B in (34). In what follows, it will be important to keep this in mind because it will play a fundamental role in the analysis of Spanish clitics I will propose in this dissertation.

In regard to this consequence, since Reinhart's (1983) grounding work on exceptional anaphora it is well known that while in English pronouns cannot covary in their LBD with any type of antecedent, they are, however, allowed to be coreferential with a focused antecedent inside their LBD. To illustrate this, let us consider the type of anaphoric relation that the accusative pronoun *him* can establish with its clause-mate subject in the English sentence in (37). For ease of argumentation, we will leave momentarily aside the disjoint interpretation in (37c) that is also available for this sentence (we will return to this interpretation later on).

- (37) Only JOHN loves him.
- a. John is the only person x such that x loves y(=John). (coreference)
 - b. John is the only person x such that x loves x. (*variable binding)
 - c. John is the only person x such that x loves y(\neq John). (disjoint reference)

As originally noted by Reinhart (1983), in (37) the accusative pronoun *him* supports the coreference reading in (37a), but not the variable binding interpretation in (37b). In the LF corresponding to the ungrammatical bound variable reading of (37), given in (38a), *him*¹ turns out to be bound by the binder prefix λ^1 in its LBD; hence, Büring's Principle B in (34) correctly rules (38a) out.

- (38) b. *sem-binding LF*: [_{TP} Only JOHN¹ λ^1 loves him¹] (✗Principle B)
 a. *syn-binding LF*: [_{TP} Only JOHN¹ loves him¹] (✓Principle B)

By contrast, in the LF featuring the grammatical coreference reading in (38b), *him¹* is syntactically, rather than semantically, bound by the nominative DP *Jean¹*; thereby, the Principle B in (34) correctly rules in (38b). This is so because in (38b), *him¹* turns out to be semantically free (not bound by any binder prefix) in its LBD.

In this way, Büring's Principle B in (38) is, on the one hand, able to exclude the *sem-binding* LF in (38a), where the pronoun *him¹* is not semantically free in its LBD, and simultaneously, is able to correctly rule in its corresponding *syn-binding* LF in (38b), where *him¹* is semantically free (i.e., not bound by any binder prefix) in its LBD.

In addition to Principle B in (34), Büring's (2005) analysis also incorporates the algorithm in (41), which has the effect of blocking coreference (or syntactic binding) when “the choice between coreference and bound variable interpretation is semantically spurious” [Büring 2005: 260].

(41) *Have Local Binding! (HLB!)*

For any two NPs A and B, if A could semantically bind B (i.e., if it c-commands B and B is not semantically bound in A's c-command domain already), A must semantically bind B, unless that changes the interpretation. [Büring 2005: 270]

(42) *Semantic binding:*

A binder prefix λ sem(antically)-binds an NP at LF if and only if

- (a) λ and NP are coindexed
- (b) λ c-commands NP
- (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP α is not bound by any binder prefix in a phrase marker P, we say that α is semantically free in P. [from Büring 2005:130]

The HLB in (41) basically says that whenever a NP could be semantically bound by another NP', NP' must semantically bind NP, unless that (i.e., the non-application of semantic binding) produces a change in the interpretation. As we will see now, the most perspicuous effect of the HLB! algorithm in (41) is to exclude certain *spurious* ambiguities that arise in binding. Indeed, as we have seen in the previous section, coreference and semantic binding involving a non-quantificational binder generally produce meanings that are indistinguishable in terms of truth conditions (with the exception of focus constructions and VP-Ellipsis, as discussed in section 2.2.1.). The HLB! automatically eliminates such spurious ambiguity.

To illustrate how the HLB! works, let us consider example (43) and the LF representations and corresponding interpretation associated with *syn(tactic)-binding* in (43a), and with *sem-binding* in (43b).

(43) Jean lost her keys

- a. *syn-binding* LF: $\llbracket \text{Jean}^1 \text{ lost } \text{her}^1 \text{ keys} \rrbracket = 1$ iff Jean lost Jean's keys
- b. *sem-binding* LF: $\llbracket \text{Jean}^1 \lambda^1 \text{ lost } \text{her}^1 \text{ keys} \rrbracket = 1$ iff Jean lost Jean's keys

As we have seen in more detail in section 2.2.1. above, the two LF representations in (43a) and (43b) produce meanings that are indistinguishable in terms of truth conditions. The meaning that results from the LF structure in (43b), where *her* is semantically bound by *Jean*, is exactly the same as the one that results from the LF representation in (43), where *Jean* could semantically bind *her* but instead syntactically binds the latter. As a consequence of this, the HLB! in (41) excludes the *syn-binding* LF in (43a). Put it in other words, the HLB! causes the *sem-binding* LF (43b) to block its truth-conditionally equivalent *syn-binding* LF in (43a). The HLB! thus eliminates the *spurious* ambiguity that arises from the two truth-conditionally equivalent LFs in (43a) and in (43b).

Another illustrative example is given in (44). In contrast to what happened in (43), where the only potential antecedent of the genitive pronoun *her* (its clause-DP subject *Jean*) is outside its LBD (i.e., the DP containing the genitive *her*), in (44) *her* is an accusative pronoun and its clause-mate subject DP *Jean* is inside the LBD of the pronoun (namely, the smallest TP containing *her* and a DP c-commanding *her*). With this difference in mind, let us consider the type of anaphoric relation that in (44) the accusative pronoun

her and the nominative DP subject *Jean* c-commanding the former can establish in this sentence, where neither *Jean* nor *her* are focalized.

- (44) Jean loves her.

In (44), the accusative pronoun *her* and the nominative DP *Jean* that c-commands it can only be interpreted as disjoint in reference. That is, *Jean* and *her* must refer to two different salient individuals in the context. Given Büring's semantic model that we have introduced in section 2.2.1, this means that, out of the three possible LF representations corresponding to the English sentence in (44), only the *disjoint* LF representation in (45c) must be ruled in.

- | | |
|------|--|
| (45) | a sem-binding LF: *[_{TP} Jean λ_1 loves her ₁] (✓ HLB!, ✗ Principle B) |
| | b. syn-binding LF: *[_{TP} Jean ₁ loves her ₁] (✗ HLB!, ✓ Principle B) |
| | c. disjoint LF: [_{TP} Jean ₁ loves her ₂] (✓ HLB!, ✓ Principle B) |

In the *sem-binding* LF in (45a), the pronoun *her₁* is semantically bound by *Jean₁*. Hence, according to the HLB! in (41), the *sem-binding* LF in (45a) will block the two LFs in (45b) and (45c), unless the interpretations derived from (45b) and (45c) change with respect to that produced by (45a). As we have previously seen in section 2.2.1., the *syn-binding* LF in (45a) and the *sem-binding* LF in (45b) produce meanings that are indistinguishable in terms of truth conditions, as roughly shown in (46a) and (46b), respectively.

- | | |
|------|---|
| (46) | a. <i>syn-binding</i> LF: $\llbracket [TP \text{ Jean}^1 \text{ loves } \text{her}^1] \rrbracket = 1$ iff Jean loves Jean. |
| | b. <i>sem-binding</i> LF: $\llbracket [TP \text{ Jean}^1 \lambda^1 \text{ loves } \text{her}^1] \rrbracket = 1$ iff Jean loves Jean |

The difference between the LFs in (46a) and in (46b) is that in (46a) *her* is syn-bound by *Jean* while this accusative pronoun is sem-bound by the nominative DP *Jean* in (46b). Thus, for the purposes of the HLB!, what interests us here is that once again the interpretation that follows from these two representations is indistinguishable, both yield the same result. Hence, the HLB! in (41) causes the *sem-binding* in LF (46b) to block its truth-conditionally equivalent *syn-binding* LF in (46a).

Notice also that the semantic binding interpretation in (46b) is also excluded (the example does not license this construal). Following Büring's line of reasoning this follows because Principle B in (34) independently rules out the *sem-binding* LF in (46a). What does this follow from? This is so because *her* in (46b) is sem-bound by *Jean* in its LBD: i.e., in the smallest TP that contains *her* and a DP c-commanding *her*, and consequently the representation violates Principle B. In a nutshell, the HLB!⁸ in (41) rules out the *syn-binding* LF in (45a=46b), and Principle B in (34) in turn excludes the *sem-binding* LF in (45b=46a).

Finally, consider the *disjoint* LF of (44) in (45c), repeated below for convenience.

- (44) Jean loves her.

- (45) a sem-binding LF: *[_{TP} Jean λ_1 loves her₁] (✓ HLB!, ✗ Principle B)
 b. syn-binding LF: *[_{TP} Jean₁ loves her₁] (✗ HLB!, ✓ Principle B)
 c. disjoint LF: [_{TP} Jean₁ loves her₂] (✓ HLB!, ✓ Principle B)
- (46) a. *syn-binding* LF: $\llbracket [TP \text{ Jean}^1 \text{ loves } \text{her}^1] \rrbracket = 1$ iff Jean loves Jean.
 b. *sem-binding* LF: $\llbracket [TP \text{ Jean}^1 \lambda^1 \text{ loves } \text{her}^1] \rrbracket = 1$ iff Jean loves Jean

The LF in (45c) and its alternative *sem-binding* LF in (45a=46b) clearly produce different meanings. Specifically, while in the *sem-binding* LF (45a=46b) *her* covaries with *Jean* by virtue of being sem-bound by the latter, in the *disjoint* LF in (45c) *her* and *Jean* bear different indices and must be thus interpreted as disjoint in reference (i.e., *her* and *Jean* must refer to different individuals). Thus, although *her* could be semantically bound by *Jean* in (45c), the interpretation of (45c) differs in terms of truth conditions from the interpretation of its alternative *sem-binding* LF in (45a=46b), where *her* is actually sem-bound by *Jean*. Consequently, the HLB! in (41) does not cause the *sem-binding* LF in

⁸ Note that, for the purposes of the HLB! in (41), it is not relevant whether the *sem-binding* LF in (45a) is independently excluded by the Principle B in (34). Put in other words, the possible existence of an LF representation that derives the same interpretation as the one that would derive from syntactic binding causes the *sem-binding* LF in (45a) to block its truth-conditionally equivalent *syn-binding* LF in (45b), as stated by the HLB! in (41), and this is so irrespective of whether the Principle B in (34) independently rules (45a) out or not (see Büring 2005: 124-126).

(45a=46b) to block its alternative *disjoint* LF in (45c). Nor does the Principle B in (34) exclude the *disjoint* LF in (45c): the pronoun *her* is semantically free (not bound by any binder prefix) in this structure. Thus, according to Büring's analysis of Principle B, the *disjoint* LF in (45c) is the only LF representation corresponding to the grammatical English sentence in (44) that is not excluded by the Principle B in (34) or by the HLB! in (41), as desired.

However, in contrast to what we have seen in (43) and in (44), the HLB! does not block coreference when the choice between the coreference and the variable binding interpretation is NOT semantically spurious.

Since this is an important feature of Büring's analysis of Principle B, let us consider, once again, the English sentence in (37), repeated here as (47) for convenience. As said before, the sentence in (47) is legitimate under the interpretations conveyed by the *syn-binding* LF in (47b) and the *disjoint* LF in (47c), but illegitimate under the meaning produced by the *sem-binding* LF in (47a).

(47) Only JOHN loves him.

- a. *sem-binding* LF: *[_{TP} only JOHN¹ λ¹ loves him¹] (✓ HLB!, ✗ Principle B)
- b. *syn-binding* LF: [_{TP} only JOHN¹ loves him¹] (✓ HLB!, ✓ Principle B)
- c. *disjoint* LF: [_{TP} only JOHN¹ loves him²] (✓ HLB!, ✓ Principle B)

As explained before, the *syn-binding* LF in (47a) and the *sem-binding* LF in (47b) produce different meanings as a result of the semantics of the focus-sensitive particle *only*. Specifically, the interpretation conveyed by *sem-binding* LF in (47a) is that “no one (apart from John) loves himself”, being thus false if someone else loves himself. By contrast, the meaning produced by the *syn-binding* LF in (47b) is that “no one (apart from John) loves John”, (47b) being thus false if someone else loves John. As consequence of this, the HLB! in (41) does not cause the *sem-binding* LF in (47a) to block its alternative *syn-binding* LF in (47b). Notice also that nothing else blocks the syntactic binding interpretation in (47b). Principle B does not rule it out, because as explained above Principle B is only concerned with *semantic* binding, not with *syntactic* binding, and this is met in (47b) because *him* is semantically free (not bound by any binder prefix) in its LBD. However, the Principle B in

(34) does exclude the *sem-binding* LF in (47a), where *him* is semantically bound by *John* in its LBD.

Finally, note that the interpretation conveyed by the *disjoint* LF in (47c) –i.e., “John is the only person that loves a salient individual (different from John) in the context”– differs in terms of truth conditions from the interpretation produced by the *sem-binding* LF in (47a). Hence, the HLB! in (41) does not cause the *sem-binding* LF in (47a) to block the *disjoint* LF in (47c). Nor does the Principle B in (34) exclude the *disjoint* LF in (47c): the pronoun *him* is semantically free in this structure.

Thus, the *HLB!* in (41), on the one hand, correctly rules in the *disjoint* LF in (47c) and the *syn-binding* LF (47b), and on the other, Büring’s Principle B in (34) correctly rules out the LF representation corresponding to *sem-binding* in (47a). That is, while the HLB! has the effect of blocking *syntactic* binding whenever it is truth-conditionally equivalent to *semantic* binding, Principle B in (34) is only concerned with *semantic* binding.

Summarizing what we have seen in this section, Büring reformulates Principle B in English as in (34), and in addition to this, incorporates the auxiliary HLB! algorithm in (41).

(34) Principle B (Büring 2005:130):

A pronoun must be sem(antically)-bound in its LBD.

(41) *Have Local Binding! (HLB!)*

For any two NPs A and B, if A could semantically bind B (i.e., if it c-commands B and B is not semantically bound in A’s c-command domain already), A must semantically bind B, unless that changes the interpretation. [Büring 2005: 270]

The Principle B in (34) states that a pronoun must be *semantically* free in its LBD, while the HLB! in (41) has the effect of blocking coreference when “the choice between coreference and bound variable interpretation is semantically spurious” [Büring 2005: 260]. As we have seen in detail in this section, Büring’s analysis of Principle B correctly captures the fact that in English pronouns must be *semantically* free in their LBD. In addition, this analysis correctly allow pronoun to be *syntactically* bound in their LBD when

the choice between coreference and variable binding give rise to two different semantic meanings.

With this much as background, we are now in a good position to move to section 2.3., where I will carefully examine the type of anaphoric relations that pronouns can establish with a local antecedent in Spanish in the two following configurations: (i) in the absence of clitic doubling and (ii) in D-doubling constructions. In addition, I will also investigate the referential interpretations available to the doubled pronoun in φ -doubling constructions. This will be, however, the topic of section 2.4.

2.3. Principle B and Coreference in Spanish: Pronouns and D-Clitics.

In this section, I will leave momentarily aside the φ -clitics *me/te/se/nos/os* (see Table 2.2 above), which are verbal agreement morphemes and to which I will return in section 2.4., and will examine with great care the binding properties of the two different groups of pronouns existing in modern Spanish: (i) D-clitics and (ii) non-clitic pronouns.

- (i) the 3rd person DO/IO **D-clitics** *lo(s)/la(s)/le(s)* in Table 2.1. repeated here for convenience.

Table 2.1 D(*ETERMINER*)-CLITICS.
[(3rd person) pronominal clitics]

	DAT/IO	ACC/DO	
	msc/fem	msc	Fem
SG	le	lo	la
PL	les	los	las

- (ii) The class of **non-subject, non-clitic pronouns** *mi/ti/él* etc. represented in Table 2.3 (with shaded cells).

Table 2.3 (*Non-clitic*) Pronouns in Spanish.

SUBJ (NOM)				NON-SUBJ (ACC, DAT, OBL)				
SG		PL		SG		PL		
	msc	fem	msc	fem	msc	fem	msc	fem
1st	yo	yo	nosotros	nosotras	mí	mí	nosotros	nosotras
2nd	tú	tú	vosotros	vosotras	ti	ti	vosotros	vosotras
3rd	él	ella	ellos	ellas	él	ella	ellos	ellas

The goal of this investigation will be to find and describe the similarities, as well as the differences, found between these two subclasses of pronouns in Spanish, with the purpose of reaching a better understanding of: i) the semantic and syntactic properties that D-clitics and pronouns exhibit in this language, and ii) the semantic status of the clitic doubling relation established between the D-clitic and the pronoun it doubles.

The main empirical contribution of this investigation will be to show that in clitic doubling, the semantic relation holding between the D-clitic and the doubled pronoun is not trivial: D-clitics do in fact affect the referential interpretations that are available to the doubled pronoun in the absence of clitic doubling. In this regard, the main contribution of this section will be to provide an analysis of clitic doubling that is able to account in a principled way for the syntactic and semantic properties that the D-clitic and the doubled pronoun display in this construction.

With this goal in mind, I start in section 2.3.1. by presenting the results of an in-depth investigation I have conducted on the binding possibilities that the Spanish

1st/2nd/3rd person pronouns *mí*, *ti*, *él* etc. exhibit in the absence of clitic doubling.⁹ The purpose of this study is to describe the referential interpretations available for Spanish pronouns independently from clitic doubling. On the basis of this research, I will show that pronouns display in Spanish the very same binding properties their corresponding pronouns display in English (a language without object agreement or clitic doubling). More specifically, I will show that while in the absence of clitic doubling Spanish pronouns must be semantically free in their LBD, they can be syntactically bound in their LBD by a coreferential DP bearing focus, exactly the same behavior we observed in the case of their corresponding pronouns in English (section 2.2.2.). To the best of my knowledge, a detailed study that compares the binding properties exhibited by English pronouns and by their Spanish counterparts in the absence of clitic doubling has never been conducted before, so this dissertation fills this gap in the literature.

The results of the discussion on the interpretation of Spanish non-clitic pronouns in the absence of clitic doubling in section 2.3.1. will serve us as a referent point to examine the binding properties exhibited by the Spanish 3rd person **D**-clitics *lo(s)/la(s)/le(s)* in section 2.3.2. As I will show there, in Spanish the binding properties exhibited by D-clitics are similar, but not identical, to those of their 3rd person their non-clitic counterparts *él/ella/ellos/ellas*. Specifically, while non-clitic pronouns and D-clitics must be *semantically* free in their LBD, there exists, however, an important (although previously unnoticed) difference between these two elements with regard to syntactic binding. More concretely, while pronouns can be *syntactically* bound by a coreferential DP bearing focus (section 2.3.1.), D-clitics cannot. To my knowledge, this difference between D-clitics and pronouns has passed unnoticed in the literature and demands an explanation.

From this perspective, the main goal of the section 2.3.2. is to offer an empirically solid classification of clitic and non-clitic pronouns that is able to account for the semantic properties that these two groups of pronouns display in Spanish. In order to do so, I will look at the semantic properties exhibited by the Spanish D-clitics and their non-clitic counterparts. Specifically, we will see that, as originally noted in Cardinaletti & Starke (henceforth; C&S1999), clitic pronouns turn out to be semantically defective in

⁹ The term non-clitic doubling constructions is used here as a convenient label to refer to those contexts where an oblique pronoun inside a Prepositional Phrase (PP) is incompatible with clitic doubling (see section 2.3.1).

comparison with their non-clitic counterparts. As I will show, this is precisely the situation of the Spanish 3rd person D-clitics *lo(s)/la(s)/le(s)*, which are semantically defective in comparison with their 3rd person non-clitic counterparts *él/ella/ellos/ellas*. As I will argue, C&S1999's observation will play an important role in accounting for the fact that in Spanish non-clitic pronouns can, but D-clitics must cannot, be syntactically bound in their LBD by a focus-marked DP.

In section 2.3.3, I will investigate the binding properties that in Spanish object pronouns display in D-doubling constructions, where they must be doubled by a D-clitic. As I will show there, pronouns doubled by a D-clitic cannot be syntactically bound in its LBD by a focus-marked DP. This is in contrast to what happens with non-clitic pronouns elsewhere in Spanish, for these elements can take a focus-marked DP as their syntactic binder in the absence of clitic doubling (section 3.2.1). To the best of my knowledge, this difference in the referential interpretations available for non-clitic pronouns has never been reported before. In addition to this empirical discovery, a significant contribution of this section is that it offers an account of clitic doubling that is able to explain why the semantic interpretations available for the pronouns doubled by a D-clitic are not the same as the semantic interpretations that these pronouns license in the absence of clitic doubling.

Finally, the major conclusions of the discussion are summarized in section 2.3.4.

2.3.1. Non-Clitic Doubling Constructions.

In this section, we will concentrate on the binding-theoretical properties that the Spanish *non-subject, non-clitic* pronouns¹⁰ in Table 2.3 (indicated with shaded cells) exhibit in the absence of clitic doubling (i.e., in contexts where they are incompatible with clitic doubling).

¹⁰ The term *non-subject* strong (or non-clitic) pronoun is employed here as a convenient label that refers to the well-known fact that pronouns bearing accusative, dative and oblique case have the same form in Spanish, as can be seen in Table 2.3. However, to simplify the terminology, I will use the (rather cumbersome) term *non-reflexive, non-subject strong pronouns* only when we will need to make a distinction between non-subject and subject non-clitic pronouns; otherwise, I will simply refer to the non-reflexive non-subject pronouns in Table 2.3 (indicated with shaded cells) as *non-clitic pronouns*.

Table 2.3 (*Non-clitic*) Pronouns in Spanish.

SUBJ				NON-SUBJ				
(NOM)				(ACC, DAT, OBL)				
SG		PL		SG		PL		
msc	fem	msc	fem	msc	fem	msc	Fem	
1st	yo	yo	nosotros	nosotras	mí	mí	nosotros	nosotras
2nd	tú	tú	vosotros	vosotras	ti	ti	vosotros	vosotras
3rd	él	ella	ellos	ellas	él	ella	ellos	ellas

It is well-known that in Spanish, clitic doubling is not compatible with oblique pronouns which are sister-constituents of lexical prepositions¹¹ like *de* ‘of’, *por* ‘for’, *en* ‘in’ etc. (cf. Jaeggli 1982, Uriagereka 1988, 1995, Ordóñez 2012, Ormazabal & Romero 2013, among many others).

(48) *Incompatibility of clitic doubling with oblique pronouns (φ-clitics)*

- a. Juan no (*me) confia en mí.
 J.(NOM) not 1.sg.DO/IO trusts in you(OBL)
 ‘Juan doesn’t trust you.’
- b. María (*nos) estaba hablando con nosotros.
 M.(NOM) 1.sg.DO/IO was talking with us(OBL)
 ‘María was talking to us.’
- c. Yo no (*te) dependo de ti.
 I(NOM) not 2.sg.DO/IO depend of you(OBL)
 ‘I don’t depend on you.’

¹¹ The accusative preposition and its homophonous dative preposition *a* in Spanish are not lexical prepositions, but case marker morphemes in this language (see Laca 1995, Torrego 1998, Leonetti 2004, Rodríguez-Mondoñedo 2007, López 2012, Zdrojewski 2013, Ormazabal & Romero 2013, and much related work).

- d. Juan (*se) lloraba por ella.
 J.(NOM) 3.sg/pl.DO/IO wept for her(OBL)
 ‘Juan wept for her.’

(49) *Incompatibility of clitic doubling with oblique pronouns (D-clitics)*

- a. Juan no (*lo/*le) confía en él.
 J.(NOM) not 3.sg.msc.DO/3.sg.IO trusts in him(OBL)
 ‘Juan doesn’t trust him.’
- b. María (*los/*les) estaba hablando con ellos.
 M.(NOM) 3.pl.msc.DO/3.pl.IO was talking with them(OBL)
 ‘María was talking to them.’
- c. Yo no (*la/*le) dependo de ella.
 I(NOM) not 3.sg.fem.DO/3.sg.IO depend of her(OBL)
 ‘I don’t depend on her.’

In (48)-(49), the oblique non-clitic pronouns *mí* ‘me’, *ti* ‘you’, *él* ‘him’, *ella* ‘her’, *ellos* ‘them’ and *nosotros* ‘us’ occur as complements of a lexical preposition and cannot be doubled either by a φ-clitic, as in (48), or by a D-clitic, as in (49).¹²

This incompatibility between clitics (both D- and φ-clitics) and oblique pronouns will play a fundamental role in the analysis of clitic doubling in next sections: it allows us

¹² It is a widely accepted assumption that in Spanish lexical prepositions like *de*, *por*, *en* etc. constitute opaque domains for Agree and Move (see Baker 2008 for a detailed account of this restriction crosslinguistically). This means (i) that the oblique pronouns sisters to P in (48) fail to enter into an Agree relation with the head v from outside the Prepositional Phrase (PP) dominating them, as roughly shown in (ia), and (ii) that the D-clitics in (49) are not able to undergo head-movement from the position where they start within the PP to v, as roughly represented in (ib).

- (i) a. *[... V_[φ:val] ... [PP P [DP *pronoun*_[φ:val]]]] Agree (v, pro)
 b. *[... D+v ... [PP P [DP [*pronoun*] t_D]]]] D-movement

However, what interests us here is that the opacity created by the lexical preposition like *de*, *por*, *en* etc. (whatever the analysis of such an opacity turns out to be) precludes their pronominal complements to be doubled either by a φ-clitic in (48) or by a D-clitic in (49).

to describe and classify the binding theoretical properties that the Spanish oblique pronouns exhibit in the absence of clitic doubling, and will prepare us to compare the binding properties of pronouns both in the presence and in the absence of clitic doubling.

With this roadmap in mind, let us start by considering first the case of the 3rd person pronoun *él*. In Spanish, this pronoun can covary with a c-commanding 3sg QNP which is outside its LBD (e.g., with an element like *nadie*¹³ ‘(no/any)one’, *quién* ‘who’ or *todo dios* ‘every one’, for instance). To illustrate this fact, consider the Spanish non-clitic doubling examples in (50):

- (50) a. Nadie sabía [si Juan desconfiaba de él].
 no.one(NOM) knew whether J.(NOM) distrusted de him(OBL)
 ‘No one knew whether Juan distrusted him.’
- b. ¿Quién ignoraba [que Juan estaba llorando por él]?.
 Who(NOM) ignored that J.(NOM) was weeping for him(OBL)
 ‘Juan didn’t know who was weeping for him.’
- c. Todo dios denunció [que el profesor abusaba
 every one(NOM) denounced that the professor(NOM) abused
 de él].
 of him(OBL)
 ‘Every one denounced that the professor abused him.’

In (50a-c), the 3sg oblique pronoun *él* of the embedded clause can refer to a salient individual in the discourse, or covary with the quantifying NPs *nadie*, *quién* and *todo dios*

¹³ While *nadie* in post-verbal position needs to be licensed by the presence of an overt negative element and has been typically analyzed as a Negative Polarity Item NPI (Bosque 1984, Laka 1990 et seq.), *nadie* in pre-verbal position does not require the presence of an overt negative marker to be licensed. In this latter case, there is an open debate as to whether pre-verbal *nadie* should be analyzed as NPI (licensed by a hidden negation) or as a negative quantifier (Vallduví 1994, Aranovich 1996, 2007, Gutiérrez-Rexach & Schwenter 2003, Giannakidou 2006, Poole 2011 and references cited therein). However, for the purposes of this Chapter, what interests us here is that pre-verbal *nadie* is not interpreted referentially and consequently it is not able to corefer with a referential NP. Henceforth, and for ease of argumentation, I will refer to pre-verbal *nadie* as a negative QNP.

that c-commands it from outside its own clause. In the latter case, the relevant part of the LF producing the variable binding reading of the Spanish sentence in (50a) would roughly correspond to the structure in (51). For ease of argumentation, we will ignore those syntactic aspects of the LF representation in (51) that are not relevant to understand the sem-binding relation that the oblique pronoun *he* within the embedded clause establishes with the subject of the matrix clause, the negative QNP *nadie*.

- (51) [TP *nadie* [T' λ^1 [T' T [VP *sabía* [CP *si* [TP *Juan²* *desconfiaba* [PP de *él¹*]]]]]]] (✓ Pr. B)

In (51), the 3sg pronoun *él¹* inside the PP is bound by the binder prefix λ^1 from outside its LBD (i.e., the smallest TP containing *él* and a DP c-commanding it). Therefore, in (51) *él* turns out to be semantically free in its LBD, in satisfaction of Büring's Principle B in (34), repeated here as (52).

- (52) Principle B (Büring 2005:130):

A pronoun must be sem(antically)-free in its LBD.

By contrast, the Spanish 3sg oblique pronoun *él* cannot covary in its LBD with a c-commanding QNP.

- (53) a. *Nadie* *desconfiaba de él.*

no.one(NOM) distrusted of him(OBL)

'No one distrusted him.'

- b. *¿Quién* *estaba llorando por él?*

who(NOM) was weeping for him(OBL)

'Who was weeping for him.'

- c. *Todo dios* *abusaba de él.*

every one(NOM) abused of him(OBL)

'Every one abused him.'

In all the non-clitic doubling examples in (53a-c), the oblique 3sg pronoun *él* inside the PP cannot covary in its LBD¹⁴ with the quantifying DPs *nadie*, *quién* and *todo dios* that c-command it in these examples. Instead, in (53a-c) *él* must refer to a salient individual in the context.

Let us first consider the relevant part of the *sem-binding* LF corresponding to the ungrammatical bound variable reading of the non-clitic doubling example in (53a), as roughly given in (54). Although I am assuming that in (54) the QNP *nadie* starts in argument position inside the *vP* and then moves to adjoin to [spec, TP], I will ignore the lower copy of the QNP *nadie* inside the *vP* domain (for expository purposes, here and elsewhere in this chapter).

- (54) [TP *nadie* [T[·] λ¹ [T[·] T [VP *desconfiaba* [PP de él¹]]]]]] (✗Principle B)

In (54) the oblique pronoun *él* inside the PP is bound by the binder prefix λ^1 in the smallest TP that contains it and a DP c-commanding it (i.e. in its LBD). Hence, the Principle B in (52), according to which a pronominal element like the Spanish 3sg pronoun *él* must be semantically free in its LBD, rules (54) out and prevents the interpretation that follows from this LF. We can thus explain why this example lacks this reading.

However, Principle B in (52) does not exclude the alternative LF representation of the Spanish sentence in (53a) given in (55):

- (55) [TP *nadie* T [VP *desconfiaba* [PP de él¹]]]]] (✓Principle B)

In (55), the 3sg non-clitic pronoun *él* is semantically free (not bound by any binder prefix) in its LBD, in compliance with the Principle B in (52). Consequently, in (55) the reference of *él* is then determined by the assignment function *g*, such that $[[\text{él}^1]]^g = g(1)$, as roughly shown in (56). For convenience, the truth-conditions associated with the LF in (56) are translated into English.

¹⁴ It is worth mentioning that in (53), the LBD of the oblique pronoun *él* extends beyond the PP that immediately dominates it: in (53a-c) the oblique pronoun *él* is not the (genitive) subject of a DP, and therefore its LBD is the smallest TP that contains *él* and a DP c-commanding *él*.

- (56) $\llbracket [vP \text{ nadie} [v' v [VP \text{ desconfiaba} [PP \text{ de } \acute{e}l^1]]]] \rrbracket^g$

no.one	distrusted	of him
‘nobody distrusted him’		
$= 1 \text{ iff no one } \lambda x. [x \text{ distrusted } g(1)]$		

Also note that the *sem-binding* LF of (53a) in (54), where the oblique pronoun *él* is semantically bound by the QNP *nadie*, and its alternative LF in (55=56), where this very same pronoun refers to a salient individual in the context, clearly produce different meanings. Hence, the HLB in (41), repeated here as (57) for convenience, does not cause the *sem-binding* LF in (54) to block its alternative LF in (55=56). That is, although *él* could be bound semantically by the QNP *nadie* in the LF in (55=56), this would change the interpretation of (55=56).

- (57) *Have Local Binding! (HLB!)*

For any two NPs A and B, if A could semantically bind B (i.e., if it c-commands B and B is not semantically bound in A's c-command domain already), A must semantically bind B, unless that changes the interpretation.

[Büring 2005: 270]

- (58) A NP A semantically binds NP B if A minimally c-commands a binder prefix that binds B at LF [Büring 2005: 261]

So far, we have seen that if we apply Büring's Principle B in (52) we can then correctly explain the fact that the Spanish 3sg oblique pronoun *él* can covary with an antecedent which is outside its LBD with the quantificational NPs *nadie*, *quién* and *todo dios*, as in the non-clitic doubling examples in (50a-c), but not within its LBD, as illustrated by the non-clitic doubling sentences in (53a-c).

More evidence militating in favor of Büring's analysis of Principle B in Spanish comes from the fact that all the oblique pronominal forms in Table 2.3 may corefer in their LBD with a c-commanding DP bearing a focus feature, exactly the same of what happened with their corresponding pronouns in English (cf. section 2.2.3.).

To illustrate this, let us consider the interpretations available for the Spanish sentences in (59)-(61). These sentences are grammatical under the coreference reading represented in (59a)-(61a), but ungrammatical under the alternative bound variable reading informally represented in (59b)-(61b).¹⁵

- (59) Solo YO voté por mí.
only I(NOM) voted for me(OBL)
a. I am the only person x such that x voted for me. (coreference)
b. I am the only person x such that x voted for x. (*variable binding)

(60) Solo TÚ confiabas en ti.
only you(NOM) trusted on you (OBL)
a. You were the only person x such that x trusted you. (coreference)
b. You were the only person x such that x trusted x. (*variable binding)

(61) Solo JUAN habló de él.
only J.(NOM) talked of him(OBL)
a. Juan was the only person x such that x talked about him. (coreference)
b. Juan was the only person x such that x talked about x. (*variable binding)

Taking the non-clitic doubling sentence in (59) in Spanish as an example, let us examine in detail the *syn-binding* LF in (62a) and the *sem-binding* LF in (62b) corresponding to the bound variable and the coreference reading of (59) (which I have informally represented in (59a) and in (59b) above, respectively).

- (62) a. *syn-binding* LF: [TP solo YO¹ [T' T [VP voté [PP por mí¹]]]] (✓HLB, ✓Pr. B)
 b. *sem-binding* LF: [TP solo YO¹ [T' λ¹ [T' T [VP voté [PP por mí¹]]]]] (✓HLB, ✗Pr. B)

In the *sem-binding* LF of (59) given in (62b), the 1sg oblique pronoun *mi*^l ‘me’ is semantically bound in its LBD by the 1sg nominative pronoun *yo*^l ‘I’. By contrast, in the alternative *syn-binding* LF in (62a), *mi*^l turns out to be syntactically bound in its LBD by

¹⁵ Of course, in (61) the 3sg pronoun *él* and *JUAN* can also be interpreted as disjoint in reference. However, since we are considering only the ability of pronouns to be syntactically bound in its LBD, I will leave aside the disjoint reference reading of (61) and concentrate on the coreference and the bound variable readings exhibited by this sentence.

*yo*¹. Hence, according to the HLB! in (57), the *sem-binding* LF in (62b) will block the alternative possibility with *syn-binding* LF in (62a), unless the interpretation that derives from (62a) changes with respect to the interpretation that derives from the *sem-binding* LF (62b).

Let us therefore consider the semantic interpretation produced by the two LF representations in (62a) and in (62b). The *syn-binding* LF in (62a) yields the coreference reading of (59) that we have informally represented in (59b); in turn, the *sem-binding* LF in (62b) conveys the bound variable interpretation of (59) represented in (59a) above. More specifically, the meaning conveyed by (62a) may be paraphrased as follows: “I was the only person that voted for me, and there was no other person that voted for me”. By contrast, (62a) yields a different meaning, which can be paraphrased as follows: “I was the only person that voted for myself, and no other person voted for her/himself”. Thus, the two LF representations in (62a) and in (62b) give rise to different interpretations. Consequently, the HLB! in (57) will not apply and will not cause the *sem-binding* LF in (62b) to block its alternative *syn-binding* LF in (62a). Nor does the Principle B in (52) exclude the *syn-binding* LF in (62a). This is so because in (62a) *mi* is semantically free in its LBD. In contrast, in (62b) the oblique pronoun *mi* is semantically bound in its LBD by the nominative pronoun *yo*. Therefore, the Principle B in (52) does independently exclude the *sem-binding* LF of (59) in (62b).

In short, if we apply Büring’s Principle B in (52) to Spanish pronouns we can correctly exclude, on the one hand, the *sem-binding* LF of (59) in (62b) –where the 1sg oblique pronoun *mi* fails to be semantically free in its LBD–, and further, thanks to the HLB! in (57), the existence of the *sem-binding* LF in (62b) will not block its corresponding *syn-binding* LF in (62a). Again, this is so because the interpretation of the LF in (62a) is not truth-conditionally equivalent to the LF in (62b) (cf. section 2.2.). In sum, by adopting Büring’s analysis of Principle B we can provide a principled explanation for the fact that in Spanish oblique pronouns (see Table 2.3.) can corefer, but cannot covary, in their LBD with a c-commanding focalized DP in non-clitic doubling configurations like (59)–(61).

Summarizing what we have seen in this section. In the absence of clitic doubling, the Spanish oblique pronouns in Table 2.3 must be semantically free in their LBD. However, they can be syntactically bound in their LBD by a coreferential DP bearing focus.

As I have shown in section 2.2.2., this is exactly the same thing we observed in the case of their corresponding non-reflexive pronouns in English.

This leads us to conclude that there exists no difference between the binding properties exhibited by English pronouns and by their corresponding non-doubled pronouns in Spanish. This conclusion may appear to be trivial, but to my knowledge it has never been drawn before in the literature, so this section fills in this gap. This conclusion is also very important, for it establishes which are the range of possible interpretation for Spanish non-clitic pronouns in the absence of clitic doubling. This will later allow us to determine which part of the interpretation that pronouns display in clitic doubling configurations comes from the semantic contribution of the pronoun itself and which part derives from the contribution of the clitic.

With this much as background, in the next section I will concentrate on the study of the binding properties exhibited by the Spanish D-clitics *lo(s)/la(s)/le(s)*, with the aim of describing and accounting for the similarities, as well as the differences, between these clitic pronouns and their non-clitic counterparts.

2.3.2. D-Clitic Constructions.

In what I will refer to here as non-doubling D-clitic constructions (or simply, D-clitic constructions) in Spanish, the D-clitics *lo(s)/la(s)/le(s)* (see Table 2.1) do not co-occur with any DO or IO non-clitic pronoun in the same clause; thus, in the structures we will analyze now the D-clitics *lo(s)/la(s)/le(s)* will be the only DO or IO pronominal argument of the verbal predicate.

Table 2.1 D(*ETERMINER*)-*CLITICS*.
[(3rd person) pronominal clitics]

	DAT/IO	ACC/DO	
	msc/fem	msc	Fem
SG	le	lo	la
PL	les	los	las

The examples in (63) illustrate this construction. In the first two examples the clitic is interpreted as the direct object of the clause, and surfaces in accusative case. In the third example, in contrast, the clitic bears dative case (as required by the properties of the main verb *hablar*).

(63) **(non-doubling) D-clitic constructions**

- a. Juan lo vio .
 J.(NOM) 3.msc.sg.DO saw
 ‘Juan saw him.’

- b. María la criticó.
 M. (NOM) 3.fem.sg.DO criticized
 ‘María criticized her.’

- c. Pedro les habló .
 P. (NOM) 3.pl.IO talked
 ‘Pedro talked to them.’

In contrast to the D-clitic sentences in (63), where the clitic is not doubling a DO/IO pronoun, there is a different structure which I will refer to as *pronominal* D-doubling constructions, and is illustrated in (64). In this type of structures, we find a 3rd person DO/IO pronoun (*él/ella/ellos/ellas*) which must obligatorily co-occur with a D-clitic

attached to the verb or the auxiliary and which surfaces in a lower structural position than the clitic.¹⁶

(64) *Pronominal D-doubling*

- a. Juan **(lo)* vio a él.
J.(NOM) 3.msc.sg.DO saw A him(ACC)
'Juan saw him.'
- b. María *(*la*) criticó a ella.
M.(NOM) 3.fem.sg.DO criticized A her(ACC)
'María criticized her.'
- c. Pedro *(*les*) entregó esto a ellos.
P.(NOM) 3.pl.IO gave this(ACC) to them(DAT)
'Pedro gave this to them.'

In this section, we will concentrate on the binding properties exhibited by the D-clitics in (non-doubling) D-clitic constructions like (63). This will prepare us to build in the next section the analysis of the more complex *pronominal* D-doubling constructions illustrated in (64).

Let us thus start by considering the well-known fact that, in (non-doubling) D-clitic constructions, the Spanish D-clitics in Table 2.3 cannot covary in their LBD with quantificational NPs like *nadie* 'no one', *todo dios* 'every one' or *quién* 'who' in Spanish (see e.g., Eguren 2012 and references cited therein).

- (65) a. Nadie lo vio.
no.one(NOM) 3.msc.sg.DO saw
'No one saw him.'

¹⁶ The Spanish D-clitics *lo(s)/la(s)/le(s)* are inflected for 3rd person and therefore cannot double 1st and 2nd person object like *mi, ti, nosotros* etc., as shown in (i).

(i) a. Juan lo vió a {*mí/*ti/él} b. Juan les habló a {*nosotros/*vosotros/ellos}
J. 3.msc.sg.DO saw A me/you/him J. 3.pl.IO talked to us/you/them
'Juan saw {him/*me/*you}' 'Juan talked to {them/*us/*you}'

b. ¿Quién lo odiaba?

who(NOM) 3.msc.sg.DO hated

‘Who hated him?’

c. Todo dios le regaló un libro.

every one(NOM) 3.sg.IO gave a book(ACC)

‘Every one gave him a book.’

In all the D-clitic sentences in (65a-c), neither the 3sg DO D-clitic *lo* in (65a-b) nor the 3sg IO D-clitic *le* in (65c) can covary in their LBD with the quantifying NPs *nadie* (see fn. 13), *quién* and *todo diós* that c-command them. Instead, the 3sg DO D-clitic *lo* in (65a-b) and the 3sg IO D-clitic *le* in (65c) must obligatorily refer to a salient individual in the context.

In order to provide an explanation of these facts, next I will adopt Büring’s model explained above for non-clitic pronouns in English and will extend it to this Spanish paradigm involving D-clitics. Consider the relevant part of the LF corresponding to the ungrammatical bound variable reading of the D-clitic examples in (65a-c), roughly given in (66). For expository purpose, I will ignore those syntactic aspects of the Spanish sentences in (65) that do not contribute to understanding the binding relation holding between the D-clitic and the DP subject.

(66) [TP {Nadie/Todo dios/Quién} [T[·] λ₁ T [v[·] D₁+V [VP V <D₁>]]]]] (xPrinciple B)

As said in Chapter 1, D-clitics are commonly analyzed as D-heads which have φ-features, but do not take a NP as their complement. Under the *movement* approach to the syntax of D-clitics that I have adopted in Chapter 1, the D-clitic starts in an argument position inside the VP and later on moves up to adjoin to v. Specifically, in the derivation represented in (66), the clitic D starts within VP and moves to adjoin to v before Spell Out. What is important for our discussion here is that in the LF in (66) the higher copy of the D-clitic *D'* is bound in its LBD¹⁷ by the binder prefix λ_1 ; Büring’s Principle B in (52) will consequently rule (66) out.

¹⁷ In Spanish, the wh-NP *quién* ‘who’ is commonly assumed to move from [Spec,TP] to [Spec, CP] in overt syntax. In (66), we are thus assuming that the copy of the *quién* located on [Spec, TP] is computed for the

What this shows is that if we adopt Büring's model and extend it to the structures under analysis, his version of Principle B will directly allow us to explain why the Spanish D-clitic sentences in (65a-c) are ungrammatical under the bound variable interpretation corresponding to the *sem-binding* LF in (66).

Although, as we have just seen, the Spanish D-clitic sentences in (65a-c) do not license the interpretation corresponding to *sem-binding* in (66) (because it violates Principle B), they do license however the interpretation conveyed by the LF representation in (67), where the D-clitic is semantically free and must thus refer to a salient individual in the context.

- (67) [TP {Nadie/Todo dios/Quién} T [v' D₁+v [VP V <D₁>]]]

The only difference between the LFs (66) and (67) is that, in the latter, the D-clitic is not semantically bound in the smallest TP that contains the clitic and a DP c-commanding it. Consequently, in (67) the D-clitic is able to satisfy its binding requirements: it is not bound by any binder prefix in its LBD, in compliance with Büring's Principle B in (52). In turn, the interpretation of the D-clitic in (67) is determined by the assignment function g , such that $[[D_1]]^g = g(1)$, as in (68):

- (68) $\llbracket [vP \{nadie/todo diós/quién\} [v' D^1_{<lo>} + v [VP V_{D<lo>}]]] \rrbracket^g =$
no.one/ever body/who
1 iff {no one/every body/who} $\lambda x.[P(x, g(1))]$

Finally, notice that the interpretation of the *sem-binding* LF in (66), where the D-clitic is semantically bound in its LBD by a QNP, is not truth-conditionally equivalent to the semantic interpretation produced by its alternative LF in (68), where this very same D-clitic refers to a salient individual in the context. Therefore, the HLB! in (57) does not cause the *sem-binding* LF in (66) to block its alternative LF in (67).

purposes of Binding Theory. I will return to the semantic interpretation of A'-movement chains in Chapter 4.

Summarizing what we have seen so far: I have shown that Büring's Principle B correctly derives the interpretations of the pronouns in these examples: not only does it rule in the LF corresponding to the Spanish D-clitic examples in (65a-c) given in (67), where the D-clitic is semantically free in its LBD and thus refers to a salient individual in the context, but it also correctly excludes the *sem-binding* LF corresponding to the D-clitic sentences in (65a-c) in (66), where the D-clitic turns out to be semantically bound in its LBD by a QNP.

An important conclusion that follows from here with the regard to Principle B in (52) is that the Spanish 3rd person D-clitics *lo(s)/la(s)/le(s)* do not differ from their 3rd person non-clitic counterparts *él/ella/ellos/ellas* (see section 2.3.1): both subclasses of pronouns must be semantically free in their LBD.

However, when we consider syntactic binding, there is an important difference between the Spanish D-clitics and their corresponding non-clitic pronouns which I will present now and which has never been reported before. More specifically, while in Spanish non-clitic pronouns can be syntactically bound in their LBD by a coreferential DP bearing focus (in non-clitic doubling constructions like those discussed in section 2.3.1.), D-clitics cannot take a focus-marked DP as their syntactic binder.

To illustrate this, consider the Spanish D-clitic sentences in (71)-(73) and the type of referential relation that the 3sg D-clitics *lo*, *la* and *le* can establish with a local antecedent bearing a focus feature in each sentence.

- (69) Solo JUAN lo criticó.
 only J. 3.msc.sg.DO criticized
 'Only JUAN criticized him'
- a. Juan was the only x such that x criticized y(=Juan) (\times coreference)
 - b. Juan was the only x such that x criticized x (\times variable binding)
 - c. Juan was the only x such that x criticized y(\neq Juan) (\checkmark disjoint reference)

- (70) Solo MARTA la odiaba.
 only M. 3.fem.sg.DO hated
 ‘Only MARTA hated her.’
- a. Marta was the only x such that x hated y(=Marta) (\times coreference)
 - b. Marta was the only x such that x hated x (\times variable binding)
 - c. Marta was the only x such that x hated y(\neq Marta) (✓disjoint reference)
- (71) Solo MARTA le habló.
 only M. 3.sg.IO talked
 ‘Only MARTA talked to her.’
- a. Marta was the only x such that x talked to y(=Marta) (\times coreference)
 - b. Marta was the only x such that x talked to x (\times variable binding)
 - c. Marta was the only x such that x talked to y(\neq Marta) (✓disjoint reference)

The 3sg DO clitics *lo* in (69) and *la* in (70), as well as the 3sg IO D-clitic *le* in (71), cannot corefer or covary in their LBD with the focus-marked DPs that c-commands them in each sentence. The coreference reading is informally represented in (69a)-(71a), and the bound variable reading, in (69b)-(71b). Instead, as informally represented in (69c)-(71c), the 3sg DO D-clitics *lo* and *la* in (69)-(70), as well as the 3sg IO D-clitic *le* in (71), must be disjoint in reference from the focus-marked DPs that c-command them in each sentence.

Let us thus start by considering the *disjoint* LF representation that conveys the grammatical disjoint reference interpretation of the Spanish D-clitic sentences in (69)-(71), succinctly represented in (72). For ease of presentation, I will represent the lower copy of the D-clitic inside the VP as a trace.

- (72) [_{TP} solo {MARTA/JUAN}¹ T [_{v'} D²+v [VP V t_D]]]]

In (72), the D-clitic *D*² and the focused DPs {MARTA/JUAN}¹ have different indices, so the D-clitic *D*² in (72) turns out to be semantically free in its LBD, in compliance with Büring’s Principle B in (52). The assignment function *g* thus assigns the D-clitic and the focalized DPs in (72) different discourse referents, as roughly shown in (73).

- (73) $\llbracket [TP \text{ solo } \{\text{MARTA/JUAN}\}^1 T [v' D^2 + v [VP V t_D]]] \rrbracket^g$
 only M/J
 = 1 iff only $g(1) \lambda x.[P(x,g(2))]$

Consider, now, the two alternative LF representations of the D-clitic sentences in (69)-(71) given in (76a) and in (76b), respectively. The *sem-binding* LF in (76a) would correspond to the bound variable interpretation represented in (69b)-(71b) above, while the *syn-binding* LF in (76b) corresponds to the coreference interpretation informally represented in (69a)-(71a).

- (74) a. *sem-binding* LF: $[_{TP} \text{ solo } \{\text{MARTA/JUAN}\}^1 T [v' \lambda^1 [v' D^1 + v [VP V t_D]]]]$
 b. *syn-binding* LF: $[_{TP} \text{ solo } \{\text{MARTA/JUAN}\}^1 T [v' D^1 + v [VP V t_D]]]$

In the *sem-binding* LF in (76a), the D-clitic D^1 is bound in its LBD by the binder prefix λ^1 , so Principle B in (54) rules (76a) out. In contrast, in the *syn-binding* LF in (76b), the D-clitic D^1 is syntactically bound by the coreferential DPs *MARTA/JUAN*¹; thereby, in (74b) the D-clitic D^1 , which turns out to be *sem-free* in its LBD, meets the conditions established by Büring's Principle B and, as a consequence of this, this LF representation and the interpretation it yields are not ruled out.

What is more, the *syn-binding* LF in (74b) and the *sem-binding* in (74a) produce meanings that are clearly different in terms of truth-conditions: while the LF in (74b) would convey the coreference interpretation represented in (69a)-(71a) above, the LF in (76a) would derive the variable binding interpretation represented in (69b)-(71b). Consequently, the HLB! in (59) does not cause *sem-binding* LF in (74a) to block the *syn-binding* LF in (74b). Yet, as mentioned above, the D-clitic sentences in (71)-(73) in Spanish are ungrammatical under the coreference reading corresponding to the *syn-binding* LF in (74b).

If, as just explained, neither Büring's Principle B in (52) nor the HLB! in (57) exclude the *syn-binding* LF representation of (69)-(71) in (74b), the question we need to address is why the Spanish D-clitics *lo(s)/la(s)/le(s)* cannot be syntactically bound in their LBD by a coreferential DP bearing focus. This is in sharp contrast to what happened with

their non-clitic counterparts *él/ella/ellos/ellas* in Spanish (see section 2.3.1.) and must therefore be explained.

To that end, I will propose a novel analysis to answer this question. More specifically, I will argue that the problem with the *syn-binding* LF in (74b) corresponding the D-clitics examples in (69)-(71) comes from the fact that D-clitics and focus-marked DPs must obligatorily refer to different types of discourse referents; if this is correct, what follows from here is that these two elements will not be able to corefer. The line of reasoning I pursue in my analysis is grounded on Cardinaletti & Starke' (henceforth; C&S 1999) observation that in languages having both clitic and non-clitic pronouns, clitic pronouns are semantically deficient in comparison with their non-clitic counterparts.

To be more specific, what C&S1999 observe is that clitic pronouns must obligatorily refer to what these authors call as *prominent/familiar* discourse referents (see also Diesing 1991, Enç 1991, Sportiche 1993, Uriagereka 1995, among others), while their non-clitic counterparts are not subject to this restriction and can refer both to *prominent/familiar* and *non-prominent/non-familiar* discourse referents. In C&S1999's words, *prominent/familiar* discourse referents are "part of the information already introduced in the discourse" (C&S1999:50), whereas *non-prominent/non-familiar* discourse referents "represent new or non-familiar information". Notice that, following C&S1999, what is crucial for our analysis is that Spanish D clitics will then require *prominent/familiar* discourse referents.

C&S1999 argue that, in contrast with clitic-pronouns, non-clitic pronouns are able to refer to a *non-prominent/non-familiar* discourse referent under the following two conditions: i) the pronoun must accompany ostension (i.e., the speaker gesturing towards the individual that the pronoun denotes), or ii) must bear a prominent pitch accent indicating focus.

(75) *3rd person non-clitic pronouns (Ostension)*

Juan	votó	por	♂él/ella/ellos/ellas.
Juan(NOM)	voted	for	him/her/them. _{msc} /them. _{fem} (OBL)

(76) 3rd person non-clitic pronouns (Focus)

A: ¿Por quién votó Juan?

For who(OBL) voted Juan(NOM)

‘For who did Juan voted?’

B: Juan votó por ÉL/ELLA/ELLOS/ELLAS

Juan(NOM) voted for HIM/HER/THEM._{msc}/THEM._{fem}(OBL)

In (75), the gesture of the speaker towards the referent of the pronoun (represented by the symbol \ominus) indicates that according to the information available from the discourse background, the referent of the non-clitic pronouns in (75) does not represent *prominent/familiar* discourse information. The same goes for the focus-marked non-clitic pronouns in (76B): they appear in the answer to the previous question in (76A) and stand for the part of (76B) that represents new/non-familiar information.

In contrast to the non-clitic pronouns in (75)-(76), the Spanish D-clitics that appear in the examples in (77)-(78) are not able to refer to *non-prominent/non-familiar* discourse referents under the same conditions where their non-clitic counterparts in (75)-(76) are allowed to refer to this type of discourse antecedents.

(77) • DO/IO D-clitics (Ostension)

a. DO D-clitics (Ostension).

#Juan \ominus lo/la/los/las votó.

J.(NOM) 3.msc.sg.DO/3.fem.sg.DO/3.sg.msc.pl.DO/3.fem.pl.DO voted

(lit.) ‘Juan voted for \ominus him/her/them’

b. IO D-clitics (Ostension)

#Juan \ominus le/les dio el regalo.

J.(NOM) 3.sg.IO/3.pl.IO gave the gift(ACC)

(lit.) ‘Juan gave the gift to him/her/them.’

(78) • *DO/IO D-clitics (Focus)*

• *DO D-clitics (Focus)*

A: ¿A quién votó Juan?

A who(ACC) voted Juan(NOM)

B: *Juan LO/LA/LOS/LAS votó.

Juan(NOM) 3.msc.sg.DO/3.fem.sg.DO/3.sg.msc.pl.DO/3.fem.pl.DO voted
(lit.) ‘Juan voted for HIM/HER/THEM.’

• *IO D-clitics (Focus).*

A': ¿A quién le dio el regalo Juan?

To who(DAT) 3.sg.IO gave the gift(ACC) Juan(NOM)

B': *Juan LE/LES dio el regalo

Juan(NOM) 3.sg.IO/3.pl.IO gave the gift(ACC)

(lit.) ‘Juan gave the gift to HIM/HER/THEM.’

Notice first that the D-clitic sentences (77), where the Spanish D-clitics *lo(s)/la(s)/le(s)* accompany ostension, turn out to be infelicitous. If we extend C&S1999’ analysis of defective pronouns to the D-clitics in Spanish, then the deviance exhibited by the D-clitics in (77) will be due to the fact that they must obligatorily represent *prominent/familiar* information in the utterance context. But this is not possible in out-of-the-blue contexts like (77), where there is not enough contextual information to link the referent of the D-clitic to a prominent/familiar discourse referent.¹⁸

¹⁸ However, as C&S1999 themselves observe, clitics can accompany ostension when their referent is already prominent in the discourse. This is illustrated by the D-clitic examples in (i) in Spanish. In these examples, the NP complement of the expression *hablando de* ‘speaking of’, *Pedro*, represents the most salient individual of the utterance context and the D-clitic must refer to it. Needless to say, in (i) ostension is highly redundant, but not infelicitous.

(i) ***DO/IO D-clitics (Ostension)***

a. *DO D-clitics (Ostension).*

Hablando de Pedro¹, Juan no \supseteq lo^{1/*2} votó.

Speaking of P.(OBL), J.(NOM) not 3.msc.sg.DO voted

(lit.) ‘Speaking of Pedro, Juan did not voted \supseteq him’

Finally, consider the D-clitic sentences in (78B-B'), which are infelicitous as an answer to the wh-questions in (78A-A'). In the ungrammatical sentences in (78B-B'), the Spanish D-clitics *lo(s)/la(s)/le(s)* stand for the part of these sentences that represents new information: i.e., they are the focus of (78B'-B'). However, according to C&S1999, this is not possible, for D-clitics must obligatorily refer to *prominent/familiar* discourse antecedents, which represent, by definition, prominent or familiar entities in the discourse and consequently, cannot represent new information.

Thus, in C&S1999's words, what makes clitic pronouns be semantically defective in comparison with their non-clitic counterparts may be described as follows:

- (79) Non-clitic pronouns can, but clitic pronouns cannot, have a *non-prominent/non-familiar* antecedent in the discourse.

[Cardinaletti & Starke (1999:50)]

In the remainder of this section, I will argue that C&S1999' generalization in (79) plays a fundamental role in accounting for the badness of the *syn-binding* LF in (76b), repeated here as (80). Recall that the *syn-binding* LF representation in (80) corresponds to the ungrammatical D-clitic sentences in (69)-(71) in Spanish, repeated here as (81)-(83) for convenience.

- (80) [_{vP} only {MARTA/JUAN}¹ [_v D¹+v [VP V t_D]]]

- (81) *Solo JUAN¹ lo¹ criticó.
 only J. 3.msc.sg.DO criticized
 ‘Only JUAN criticized him’

b. *IO D-clitics (Ostension)*

Hablando de Pedro¹, Juan nunca \diamond le^{1/*2} dio el regalo.
 Speaking of P.(OBL), J.(NOM) never 3.sg.IO gave the gift
 (lit.) ‘Speaking of Pedro, Juan never gave the gift to \diamond him.’

- (82) *Solo MARTA¹ la¹ odiaba.
 only M. 3.fem.sg.DO hated
 ‘Only MARTA hated her.’

- (83) *Solo MARTA¹ le¹ habló.
 only M. 3.sg.IO talked
 ‘Only MARTA talked to her.’

All the D-clitic sentences in (81)-(83), where a D-clitic is syntactically bound in their LBD by a coreferential DP bearing focus, result in sharp ungrammaticality in Spanish. As I have pointed out before, the badness of (81)-(83) is not due to Principle B: the D-clitics *lo*, *la* and *le* in (81)-(83) are sem-free (not bound by any binder prefix) in their LBD, as represented in the LF in (80). Instead, in this LF structure, the D-clitic is syn-bound by a focus-marked DP, *JUAN/MARTA*. This means that in (80), the D-clitic and its syntactic binder share the same index and therefore, must independently refer to the same discourse referent. However, according to C&S1999’s generalization in (79), this is not possible. The reason is that in (81)-(83), the D-clitics *lo*, *la* and *le* and their corresponding (syntactic) binders *JUAN/MARTA* must refer to different discourse referents, and *a fortiori* they do not corefer.

Notice, first, that the D-clitics in (81)-(83) must have a *prominent/familiar* antecedent in the discourse (C&S1999) and, second, that the focus-marked DPs which syntactically binds them in (81) and (83) (the DPs *JUAN/MARTA*), are commonly considered to refer to *non-prominent/non-familiar* discourse antecedents (see e.g., Zubizarreta 1998, Frascarelli 2007, Domínguez 2004, Camacho & Jiménez 2013 and references cited therein). As a result, the D-clitics and the focused DPs coindexed with them in (81)-(83) cannot (co)refer to the same discourse referent. This is so because it is not possible for a single referent to simultaneously represent *prominent/familiar* and a *non-prominent/non-familiar* information within a single clause.¹⁹

¹⁹ A note might be in order regarding C&S’s notion of *non-prominent* antecedent, and my discussion of focus. From the point of view of information structure, a focused constituent is usually interpreted as an element that is informationally prominent. But notice that what C&S seem to have in mind with the notion of “(non)prominent antecedent” seems to be a different notion of prominence. More specifically, the notion of “(non-)prominent antecedent” seems to be related to the visibility that a given element needs to have to become an accessible/prominent referential antecedent for another element (which in the case of D- clitics is

In this view, the badness of the *syn-binding* LF of the D-clitic sentences in (81)-(83) would thus be similar to the badness of the *syn-binding* LF representation corresponding to the English sentence in (84a), roughly given in (84b).

- (84) a. Only HE hated her.
- b. [Only HE¹ hated her¹]

In the *syn-binding* LF of (84a) given in (84b), the pronoun *her* is semantically free in their LBD, in compliance with Büring's Principle B in (52). However, the problem with the LF in (84b) has to do with the fact that the coindexed pronouns *HE*¹ and *her*¹ in (84b) must have different discourse referents (i.e., *HE* must refer to a male and *her* to a female), and *a fortiori* they cannot corefer. Thus, what makes the English *syn-binding* LF in (84b) ungrammatical is, in a sense, similar to what makes the syn-binding LF in (80) in Spanish ungrammatical. In this latter case, the Spanish D-clitics (*lo*, *la* and *le*) and their corresponding (syntactic) binders in (81)-(83) (the focus-marked DPs MARTA/JUAN), must refer to different discourse referents and consequently they cannot corefer.²⁰

In contrast to the Spanish D-clitics *lo(s)/la(s)/le(s)*, their non-clitic counterparts *él/ella/ellos/ellas* can be syntactically bound in their LBD by a coreferential DP bearing focus, as the grammatical non-clitic doubling examples in (85) illustrate (cf. examples (55a-c) of section 2.3.1.). [In these examples coindexing represents syntactic-binding].

an element that lacks deictic force and need to get “referentially anchored” to an independently established and visible referential antecedent).

It is in this regard that I understand their definition of “(non)-prominent antecedent”. When Focus introduces for the first time a new element in the discourse this element is prominent from the point of view of discourse information, but the reference that this element introduces has not been part of the common ground, and consequently it does not constitute a prominent *antecedent* (an already established and available referential antecedent). Consequently, the new element introduced by Focus cannot be a visible/prominent referential antecedent for a D-clitic.

²⁰ I have not provided, however, a semantic analysis of the facts emerging from C&1999's generalization in (79). To put forth a semantic analysis of this generalization goes, however, far beyond the scope of this dissertation and I leave it for further research. For the purposes of this section, what is of interest to us here is that C&S1999's generalization in (79) strongly points out that the badness of the *syn-binding* LF in (80) in Spanish comes from independent properties concerning the semantics status and inherent lexical properties of D-clitics in this language.

- (85) a. Solo JUAN¹ habló de él¹.
 only J.(NOM) talked of him(OBL)
 Juan was the only person x such that x talked about Juan. (coreference)
- b. Solo MARTA¹ habló de ella¹.
 only M.(NOM) talked of her(OBL)
 Marta was the only person x such that x talked about Marta. (coreference)

Unlike the Spanish D-clitics in (81)-(83), their corresponding non-clitic counterparts in (85), *él/ella*, can be syntactically bound in their LBD by a focus-marked DP, *JUAN/MARTA* (see section 2.3.2.). This difference found between these two groups of pronouns in Spanish can be easily derived from C&S1999's generalization in (79). This is so because, unlike the D-clitics in (81)-(83), their non-clitic counterparts in (85) are not semantically defective and can thus refer to (or corefer with) a *non-prominent/non-familiar* discourse antecedent (in the sense of C&S 1999). If this is correct, then the fact that in (85), the non-clitic pronouns *él/ella* corefer with a focus-marked DP, which typically represents new (or non-familiar) information, comes as no surprise.

Summarizing what we have seen in this section. I have shown that the binding-theoretic properties that the Spanish D-clitics *lo(s)/la(s)/le(s)* (see Table 2.1) exhibit are similar, but not identical, to those of their non-clitic counterparts *él/ella/ellos/ellas* (see Table 2.3 in section 2.3.1). More specifically, I have provided evidence that while non-clitic pronouns can be syntactically bound by a coreferential DP bearing focus (section 2.3.1.), D-clitics cannot take a local DP bearing-focus as their syntactic binder. This difference between D-clitics and pronouns has gone unnoticed in the literature on this topic. In addition to this empirical discovery, I have also provided a principled explanation for this contrast.

In order to do so, I have looked at the semantic properties exhibited by Spanish D-clitics and their non-clitic counterparts. Specifically, I have adopted C&S1999 analysis of the differences between clitic and non-clitic pronouns and extended it to Spanish. Following their line of reasoning, I have defended that, being clitic pronouns, the Spanish D-clitics *lo(s)/la(s)/le(s)* are semantically defective in comparison with their non-clitic counterparts. More concretely, while the Spanish non-clitic pronouns *él/ella/ellos/ellas* can

be anteceded either by a *prominent* discourse referent (i.e., an individual that has been already introduced in the discourse) or by a *non-prominent* discourse referent, D-clitics must be obligatorily anteceded by a *prominent* discourse referent (C&S 1999). Finally, based on C&S1999' idea that clitic pronouns are semantically defective because they can refer to a *non-prominent/non-familiar* antecedent, I have further argued that in Spanish, a D-clitics cannot be syntactically bound in its LBD by a focus-marked DP because these two elements must refer to two different types of discourse referents, and consequently they cannot corefer.

2.3.3. *Pronominal D-Doubling Constructions.*

In contrast to the D-clitic construction that we have examined in the previous section, what characterizes the construction to which we turn now, which I have referred to as *pronominal D-doubling* construction, is that it involves a 3rd person DO/IO pronoun (*él/ella/ellos/ellas*) which must obligatorily co-occur with a D-clitic attached to the verb or the auxiliary. The examples in (86) illustrate this construction.

(86) *Pronominal D-doubling*

- a. Juan * (lo) vio a él.
J.(NOM) 3.msc.sg.DO saw A him(ACC)
'Juan saw him.'
- b. María *(la) criticó a ella.
M.(NOM) 3.fem.sg.DO criticized A her(ACC)
'María criticized her.'
- c. Pedro *(les) entregó esto a ellos.
P.(NOM) 3.pl.IO gave this(ACC) to them(DAT)
'Pedro gave this to them.'

In this section, we will examine the structural conditions under which the Spanish D-clitics *lo(s)/la(s)/le(s)* and the doubled non-clitic pronouns *él/ella/ellos/ellas* can

establish a referential relation with another nominal in D-(clitic) doubling structures. The goal of this investigation is to provide a careful description of the range of referential possibilities available to the D-clitic and the doubled pronoun in D-doubling constructions like (86), with the purpose of comparing them with the referential possibilities that are independently available to the D-clitic (section 2.3.2.) and to the non-clitic pronouns in the absence of clitic doubling (section 2.3.1.) As I will show, the results of this research will play a fundamental role in helping us define the semantic dependency that the D-clitic establishes with the doubled pronoun in object position in structures involving clitic doubling. The ultimate goal of this section is to offer an analysis of clitic doubling that is able to account for the syntactic and semantic properties that the D-clitic and the doubled pronoun display in this construction.

But before we examine the referential relation that the D-clitic and the doubled pronoun are able to establish with another nominal in the clause, we must first determine the type of referential relation that the D-clitic and the doubled pronoun must establish with each other in D-doubling constructions.

Recall that under Uriagereka's Big-DP hypothesis (which I have explicitly adopted in Chapter 1), the D-clitic starts as the head of a Big-DP and the doubled pronoun is inserted in the specifier position of this Big-DP, as in (87a). Later on, the D-clitic moves to adjoin to v and leaves the doubled pronoun stranded in the specifier position of the Big-DP, as shown in (87b). Notice that the D-clitic and the DP sitting in the specifier of the Big DP not only need to share the same φ -features, but must necessarily refer to the same individual in the discourse.

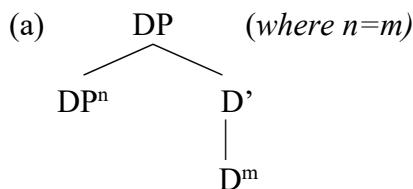
- (87) a. [_{vP} [_{DP} Juan] [_{v'} _v [_{VP} vio [_{DP} a *él*¹ [*lo*¹]]]]]]
b. [_{vP} [_{DP} Juan] [_{v'} [_v *lo*¹+_v] [_{VP} vio [_{DP} a *él*¹ [*t_{lo}*]]]]]

In the particular case illustrated in (87), the clitic under analysis is the 3sg DO D-clitic *lo*; this clitic is the head of a Big-DP selected by V as its complement. From this initial position, this 3sg DO D-clitic *lo* has head moved to adjoin to v. As a result of the movement of D to v, the 3sg DO pronoun *él* gets stranded alone inside the Big-DP, as shown in (87b).

Since the D-clitic *lo* and the DP that doubles this clitic (*a él* in (87a)) must obligatorily refer to the same individual, I will assume that the D-clitic and the DP sitting in the specifier of a Big-DP must always share the same referential index, in such a way that the interpretation where each of them refer to a different discourse referent will be automatically disallowed. This condition is rendered explicit²¹ in (88).

(88) *Indexing Condition on Big-DP structures*

In structures where a D-clitic D^n is merged with a DP^m in a specifier-head relation, then $n=m$.



I will also assume that as a result of D-to-v movement, the higher copy of the D-clitic does not c-command the doubled pronoun inside the Big-DP. This follows in fact from Reinhart's *classical* definition of c-command, where “ α c-commands β iff the first branching node that immediately dominates α also dominates β ” (Reinhart 1976). In (87), the first branching node that immediately dominates the moved D-clitic is v, but the latter does not dominate the doubled DP; consequently, the D-clitic does not c-commands the doubled DP (see also Nunes 1995 and Baker & Kramer 2018 for a related proposal; according to these authors, clitic pronouns are morphologically merged with the head to which they must undergo head-movement. As a consequence of this, the moved clitic cannot c-command any element from outside the morphological unit it forms with the head to which it incorporates as a result of head-movement).

As I will show now, the assumption that the D-clitic does not c-command the doubled pronoun is also needed to account for a basic property that characterizes the syntax of *pronominal* D-doubling constructions which is not discussed by Uriagereka (1988, 1995). More specifically, although in (87) the doubled 3sg DO pronoun *él* corefers with

²¹ Since in the Big-DP structure in (88) the D-clitic and the doubled DP are merged in a Specifier-Head relation, the condition in (88) might be independently derived from the assumption that the D-clitic and the doubled DP share their referential and φ -features as a result of entering into a spec-head agreement relation (Chomsky 1995, Kratzer 2009, Rooryck & Van Wyngaerd 2011 and references cited therein).

the 3sg D-clitic *lo*, this configuration does not trigger a Principle B effect, as shown by the fact that these two elements are interpreted as coreferential. Under the definition of c-command and dominance I have adopted in this work, this would follow from the assumption that the D-clitic does not bind the doubled pronoun in (87): although the 3sg pronoun *él* is coindexed with the 3sg D-clitic *lo*, the latter does not c-command the former; therefore, it is not possible for *lo* to sem-bind²² *él* in (87).

In sum: if for the reasons I have mentioned above the D-clitic and the doubled pronoun in (87-88) (in addition to sharing the same φ-features) must share the same referential index, we can explain why these two elements cannot refer to two different individuals and must refer to the same discourse referent (see fn. 22). Furthermore, under the assumption that the D-clitic does not c-command the doubled pronoun, we can also explain why even if the D clitic and the doubled pronoun are clause-mate and share the same referential index, this configuration does not cause a Principle B violation.

With this as background, let us now examine the type of anaphoric relations the D-clitic and the doubled pronoun are allowed to establish with another NP in the clause.

²² Recall that semantic binding, repeated here as (i) for convenience, relies on c-command. Hence, in (88), the 3sg DO D-clitic *lo* does not semantically bind the 3rd DO non-clitic pronoun *él* since the former does not c-command the latter, by assumption.

- (i) A binder prefix λ sem(antically)-binds an NP at LF if and only if
 - (a) $\square \lambda$ and NP are coindexed
 - (b) $\square \lambda$ c-commands NP
 - (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP is not bound by any binder prefix λ in a phrase marker P, we say that is semantically free in P. [based on Büring 2005:130]

Notice that Büring's (2005) HLB!, repeated here as (ii) for convenience, according to which semantic binding blocks coreference when both construals are indistinguishable in terms of truth-conditions (cf. section 2.2.2.) is not relevant here. This is so because, as just mentioned, the 3sg DO D-clitic *lo* does not c-command the 3sg DO non-clitic pronoun *él* in (88) and consequently it is not possible for the former to semantically bind the doubled pronoun.

- (43) Have Local Binding! (HLB!)

For any two NPs A and B, if A could semantically bind B (i.e., if it c-commands B and B is not semantically bound in A's c-command domain already), A must semantically bind B, unless that changes the interpretation.[Büring 2005: 270]

Notice, first, that in D-doubling constructions, neither the D-clitics *lo(s)/la(s)/le(s)* nor their non-clitic doubled counterparts *él/ella/ellos/ellas* can covary in their LBD with quantificational NPs like *nadie* ‘no one’, *todo dios* ‘every one’ and *quién* ‘who’ in Spanish, as shown in (95).

- (95) a. Nadie lo vio a él.
 no.one 3.msc.sg.DO saw A him
 ‘No one saw him.’
- b. ¿Quién la odiaba a ella?
 who 3.fem.sg.DO hated A her
 ‘Who hated her?’
- c. Todo dios le regaló un libro a él
 every one 3.sg.IO saw gave a book to him
 ‘Every one gave him a book.’

In none of these examples can either the 3sg D-clitics *lo/la/le* or the doubled 3sg pronouns *él/ella* covary in their LBD with the non-referential NPs in subject position. Instead, both the 3sg D-clitics *lo/la/le* and their doubled 3sg non-clitic pronoun *él/ella* must obligatorily refer to a salient individual in the context. For instance, if in (95c) the salient individual is *John*, then the sentence is interpreted as saying that “everyone gave a book to him(=John)”.

With this in mind, consider the LF structure I have sketched in (96).

- (96) [TP {nadie/todo dios/ quién} [T[·] λ¹ T [v[·] D^{1+V} [VP ... [DP [DP *pron*¹] [D[·] t_D] ...]]]]]]

(96) is the *sem-binding* LF representation corresponding to the ungrammatical bound variable interpretation of the *pronominal* D-doubling sentences in (95a-c). In this LF structure, a D-clitic, *D¹*, and its non-clitic doubled pronoun in the specifier of the Big-DP, *pron¹*, are both bound by the binder prefix λ^1 in their LBD (i.e., in the smallest TP containing these two pronominal D(P)s and a DP-commanding them). Since this structure violates Büring’s Principle B in (52) (because both the D-clitic and the doubled pronoun

are bound by the binder prefix λ^1 their LBD), we can correctly exclude the reading that follows from the *sem-binding* LF configuration in (96).

Let us next consider the LF corresponding to the grammatical interpretation of the *pronominal* D-doubling examples (95a-c), roughly given in (97):

- (97) [TP {nadie/todo dios/ quién} [T' T [v' D¹+v [VP ... [DP [DP *pron*¹] [D' t_D] ...]]]]

In (97), the D-clitic *D*¹ and its non-clitic double *pron*¹ in the specifier of the Big-DP are semantically free in their LBD (i.e., they are not bound by any binder prefix in their LBD); consequently, their reference is determined by the assignment function *g*, such that *g* provides *D*¹ and *pron*¹ with the same discourse referent. Furthermore, given that the meaning of the *sem-binding* LF in (96) and that of its alternative LF in (97) are not truth-conditionally equivalent, the HLB in (59) does not cause the *sem-binding* LF in (96) to block its alternative LF in (97).

Recapitulating what we have seen so far. If we follow Büring's analysis of Principle B for English pronouns and extend it to incorporate also pronominal D-clitics in Spanish, we can account for the fact that *pronominal* D-doubling examples like (95a-c) are grammatical under the meaning conveyed by the LF representation in (97), where the D-clitic and its non-clitic double are not semantically bound in their LBD by the quantificational DP c-commanding them, but yield an illicit output under the bound variable interpretation corresponding to the *sem-binding* LF in (97), where the D-clitic and its non-clitic double fail to be semantically free in their LBD.

As I have shown in previous sections, in the wide range of configurations where clitic doubling does not take place (either because the D-clitics *lo(s)/la(s)/le(s)* surface attached to the verb but do not double any NP or because the non-clitic pronouns *él/ella/ellos/ellas* are contained inside a PP and cannot be doubled by any clitic), both D-clitics and their non-clitic counterparts are independently subject to the same binding requirement: namely, they must be semantically free in their LBD. Therefore, the fact that, in D-doubling constructions like (95) (where a D-clitic doubles a non-clitic pronoun), these two elements must be simultaneously free in their LBD is not surprising. It would just

reflect what seems to be a common feature of structures involving these two types of pronominal elements.

But notice that, although Spanish pronouns must be semantically free everywhere, in the case of the interpretation that corresponds to syntactic binding, there exists an important (but previously unnoticed) difference between the following two syntactic configurations: (i) in the absence of clitic doubling, where pronouns surface contained within a PP and cannot be doubled by a D-clitic, and (ii) in D-doubling structures where they are doubled by a D-clitic. In particular, while the pronouns *él/ella/ellos/ellas* can be syntactically bound in their LBD by a coreferential DP bearing focus in non-clitic doubling constructions (see section 2.3.1), these very same pronouns cannot take a focus-marked DP as their antecedent when they are doubled by a D-clitic.

To illustrate this difference, let us compare the type of anaphoric relation that the 3rd person non-clitic pronoun *él* can establish with a referring focalized DP both in the non-clitic doubling sentence in (98) and in the *pronominal* D-doubling sentence (99).

(98) *Non-clitic doubling*

Solo JUAN habló de él.
only J.(NOM) talked of him(OBL)

- a. Juan was the only person x such that x talked about y=Juan. (✓coreference)
- b. Juan was the only person x such that x talked about x. (✗variable binding)
- c. Juan was the only person x such that x talked about y≠Juan (✓disjoint reference)

(99) *Pronominal D-doubling*

Solo JUAN lo criticó a él.
only J. (NOM) 3.msc.sg.DO criticized A him(ACC)
'Only JUAN criticized him'

- a. Juan was the only person x such that x criticized y=Juan. (✗coreference)
- b. Juan was the only person x such that x criticized x (✗variable binding)
- c. Juan was the only person x such that x criticized y≠Juan (✓disjoint reference)

While in the non-clitic doubling example in (98), the 3sg oblique pronoun *él* and the focused DP JUAN can either corefer or be interpreted as disjoint in reference, in the

pronominal D-doubling example in (99) the 3sg DO pronoun *él* and the focalized DP JUAN must be obligatorily interpreted as disjoint in reference. Additional *pronominal* D-doubling examples illustrating this very same contrast are given in (100) and (101).

(100) *Pronominal D-doubling*

Solo MARTA la odiaba a ella.
 only M.(NOM) 3.fem.sg.DO hated A her(HER)
 ‘Only MARTA hated her.’

- a. Marta was the only person x such that x hated y=Marta. (\times coreference)
- b. Marta was the only person x such that x hated x (\times variable binding)
- c. Marta was the only person x such that x hated y \neq Marta (\checkmark disjoint reference)

(101) Solo MARTA le habló a ella.

only M.(NOM) 3.sg.IO talked to her(DAT)

‘Only MARTA talked to her.’

- a. Marta was the only person x such that x talked to y=Marta. (\times coreference)
- b. Marta was the only person x such that x talked to x (\times variable binding)
- c. Marta was the only person x such that x talked to y \neq Marta (\checkmark disjoint reference)

What this shows is that while the non-clitic pronouns *él/ella/ellos/ellas* can be syntactically bound in its LBD by a coreferential DP bearing focus in the absence of clitic doubling, they cannot be syntactically bound in their LBD by a focus-marked DP when they are doubled by a clause-mate D-clitic. The generalization that emerges from these facts is rendered explicit in (102).

- (102) In Spanish, a non-clitic pronoun (call it P) can be syntactically bound in its LBD by a coreferential DP bearing focus only if P is not doubled by a D-clitic.

In what follows, I will argue that the generalization in (102) can be directly derived from a property of D-clitics *lo(s)/la(s)/le(s)* I have discussed in section 2.3.2. More specifically, from the fact that these clitics cannot have an antecedent which is *non-prominent* in the discourse (for instance, they cannot have a focused DP as their antecedent). In other words, in clitic doubling, the non-clitic pronouns *él/ella/ellos/ellas* cannot be syntactically bound by a coreferential focused DP in their LBD because they are

doubled by (and coindexed with) a D-clitic, which cannot take a focalized DP as its syntactic binder and consequently imposes this restriction to the pronoun doubled by, and coindexed with, it.

This line of argumentation is grounded on the assumption that the D-clitics *lo(s)/la(s)/le(s)* and their non-clitic doubles *él/ella/ellos/ellas* must have the same discourse referent. From this assumption, the following restriction on the interpretation of the doubled pronouns follows as a corollary. Namely, if a D-clitic – due to its defective semantic status (C&S1999) – is unable to have an antecedent which is not *-prominent* in the discourse and requires a salient antecedent (see section 2.3.2), by transitivity the pronoun doubled by, and coindexed with, this D-clitic will not be able to have an antecedent *non-prominent* in the discourse either. In a nutshell, if A and B must corefer and A cannot independently corefer with C, it follows that B cannot corefer with C, either.

To illustrate how this argument works, let us consider the relevant part of the *syn-binding* LF in (104), which corresponds to the ungrammatical *pronominal* D-doubling sentence in (100), repeated here as (103) for convenience.

- (103) *Solo MARTA¹ la¹ odiaba a ella¹.
 only M. 3.fem.sg.DO hated A her
 ‘Only MARTA hated her.’

- (104) [TP solo MARTA¹ [T T [v' la¹+v [VP odiaba [DP [DP a ella¹] [D' t_{la}]]]]]]]

In the *syn-binding* LF in (104), both the 3sg DO D-clitic *la*¹ and its 3sg non-clitic double *ella*¹ are syntactically bound in their LBD by the focus-marked DP *MARTA*¹. Therefore, neither the DO D-clitic *la* nor its non-clitic double *ella* in (104) violate Büring’s Principle B in (52). However, the problem with the *syn-binding* LF in (104) has to do with the fact that, as explained in section 2.3.2., the 3sg DO D-clitic *la* and the focus-marked DP *MARTA* in (104) must refer to different types of discourse referents: i.e., the 3sg DO D-clitic *la* must, but the focused DP *MARTA* must not, refer to a *prominent/familiar* referent in the discourse (see section 2.3.2.). Consequently, by transitivity, the 3sg non-clitic pronoun *ella* coindexed with the 3sg DO D-clitic *la* in (104) will not be able to corefer with the focused DPs *MARTA* either. Again, this is so because if the doubled 3sg non-clitic

pronoun *ella* and the focus-marked DP *MARTA* refer to the same *non-prominent/non-familiar* discourse referent, then the 3sg DO-D-clitic *la* and the non-clitic pronoun *ella* doubled by, and coindexed with *la*, will not be able to refer to the same discourse referent. The reason is that the 3sg DO-D-clitic *la* –due to its ‘defective’ semantics (in the sense of C&S1999)– cannot independently refer to a *non-prominent* discourse referent (cf. section 2.3.2.) and the antecedent of the doubled pronoun coindexed with the D-clitic must be compatible with the latter.

Also note that this problem does not arise in the alternative LF representation corresponding to the D-doubling example in (103), given in (105). In this structure, the 3sg DO D-clitic *la* and the doubled 3sg DO non-clitic pronoun *ella* are *semantically*, rather than syntactically, bound by the focused DP *MARTA*. As a consequence, these two elements are not interpreted referentially, but as bound variables.

- (105) [_{TP} solo *MARTA*¹ [_{T'} λ^1 [_{T'} *T* [_{v'} *la*¹+*v* [_{VP} *odiaba* [_{DP} [_{DP} a *ella*¹] [_{D'} *t_{la}*]]]]]]]

The problem with the *sem-binding* LF in (105) is, however, that both the 3sg DO-clitic *la*¹ and the doubled 3sg DO non-clitic pronoun *ella*¹ are simultaneously bound in their LBD by the binder prefix λ^1 . Hence, the LF representation in (105) will be ruled out by Büring’s Principle B in (52).

As we will see now, the only grammatical LF representation corresponding to the D-doubling example in (103) in Spanish that is not excluded by the Principle B in (52) or by the ‘defective’ referential properties of the 3sg DO D-clitic *la* is the *disjoint* LF in (106).

- (106) [_{TP} solo *MARTA*² [_{T'} *T* [_{v'} *la*¹+*v* [_{VP} *odiaba* [_{DP} [_{DP} a *ella*¹] [_{D'} *t_{la}*]]]]]]]

In (106), both the 3sg DO D-clitic *la*¹ and the doubled 3sg DO non-clitic pronoun *ella*¹ bear an index that is different from that of the focused DP *MARTA*² which c-commands them. Therefore, in (106) neither the 3sg DO D-clitic *la* nor its non-clitic double *ella* are semantically bound in their LBD, in compliance with Principle B in (52). Furthermore, the semantic interpretation of the *disjoint* LF in (106) and that of its corresponding *sem-binding* LF in (105) are clearly different. Hence, the HLB! in (57) does not cause the *sem-binding* LF in (105) to block the *disjoint* LF in (106).

Summarizing the analysis I have proposed of the interpretation of *Spanish* D-doubling structures like (103): I have shown that if we extend Büring's analysis of Principle B to configurations like (103), where a non-clitic pronoun is doubled by a D-clitic, we can correctly exclude the *sem-binding* LF of (103) in (105), where both the D-clitic and the doubled pronoun are semantically bound in their LBD (in violation of Principle B), and rules in its corresponding *disjoint* LF in (106), where neither the D-clitic nor the doubled pronoun are bound by any binder prefix in their LBD (in accordance to Principle B).

By contrast, the badness of the alternative *syn-binding* LF of (103) in (104), where both the D-clitic and the doubled pronoun are syntactically bound by a focus DP in their LBD, cannot be explained under Büring's analysis: this structure is not excluded neither by Principle B nor by the HLB!. I have argued that in order to account for the ill-formedness of (104), we need to appeal to independent properties of the D-clitics. Specifically, I have argued that the coreference interpretation of (104) is ill-formed because the D-clitic (due to its defective semantic status) cannot corefer with the focused-marked DP and, as a consequence of this, the pronoun doubled by, and coindexed with, the D-clitic, cannot corefer with the focus DP either.

2.3.4. Interim Conclusions.

We have seen in section 2.3.2 that the binding possibilities that the D-clitics *lo(s)/la(s)/le(s)* display in Spanish are similar, but not identical, to the binding possibilities that their non-clitic counterparts *él/ella/ellos/ellas* exhibit in the absence of clitic doubling (cf. section 2.3.1.). Specifically, while the Spanish D-clitics *lo(s)/la(s)/le(s)* and their non-clitic counterparts must be semantically free in their LBD, the former cannot be syntactically bound in their LBD by a coreferential DP bearing focus. This is in contrast to what happened with the Spanish non-clitic pronouns *él/ella/ellos/ellas* in the absence of clitic doubling, where these pronouns can take a focus-marked DP as their syntactic binder (cf. section 2.3.1.).

To account for this difference, I have argued that C&S1999's generalization in (79), repeated here as (107), plays a fundamental role in explaining why the Spanish D-clitics

lo(s)/la(s)/le(s) cannot be syntactically bound in their LBD by a coreferential DP bearing focus. According to (79), clitic pronouns like D-clitics in Spanish must obligatorily refer to what C&S1999 call as *prominent/familiar* discourse referents.

- (79) Non-clitic pronouns can, but clitic pronouns cannot, have a *non-prominent/non-familiar* antecedent in the discourse.

[from Cardinaletti & Starke (1999:50)]

Based on (79), I have argued that D-clitics cannot corefer with a c-commanding DP bearing focus because these two elements must denote different type of discourse antecedents and *a fortiori* they are not able to corefer. On the one hand, focus-marked DPs must denote *non-prominent/non-familiar* discourse referents (see e.g., Zubizarreta 1998, Frascarelli 2007, Camacho 2013 and much related work); on the other hand, D-clitics must denote *prominent/familiar* discourse referents (C&S 1999). Thus, if this is correct, D-clitics and focus-marked DPs cannot corefer because they must obligatorily refer to different discourse referents.

In section 2.3.3, I have also discussed an important (although previously unnoticed) difference in the (co)referential possibilities that the Spanish non-clitic pronouns *él/ella/ellos/ellas* exhibit in the following two constructions: i) in the absence of clitic doubling and ii) in D-doubling constructions. Specifically, as we have seen in section 2.3.1., in non-clitic doubling constructions the non-clitic pronouns *él/ella/ellos/ellas* can be syntactically bound in their LBD by a coreferential DP bearing focus. In contrast, these very same pronouns cannot be syntactically bound in their LBD by a coreferential DP bearing focus when they are doubled by, a coindexed with, a D-clitic (i.e., in *pronominal* D-doubling constructions).

To account for this difference, in section 2.3.3 I have argued that in D-doubling constructions, the object pronouns *él/ella/ellos/ellas* cannot not be syntactically bound in their LBD by a coreferential focalized DP because of the ‘defective’ referential status of the D-clitic that doubles them. To be more specific, D-clitics are semantically defective pronouns and as such, they cannot corefer with a *non-prominent* discourse antecedent (e.g. a focalized DP). As a result of this, when a non-clitic pronoun is doubled by (and coindexed

with) a D-clitic, the former is constrained to have the same reference as the D-clitic doubling it.

I want to emphasize that the fact that in D-doubling constructions, the D-clitics *lo(s)/la(s)/le(s)* impose restrictions on the (co)referential interpretations available for the doubled pronoun turns out to be, in fact, crucial: it shows that the Spanish D-clitics are semantically defective pronouns; however, they still have the referential/semantic properties allowing them to affect the semantic interpretation available for the doubled pronoun. This fact thus brings strong empirical evidence in favor the hypothesis, defended in this dissertation, that the Spanish D-clitics *lo(s)/la(s)/le(s)* count as pronouns for the purposes of semantic interpretation and Binding Theory in LF, and against the view that they are object agreement morphemes lacking referential properties (Strozer 1976; Aoun 1981; Jaeggli 1982, 1986; Borer 1986; Saltarelli 1987; Suñer 1988; Fernández Soriano 1989; Franco 1993, 2000; Sportiche 1993, 1996; Fontana 1993; Landa 1995; Barbosa 2000; Anderson 2005 and references cited therein).

As I will show next in section 2.4., unlike D-clitics, the φ -clitics *me/te/se/nos/os* do not affect the semantic interpretation available to the doubled non-clitic pronouns. More specifically, I will present a detailed investigation on the binding properties exhibited by non-clitic pronouns in φ -doubling constructions, with the purpose of providing a new empirical argument in favor of the hypothesis that the φ -clitics are agreement morphemes lacking referential properties. In particular, I will argue that φ -clitics are agreement morphemes because unlike D-clitics, they lack the referential/semantic properties needed to affect the referential interpretation of the non-clitic pronouns that they double.

2.4. Principle B and Coreference in *Pronominal φ -Doubling Constructions.*

In section 2.3.2., I have discussed the syntactic and semantic properties exhibited by ***pronominal D-doubling*** constructions in Spanish, in which a pronoun in object position is mandatorily doubled by a D-clitic pronoun attached to the verb or the auxiliary. In this

section, I will investigate a different type of clitic doubling construction found in this language: what I will refer to as ***pronominal φ-doubling***. The different terms D-doubling vs. φ-doubling reflect the fact that the clitics involved in these two constructions are different. In the previous sections we have studied configurations where the doubling clitic was a D-clitic. Now we turn to a different type of doubling, where the doubling clitic is a **φ-clitic**. In the remainder of this dissertation, I will use this term as a convenient label to refer to those structures which involve an object pronoun cross-referenced by an object agreement morpheme attached to the verb or the auxiliary: i.e., the Spanish φ-clitics *me/te/se/nos/os* in Table 2.2.

Table 2.2 *1ST/2ND/3RD DO/IO φ-CLITICS (SPANISH)*.

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

The examples in (108) illustrate this type of structures. As shown here, φ-doubling involves the co-occurrence of an object pronoun (either a DO or an IO) and a φ-clitic attached to the verb. In (108a), the 1sg DO pronoun *mi* must obligatorily co-appear with the 1sg DO φ-clitic *me*. Similarly, in (108b), the 2sg DO pronoun *ti* in (108b) must surface with the 2sg DO φ-clitic *te*.

- (108) a. Juan *(me) vio a mí.
 J.(NOM) 1.sg.DO saw A me(ACC)
 ‘Juan watched me.’
- b. Juan *(te) vio a ti.
 J.(NOM) 2.sg.DO saw A you(ACC)
 “Juan watched you.”

Thus, on the surface, the φ -doubling examples in (108) do not appear to differ from the type of D-doubling structures that we have discussed in section 2.3.2. above: they both seem to involve a clitic pronoun which must obligatorily double a non-clitic pronominal DP.

However, as I will show in this section and in the Chapters that follow, the relation that holds between the φ -clitic and the doubled pronoun in configurations of φ -doubling like (108) differs both syntactically and semantically from the relation that the D-clitics *lo(s)/la(s)/le(s)* establish with the doubled pronoun in D-doubling constructions.

So, the main goal of this section will be to develop an analysis of φ -doubling that is able to account for the whole range of syntactic and semantic properties that the φ -clitic and the doubled pronoun display in the φ -doubling constructions found in this language.

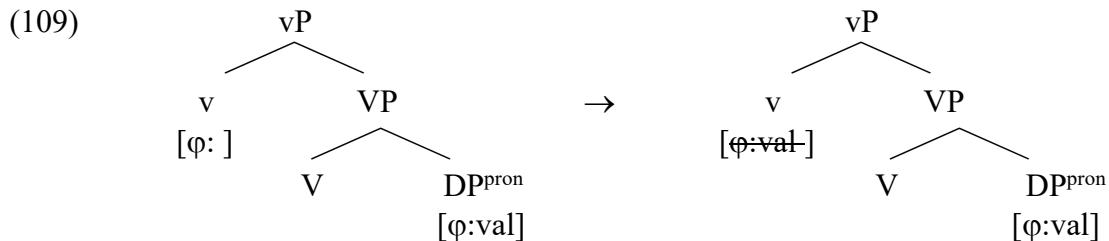
Under the *Agree*-based analysis of the Spanish φ -clitics adopted in Chapter 1, the φ -clitics in Table 2.2 are the morphological reflex of the φ -features values associated with v as a result of Agree (Chomsky 1998, 2001a, 2001b et seq.). Specifically, what Chomsky contends is that v is selected from the lexicon and enters the derivation with a set of unvalued φ -features. In order to be interpretable/legible at the interface with-phonology (PF), the unvalued φ -features of v must acquire a value by means of the operation Agree during the course of the syntactic derivation. In turn, Agree consists of two different (sub)operations: Match and Copying (Chomsky 1998). In the case of object agreement, these two (sub)operations work as follows:

- (i) *Match*: the unvalued φ -features of v look down into v's c-command domain in search of a goal DP with matching and valued φ -features.
- (ii) *Copying*: once v finds a suitable DP with matching and valued φ -features, the φ -features of the goal DP are copied onto v.

Thus, Copying relays on Match: the unvalued φ -features of v acquire the φ -features values of a goal DP inside v's c-command domain whenever the goal bears matching and valued φ -features values.

Chomsky (1998, 2001a, 2001b) further contends that as a reflex of Agree, the newly φ -features copied onto v must be deleted for the purposes of LF. This is so because the φ -features values associated with v as a result of Agree do not make any contribution to the semantics of this category²³: i.e., they are semantically uninterpretable and, by definition, do not reach the interface with semantics (LF). Agree is thus assumed to fulfill two functions: i) it values the unvalued φ -features of v for the purposes of PF, and ii) it removes the φ -features values of v from the syntactic representation that is handed over to the external interface with semantics.

For illustration, let us consider the relevant part of the syntactic structure underlying the *pronominal* φ -doubling sentences in (108), given in (109). For the sake of argumentation, we omit the part of the syntactic derivation in (109) that is not relevant for the syntax of the Spanish φ -clitics under analysis. Notice that a crucial difference with respect to the underlying structure I have assumed for D-doubling in the previous sections is that in the case of φ -doubling the structure does not involve a big DP containing the clitic and the DP.



If the original structure in (109) does not include a clitic pronoun, how is it then that we always have a clitic in the resulting sentence? Let us consider in detail how this takes place.

To create the structure in (109) the derivation proceeds as follows. First, V merges with the object DP, which is a pronominal with valued φ -features, creating the VP. The head v is then selected from the lexicon and enters the derivation with a set of unvalued φ -

²³ That is, φ -features values are semantically interpretable on nominals, but not on verb-type categories like v or T.

features. These unvalued φ -features of v probe and find a suitable goal on the DP^{pron} inside the VP. Upon matching through Agree, the φ -features of the goal DP the DP^{pron}, are copied onto v. In addition to this, as part of the operation Agree, the newly φ -features values of v are deleted for the purposes of LF, although they will still remain visible for the interface with phonology. At PF, the φ -features values which are associated with v as a result of Agree are phonetically realized as the corresponding object agreement morphemes, giving rise to the φ -clitics *me/te/se/nos/os* (see Table 2.2).

If the Agree-analysis of the Spanish φ -clitics I have just defended is correct, we expect these clitics to lack the referential/semantic properties necessary to affect the referential possibilities that the doubled pronoun exhibits in the absence of clitic doubling. To put in other words, we expect that in contrast to D-clitics, the Spanish φ -clitics will not have the semantic features that are required to affect the referential interpretation of the doubled pronoun. As I will show in this section, this prediction is borne out. This result provides solid empirical evidence in favor of the hypothesis that, unlike D-clitics, the φ -clitics in Table 2.2. are true object agreement morphemes lacking referential properties.

The rest of this section is organized as follows. In section 2.4.1., I will carefully examine the binding theoretical properties that the object pronouns doubled by a φ -clitic exhibit in-Spanish. On the basis of this investigation, I will show the following two things regarding the pronouns that appear in object position in φ -doubling constructions: first, I will show that the pronouns in object position must be *semantically* free in their LBD, and ii) I will further show that these pronouns in object position can be *syntactically* bound in their LBD by a coreferential DP bearing focus. Note, crucially, that this is exactly the result we obtained when we examined the behavior of these very same pronouns in the absence of clitic doubling (section 2.3.1). This turns out to be a determining fact: it proves that unlike the Spanish D-clitics *lo(s)/la(s)/le(s)*, the φ -clitics *me/te/se/nos/os* (see Table 2.2.) do not have the referential/semantic properties required to affect the referential interpretation of doubled NP.

Next, in section 2.4.2., I will turn to the discussion of a well-known restriction that affects the φ -doubling possibilities of the Spanish 3rd person pronouns *él/ella/ellos/ellas*. Namely, the fact that these pronouns must be doubled by the φ -clitic *se* only when they are

syntactically bound in their LBD by their clause-mate subject. At first sight this restriction might look problematic for the analysis of *se* as an object agreement morpheme, as this clitic seems to be able to impose restrictions on the referential interpretations available for the doubled pronouns in configurations where they are not doubled by any clitic (i.e., in the absence of clitic doubling). In these latter constructions, 3rd person oblique pronouns inside a PP can, but do not have to, be syntactically bound in their LBD by their clause-mate subject (section 2.3.1.).

However, I will argue that contrary to appearances, the clitic *se* does not constraint the referential possibilities of the doubled pronoun. In order to prove this, I will show that the 3rd person pronouns *él/ella/ellos/ellas* can only be inserted in syntactic positions from where their corresponding 3rd person D-clitics *lo(s)/la(s)/le(s)* are independently excluded. Based on this observation, I will contend that the complementary distribution found between the Spanish D-clitics *lo(s)/la(s)/le(s)* and their 3rd person non-clitic counterparts *él/ella/ellos/ellas* follows from C&S1999' Economy of Representation (ER). According to this principle of economy, a smaller structure (the D-clitic) must be chosen if possible. Only if the smaller structure (the D-clitic) is independently ruled out is the bigger alternative (the non-clitic pronoun) possible. As I will argue next in the following section, C&S1999' ER correctly restricts the insertion of the Spanish 3rd person pronouns *él/ella/ellos/ellas* to those syntactic positions where their corresponding (but ‘smaller’) 3rd person D-clitics *lo(s)/la(s)/le(s)* are independently excluded.²⁴ Based on this novel observation, I will argue that in φ -doubling structures, the 3rd person pronouns that appear in object position must be syntactically bound in their LBD not because they are doubled by *se*, but rather because their corresponding D-clitics cannot be licensed under such binding conditions.

²⁴ In section 2.4.2. I will also explain why the ER does not affect pronominal D-doubling or the φ -doubling possibilities of the Spanish 1st and 2nd person non-clitic pronouns *mí/ti/nosotros/vosotros*.

2.4.1. ϕ -Doubling Constructions.

In φ -doubling constructions, the Spanish 1st/2nd/3rd person non-clitic pronouns *mi*, *ti*, *él* etc. that appear in object position can corefer, but not covary, in their LBD with a referring DP bearing focus. To illustrate this, consider the interpretation of the *pronominal* φ -doubling examples in (110)-(112).

- (110) Solo YO me voté a mí.

Only I(NOM) 1.sg.DO voted A me(ACC)

- a. I am the only person x such that x voted for y(=me). (coreference)
 - b. I am the only person x such that x voted for x. (*variable binding)

- (111) Solo TÚ te criticaste a ti.

only you(NOM) 2.sg.DO criticized A you(ACC)

- a. You were the only person x such that x criticized y(=you). (coreference)
 - b. You were the only person x such that x criticized x. (*variable binding)

- (112) Solo JUAN se votó a él.

only J.(NOM) 3.sg/pl.DO voted A him(ACC)

- a. Juan was the only person x such that x voted for y(=Juan). (coreference)
 - b. Juan was the only person x such that x voted for x. (*variable binding)

All the *pronominal* φ-doubling sentences in (110)-(112) are grammatical under the coreference reading informally represented in (110a)-(112a), but ungrammatical under the bound variable reading in (110b)-(112b).

Under the *Agree* analysis of the Spanish φ -clitics *me/te/se/nos/os* (section 2.3.), the *syn-binding* LFs of (110)-(113) and their corresponding *sem-binding* LFs would roughly correspond to the LF structures (113a)-(115a) and (113b)-(115b), respectively. Since the φ -features values associated with v as a result of Agree are deleted for the purposes of LF, I will omit them for the LF representation in (113)-(115).

(113) a. syn-binding LF of (110):

$$[\text{TP solo YO}^1 \text{ T } [\text{vP V } [\text{VP voté a mí}^1]]] \quad (\checkmark \text{HLB!}; \checkmark \text{Pr B})$$

b. sem-binding LF of (110):

$$[\text{TP solo YO}^1 [\text{T' } \lambda^1 \text{ T } [\text{vP V } [\text{VP voté a mí}^1]]]] \quad (\checkmark \text{HLB!}; \times \text{Pr B})$$

(114) a. syn-binding LF of (111):

$$[\text{TP solo TÚ}^1 \text{ T } [\text{vP V } [\text{VP criticaste a ti}^1]]] \quad (\checkmark \text{HLB!}; \checkmark \text{Pr B})$$

b. sem-binding LF of (111):

$$[\text{TP solo TÚ}^1 [\text{T' } \lambda^1 \text{ T } [\text{vP V } [\text{VP criticaste a ti}^1]]]] \quad (\checkmark \text{HLB!}; \times \text{Pr B})$$

(115) a. syn-binding LF of (112):

$$[\text{TP solo JUAN}^1 \text{ T } [\text{vP V } [\text{VP votó a él}^1]]] \quad (\checkmark \text{HLB!}; \checkmark \text{Pr B})$$

b. sem-binding LF of (112):

$$[\text{TP solo JUAN}^1 [\text{T' } \lambda^1 \text{ T } [\text{vP V } [\text{VP votó a él}^1]]]] \quad (\checkmark \text{HLB!}; \times \text{Pr B})$$

In the *sem-binding* LFs in (113b)-(115b), the object pronouns are semantically bound by their clause-mate subject, while in the *syn-binding* LFs in (113a)-(115a) these very same object pronouns are syntactically bound by their clause-mate subject. The object pronouns in (113a)-(115a) could thus be semantically bound by their clause-mate subjects. Consequently, following to the HLB!, the former must be semantically bound by their clause-mate subjects, unless that changes the interpretation of the example.

In this respect, note that the *syn-binding* LFs in (113a)-(115a) and their corresponding *sem-binding* LF in (113b)-(115b) produce different meanings: namely, while the former give rise to the coreference interpretation of (110)-(112) that I have informally represented in (110a)-(112a), the *sem-binding* LFs in (113b)-(115b) yield the bound variable interpretation of (110)-(112) represented in (110b)-(112b). Hence, HLB! in (57) does not cause the *sem-binding* LFs in (113b)-(115b) to block their alternative *syn-binding* LFs in (113a)-(115a). Nor does Büring's Principle B in (52) exclude the *syn-binding* LFs in (113a)-(115a). This is so because the object pronouns *mí* in (113a), *ti* in

(114a) and *él* in (115a) turn out to be semantically free in their LBD. However, Büring's Principle B in (52) does exclude the *sem-binding* LFs in (113b)-(115b): the object pronouns *mi^l* in (113b), *ti^l* in (114b) and *él^l* in (115b) are bound in their LBD by the binder prefix λ^1 .

Notice that Büring's analysis of Principle B (section 2.2.2) correctly derives the following two facts. On the one hand, it excludes the *sem-binding* LFs of (110)-(112) given in (113b)-(115b), where the non-clitic pronouns *mi* in (113b), *ti* in (114b) and *él* in (115b) fail to be semantically free in their LBD. On the other hand, the HLB! in (57) does not cause the *sem-binding* LFs in (113b)-(115b) to block their alternative *syn-binding* LFs in (113a)-(115a). This is so because the interpretation of the *syn-binding* LFs in (113a)-(115a) is not truth-conditionally equivalent to that of their alternative *sem-binding* LFs in (113b)-(115b).

In this way, the fact that in the *pronominal* φ -doubling examples in (110)-(113), the pronouns *mi*, *ti* and *él* can be syntactically bound by a coreferential DP bearing focus turns out to be a crucial fact: it shows that the Spanish φ -clitics *me/te/se/nos/os* lack the referential/semantic properties needed to affect the referential interpretation of the object pronouns that appear in a hierarchically lower position in the structure.

Crucially, this stands in sharp contrast to what happened with the D-clitics which, as I showed above, are semantically 'defective' pronouns (C&S1999), but still possess the referential/semantic properties necessary to affect the semantic/referential interpretation of the doubled non-clitic pronoun.

These two facts together provide new empirical evidence in favor of the hypothesis defended in this thesis that Spanish D-clitics are pronominal-like elements, while φ -clitics are object agreement morphemes without referential properties.

2.4.2. The Economy of Pronominal Forms.

As I have shown in the previous section, the 3rd person φ-clitic *se* must double the 3rd person non-clitic pronouns *él/ella/ellos/ellas* when the latter are syntactically bound in their LBD by their clause-mate subject. This is similar to what happened with the 1st/2nd person φ-clitics *me/te/nos/os*, which must double the 1st/2nd person pronouns *mí/ti/nosotros/vosotros* under the same conditions. However, a well-known (but largely neglected) difference between the Spanish 3rd person φ-clitic *se* and the 1st/2nd φ-clitics *me/te/nos/os* is that while the latter cannot double a pronoun that is interpreted as disjoint in reference from its clause-mate subject, the φ-clitic *se* cannot.

To illustrate this difference, let us consider the referential interpretation available for the doubled pronouns in the Spanish φ-doubling sentences in (116) and in (117).

- (116) Solo JUAN se votó a él.

only J.(NOM) 3.sg/pl.DO voted A him(ACC)

- a. Juan was the only person x such that x voted for Juan. (coreference)
- b. Juan was the only person x such that x voted for x. (*variable binding)
- c. Juan was the only person x such that x voted for y. (*disjoint reference)

- (117) a. *Yo se voté a él.

I(NOM) 3sg/pl.DO voted A him(ACC)

(intended) ‘I voted him.’

- b. Juan me vio a mí.

J.(NOM) 1sg.DO saw A me(ACC)

‘Juan saw me.’

In (116), the 3sg DO non-clitic pronoun *él* must be coreferential with its clause-mate subject JUAN, as represented in (116a), but cannot covary with JUAN, as in (116b), or be interpreted as disjoint in reference from the latter, as in (116c). That is, the 3rd person DO pronoun *él* doubled by *se* in (116) must be obligatorily interpreted as coreferential with its clause-mate subject JUAN.

The ungrammatical φ -doubling sentence in (117a) makes this fact even more evident. In (117a), the 3sg DO pronoun *él* is doubled by *se* and must be interpreted as coreferential with its clause-mate subject *yo* ('I'). However, this is not possible in this example because *él* 'him' and *yo* 'I' have different φ -feature values and these two pronouns cannot refer to same individual.

Finally, consider the φ -doubling example in (117b), which differs from (117a) in the way the doubled pronoun must be interpreted. In (117b), the 1sg DO pronoun *mi* is doubled by the 1sg DO φ -clitic *me* and must be interpreted as disjoint in reference from its clause-mate subject *Juan*. Thus, in contrast to the doubled pronoun *él* in (117a), *mi* in (117b) does not require to be coreferential with its clause-mate subject; otherwise, the φ -doubling (117b) would be ungrammatical, contrary to what we observe.

In sum, unlike the rest of φ -clitics, the φ -clitic *se* appears to impose restrictions on the referential interpretation of the doubled pronoun.

At first sight, this fact is problematic for the analysis of *se* as an object agreement morpheme; for the object pronouns doubled by *se* do not exhibit the same referential possibilities that are available for the object pronouns doubled by the rest of φ -clitics (i.e., *me/te/nos/os*).

However, in the remainder of this section, I will argue that, in spite of appearances, the clitic *se* does not constrain the referential possibilities of the doubled pronoun. In order to do so, I will show that the Spanish 3rd person pronouns *él/ella/ellas/ellos* can only be inserted in those syntactic positions where their corresponding 3rd person D-clitic *lo(s)/la(s)/le(s)* are independently excluded. As I will show, the complementary distribution found between D-clitics and their non-clitic counterparts will play a fundamental role in explaining why the 3rd person pronouns *él/ella/ellos/ellas* must be syntactically bound in their LBD when doubled by the clitic *se*. The main goal of this section will thus be to offer an analysis of the Spanish clitic *se* that is able to account in a principled way for the syntactic and semantic properties that this clitic displays in this language.

With this goal in mind, let us start by examining the two alternative LF representations that would correspond to the ungrammatical φ -doubling examples in (118). In these examples, we have an object pronoun, *él*, which is doubled by the clitic *se* and a non-referential QNP, *nadie/todo dios*, in subject position. For reasons that will become clear shortly, the badness of the φ -doubling sentence in (118) turns out to be relevant from the standpoint of Büring's analysis of Principle B.

In *sem-binding* the LF in (119a), 3sg DO non-clitic pronoun *él^l* is bound by the binder prefix λ^1 in its LBD, in violation of the Principle B in (54). Hence, this Principle correctly rules out the *sem-binding LF* in (119a) that corresponds to the ungrammatical φ -doubling sentences in (118).

Consider, now, the alternative LF in (110b). In this structure, the 3sg DO strong pronoun *él* is semantically free in its LBD, and therefore Büring's Principle B in (52) rules (119b) in. In this LF structure, the reference of the doubled pronoun *él* is thus determined by the assignment function g , such that $[[\text{él}^l]]^g = g(l)$, as roughly shown in (120). For convenience, the truth-conditions associated with the LF in (120) are translated into English.

- (120) $\llbracket [TP \{nadie/todo\} T [vP v [VP odiaba [DP a él]¹]]] \rrbracket^g$
 no.one/every body hated A him
 = 1 iff {no one/every body} $\lambda x.[x \text{ hated } g(1)]$

Also note that the *sem-binding* LF in (119a) and its alternative LF in (119b=120) produce different meanings; thereby, the HLB! in (57) does not cause the *sem-binding* LF

in (119a) to block its alternative LF in (119b=120). That is, neither Büring's Principle B in (52) nor the HLB! in (57) can explain by themselves why the φ -doubling examples in (129) in Spanish turn out to be ungrammatical under the meaning conveyed by the LF in (119b=120).

Instead, as I will show next in this section, the badness of the LF in (119b=120) corresponding the φ -doubling sentence in (118) correlates with the fact that the very same meaning conveyed by (119b=120) is independently produced by the D-clitic sentence in (121) in Spanish.

- (121) {Nadie/Todo dios} lo odiaba.
no.one/every one(NOM) 3.msc.sg.DO hated
‘{No one/Every body} hated him.’

In contrast to the ungrammatical φ -doubling sentence in (118), where the DO is realized by 3sg DO non-clitic pronoun *él* ‘him’, in the grammatical D-clitic sentence in (121), the DO is realized by the 3sg DO D-clitic *lo* ‘him’. As I will show now, despite this difference regarding the realization of the DO, the actual meaning of the grammatical sentence in (121) is identical to the meaning produced by the LF in (119b=120) which corresponds to the ungrammatical φ -doubling example in (118).

To illustrate this, let us first consider the relevant part of the syntactic derivation corresponding to the D-clitic example in (121), as represented in (122) (cf. section 3.2.1). For the ease of the argumentation, I will concentrate only on those syntactic aspects of (122) that are relevant for the syntax of D-clitics.

- (122) a. [_{vP} {nadie/todo dios} [_v v [_{VP} odiaba D¹]]]]
b. [_{vP} {nadie/todo dios} [_v D¹+v [_{VP} odiaba t_D]]]]

The D-clitic in (121a) starts in an argument position inside the VP and later on moves up to adjoin to v, as shown in (122b). Thus, the resulting syntactic representation in (122b) may be associated either with the *sem-binding* LF in (123a) or with the alternative LF representation in (123b),

- (123) a. $[\text{TP} \{ \text{nadie/todo dios} \} [\text{T} \lambda^1 \text{T} [\text{vP} [\text{vD}^{1+}\text{v}] [\text{VP} \text{odiaba t}_D]]]]$ (\times Pr. B)
 b. $[\text{TP} \{ \text{nadie/todo dios} \} \text{T} [\text{vP} [\text{vD}^{1+}\text{v}] [\text{VP} \text{odiaba t}_D]]]$ (\checkmark Pr. B)

In the *sem-binding* LF in (123a), the D-clitic D^l turns out to be semantically bound by the quantifying NPs *nadie/todio dios* in its LBD; hence, the Principle B in (52) rules out the *sem-binding* LF in (123a) (cf. section 2.3.2.1).

By contrast, in the LF in (123b), the D-clitic D^1 turns out to be semantically free in its LBD in (123b), in compliance with Principle B in (52). In this LF structure, the reference of the D-clitic D^1 is thus determined by the assignment function g , as shown in (124).

Thus, the meaning conveyed by the *D-clitic* LF in (124) is truth-conditionally equivalent to the meaning produced by the ungrammatical *φ-doubling* LF in (119b=120) above, repeated here as (125) for convenience.

- (125) $\llbracket [TP \{nadie/todo\ dios\} [vP v [VP odiaba [DP a él]¹]]] \rrbracket^g$
 no.one/every body hated A him
 = 1 iff {no one/every body} $\lambda x.[x \text{ hated } g(1)]$

The most relevant difference between the two truth-conditionally equivalent LFs in (124) and (125) is that the verb *odiaba* ‘hated’ is merged with the 3sg DO D-clitic *lo* ‘him’ in the grammatical *D-clitic* LF in (124), while this very same verb is merged with the 3sg DO non-clitic pronoun *él* ‘him’ in the ungrammatical *φ-doubling* LF in (125). This being the most relevant difference between the grammatical *D-clitic* LF in (124) and its truth-conditionally equivalent (but ungrammatical) *φ-doubling* LF in (125), the problem with the latter may be thus described as follows:

(126) *Complementary distribution between D-clitics and their 3rd person counterparts*

For a given position α , if either a D-clitic A or a non-clitic pronoun B may be inserted in α and $\llbracket A \rrbracket^g = \llbracket B \rrbracket^g$, then A must be inserted in α (if possible).

What (126) says is that if a D-clitic and a non-clitic pronoun with the same meaning compete to be inserted in a given position α in the clause structure, then it must be the D-clitic that is inserted in α . Only if the D-clitic is independently excluded can its corresponding non-clitic pronoun in Spanish be inserted in α . If this is correct, the badness of the φ -doubling LF representation in (125) would come from the fact (to be explained below) that the verb *odiaba* is merged with the 3sg DO non-clitic pronoun *él* in (125), rather than with its corresponding 3sg DO D-clitic *lo*, as in the grammatical *D-clitic* LF representation in (124).²⁵

Support in favor of this analysis comes from the fact that in Spanish the 3rd person pronouns *él/ella/ellos/ellas* turn out to be grammatical in those syntactic positions where their corresponding 3rd person DO/IO D-clitics *lo(s)/la(s)/le(s)* are independently excluded.²⁶ For instance, as we have seen in section 2.3.2.1., the D-clitics *lo(s)/la(s)/le(s)*

²⁵ It is also worth mentioning that (126) correctly captures the fact that Spanish 1st and 2nd person non-clitic pronouns like *mí, ti, nosotros* etc., for which a corresponding D-clitic does not exist in this language (all the D-clitics *lo(s)/la(s)/le(s)* are inflected only for 3rd person), may be inserted in syntactic positions where a D-clitic may also be inserted, but with a different meaning in each case. For instance, the 1st person φ -doubling sentence in (ia) and the 3rd person D-clitic sentence in (120a), repeated here as (ib), are both grammatical in Spanish, but not with the same meaning.

- | | | |
|-----|---|--|
| (i) | a. Nadie me vio a mí.
no.one 1sg.DO saw A me
'No one saw me.' | b. Nadie lo vio.
no.one 3sg.msc.DO saw
'No one saw him.' |
|-----|---|--|

The 1sg DO non-pronoun *mí* in (ia) refers to the speaker of (ia), while the 3sg DO clitic *lo* in (ib) refers to a salient individual in the context that is neither the speaker nor the addressee of (ib). Consequently, the meaning of the 1st person φ -doubling sentence in (ia) will be necessarily different from that of the 3rd person D-clitic sentence in (ib). By contrast, as explained in the text, the ungrammatical 3rd person φ -doubling sentence in (116), repeated here as (ii), it is truth-conditionally equivalent to the grammatical 3rd person D-clitic sentence in (ib).

- | | |
|------|---|
| (ii) | *Nadie se vio a él.
no.one 3.refl saw A him
'No one saw him.' |
|------|---|

²⁶ Recall that, following Uriagereka's big-DP analysis of clitic doubling, the D-clitic and the doubled pronoun in (i) are not inserted in the same syntactic slot: the doubled pronoun occupies the specifier position of a Big-

cannot be syntactically bound in their LBD by a coreferential DP bearing focus, as the ungrammatical D-clitic examples in (127a) and in (127b) in Spanish demonstrate; coindexing indicates coreference.

(127) *D-clitics*

- a. *Solo JUAN¹ lo¹ criticó.
only J. 3.msc.sg.DO criticized
'Only JUAN criticized him'
- b. *Solo MARÍA¹ la¹ criticó.
only M. 3.fem.sg.DO criticized
'Only MARÍA criticized her.'

Neither the 3sg masculine DO D-clitic *lo* nor the 3sg feminine DO D-clitic *la* can corefer with their intended binders in (127a) and in (127b): i.e., JUAN and MARÍA, respectively. As explained at length in section 2.3.2., the badness of the D-clitic sentences in (127a) and in (127b) comes from the fact that in Spanish, D-clitics and focus-marked DPs must refer to different discourse referents and *a fortiori* they cannot corefer.

Crucially, this stands in sharp contrast to what happens with the grammatical φ-doubling sentences in (128). In these sentences, the 3sg masculine DO pronouns *él* 'him' in (128a) and the 3sg feminine DO pronoun *ella* 'her' in (128b) turn out to be grammatical under the same conditions making their corresponding 3sg DO D-clitics *lo* and *la* ungrammatical in the D-clitic sentences in (127a) and (127b), respectively.

DP and the D-clitic corresponds to the head of the Big-DP. Therefore, (126) does not apply to (i) (see also fn. 27).

(i) Juan lo vio a él.
J.(NOM) 3msc.sg.DO saw A him(ACC)
'Juan saw him.'

(128) φ -doubling

- a. Solo JUAN¹ se votó a él¹.
only J. 3.sg/pl.DO voted A him
(lit.) ‘Only JUAN voted for him.’
- b. Solo MARÍA se votó a ella.
only M. 3.sg/pl.DO voted A her
(lit.) ‘Only MARÍA voted for her.’

In (128a), the 3sg DO non-clitic pronoun *él* is syntactically bound in its LBD by a coreferential DP bearing focus, JUAN. This is exactly the opposite of what happened with its corresponding 3sg DO D-clitic *lo* and its binder JUAN in the ungrammatical D-clitic sentence in (128a), where the coreference relation between the 3sg DO D-clitic *lo* and *JUAN* is excluded for independent reasons (see section 2.3.2). The same goes for the 3sg feminine DO non-clitic pronoun *ella* in (128b), which turns out to be grammatical under the same conditions that make its corresponding 3sg feminine DO D-clitic *la* ungrammatical in the D-clitic example in (127b) in Spanish.

In sum, what this shows is that in Spanish 3sg non-clitic pronouns like *él* and *ella* can be only inserted in syntactic positions where their corresponding 3sg D-clitics *lo* and *la* are independently excluded, as correctly described by (126), repeated here for convenience.

(126) *Complementary distribution between D-clitics and their 3rd person counterparts*

For a given position α , if either a D-clitic A or a non-clitic pronoun B may be inserted in α and $\llbracket A \rrbracket^g = \llbracket B \rrbracket^g$, then A must be inserted in α (if possible).

In what follows, I will propose that the facts emerging from (126) in Spanish can be derived from C&S1999’s Economy of Representation (ER) in (130).

(130) Economy of Representation (ER) (C&S1999)

Minimise structure (up to crash)

This principle states that, within the following hierarchy of pronouns, the pronoun with the smaller structure must be obligatorily chosen if possible: clitic pronouns (D^0) < non-clitic pronouns (DP). Specifically, what C&S1999 contend is that the ER in (120) guides the choice between non-clitic and (D-)clitic pronouns. This is because, for a given position α in the clause structure, the ER in (120) requires the pronoun with smaller structure to be inserted in α (up to crash). Only if the pronoun with the smaller structure is independently ruled out is the bigger alternative possible.

Assuming the ER in (130), let us consider, once again, the two LF representations in (124) and (125), repeated here as (131a) and (131b) for convenience.

- (131) a. $\llbracket [TP \{nadie/todo\} T [vP D_{<lo>} + v [VP odiaba t_{D_{<lo>}}]]] \rrbracket^g$ (\checkmark ER)

no.one/every body	hated
-------------------	-------

$= 1 \text{ iff } \{\text{no one/every body}\} \lambda x. [x \text{ hated } g(1)]$

b. $\llbracket [TP \{nadie/todo\} T [vP v [VP odiaba [DP a él]¹]]] \rrbracket^g$ (\times ER)

no.one/every body	hated	A him
-------------------	-------	-------

$= 1 \text{ iff } \{\text{no one/every body}\} \lambda x. [x \text{ hated } g(1)]$

As explained before, the two LF representation in (131a) and (131b) produce the same meaning. The only difference between these two LFs is that while the verb *odiaba* ‘hated’ is merged with the 3sg DO D-clitic *lo* ‘him’ in the *D-clitic* LF in (131a), this very same verb is merged with the 3sg DO non-clitic pronoun *él* in its truth-conditionally equivalent *φ-doubling* LF in (131b). Notice further that the 3sg DO D-clitic *lo* in (131a) is an intransitive D head, whereas the 3sg DO non-clitic pronoun *él* in (131b) consists of a D head which takes a phonetically NP as its complement. Thus, the 3sg DO non-clitic pronoun *él* in (131b) has more structure than its corresponding 3sg DO D-clitic *lo* in (131a). Hence, the ER in (130), according to which a pronoun with smaller structure must be inserted if possible, correctly excludes the *φ-doubling* LF representation in (131b), which corresponds to the ungrammatical Spanish *φ-doubling* example in (118), repeated here as (132) for convenience.

(132) *3rd person pronominal φ-doubling*

- *{Nadie/Todo dios} se odiaba a él.
no.one/every one 3.sg/pl.DO hated A him
(lit.) ‘{No one/Every one} hated him.’

Therefore, if we adopt C&S1999’s ER in (130), then the badness of the φ-doubling sentences in (132) is directly derived as a consequence of the obligatory choice of the D-clitic over the non-clitic pronoun: namely, of the obligatory choice of *lo* over *él*. As shown in (122), repeated here as (133), the 3sg D-clitic *lo* turns out to be independently available for the DO position, and consequently, this pronominal form must be chosen over ‘bigger’ alternatives (in this case, its 3sg non-clitic counterpart *él*).

(133) *D-clitic pronouns*

- {Nadie/Todo dios} lo odiaba.
no.one/every one 3.msc.sg.DO hated
'{No one/Every one} hated him.'

Thus, if we adopt C&S1999’s ER in (130) we can correctly exclude the choice of the ‘bigger’ 3sg DO pronoun *él* in the ungrammatical φ-doubling example in (132). Again, this follows from the fact the 3sg DO D-clitic *lo* is structurally smaller than the 3sg DO pronoun *él*, so this is the form that must be inserted.

If, however, the insertion of the D-clitics *lo(s)/la(s)/le(s)* is independently excluded, as in the *coreference* D-clitic sentences in (134) in Spanish, the ER in (130) correctly predicts that the insertion of the ‘bigger’ 3rd person pronouns *él/ella/ellos/ellas* will be possible in this case, as the grammatical φ-doubling examples in (135) demonstrate.

(134) *D-Clitic pronouns*

- a. *Solo JUAN¹ lo¹ criticó.
only J. 3.msc.sg.DO criticized
'Only JUAN criticized him'

- b. *Solo MARÍA¹ la¹ criticó.
 only M. 3.fem.sg.DO criticized
 ‘Only MARÍA criticized her.’

(135) 3rd person pronominal φ-doubling

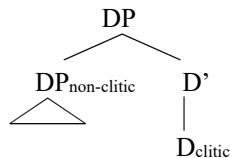
- a. Solo JUAN¹ se votó a él¹.
 only J. 3.sg/pl.DO voted A him
 (lit.) ‘Only JUAN voted for him.’
- b. Solo MARÍA¹ se criticó a ella¹.
 only M. 3.sg/pl.DO criticized A her
 ‘Only MARÍA criticized her.’

What we see in (135) is that if we adopt C&S1999’s ER in (130) we can provide a principled account of the choice of the ‘bigger’ 3sg DO non-clitic pronouns *él* and *ella* in these structures.²⁷

Summarizing so far, in this section I have shown that unlike the rest of φ-clitics, the φ-clitic *se* seems to impose restrictions on the referential interpretation that are

²⁷ A clarification note on *pronominal* D-doubling constructions in Spanish is in order here. Following Uriagereka’s Big-DP hypothesis, in these constructions the D-clitic is the head of a Big-DP, while the doubled pronoun corresponds to a full-articulated DP inserted in the specifier of the Big-DP, as shown in (i).

- (i) Uriagereka’s Big-DP hypothesis



In (i), the non-clitic pronoun DP and the D-clitic are inserted in different positions and consequently, the ER in (130) is not at stake here. This is so because the non-clitic pronoun DP and the D-clitic in the Big-DP in (i) are not competing for being inserted in the same syntactic slot. This accounts for the fact that pronominal doubling is optional in the D-clitic sentences in (133) in Spanish, as shown in (ii).

- (ii)
- a. {Nadie/Todo dios} lo odiaba (a él).
 no.one/every one 3.msc.sg.DO hated A him
 ‘{No one/Every one} hated him.’
 - b. ¿Quién lo odiaba (a él)?
 who 3.msc.sg hated A him
 ‘Who hated him?’

available for the doubled pronoun in the absence of clitic doubling. Specifically, the 3rd person pronouns *él/ella/ellos/ellas* that are doubled by the φ-clitic *se* must be syntactically bound in their LBD by their clause-mate subject. However, I have argued that, despite appearances to the contrary, the clitic *se* does not constraint the referential possibilities of the doubled pronoun.

In order to do so, I have shown that the Spanish 3rd person pronouns *él/ella/ellas/ellos* can only be inserted in those syntactic positions where their corresponding 3rd person D-clitic *lo(s)/la(s)/le(s)* are independently excluded. This turns out to be a crucial fact: it shows that in object position, the Spanish 3rd person pronouns *él/ella/ellos/ellas* triggering object agreement (i.e., *se*-doubling) must be syntactically bound in their LBD by a focus-marked DP because these are the conditions under which their (smaller) 3rd person D-clitic counterparts *lo(s)/la(s)/le(s)* cannot be inserted in the same position (section 2.3.2.). If this is correct, the Spanish 3rd person pronouns *él/ella/ellos/ellas* that surface in DO/IO position must be syntactically bound in their LBD not because they are doubled by *se*, but because their corresponding 3rd person D-clitics *lo(s)/la(s)/le(s)* cannot be licensed under such binding conditions.

Following C&S1999, I have further suggested that in Spanish, the complementary distribution found between D-clitics and their non-clitic counterparts follows from economy. Specifically, C&S1999 contend that, in languages with both clitic and non-clitic pronouns, the choice between these two types of pronouns is guided by the Economy of Representation (ER). According to this principle of economy, a smaller structure (the D-clitic) must be chosen if possible. Only if the smaller structure (the D-clitic) is independently ruled out is the bigger alternative (the non-clitic pronoun) possible. As I have shown, we only need to assume C&S1999's ER to account for the fact that in Spanish, the 3rd person pronouns *él/ella/ellos/ellas* are only inserted in those syntactic positions where their corresponding (but ‘smaller’) 3rd person D-clitics *lo(s)/la(s)/le(s)* are independently excluded.

2.5. Conclusions.

I have presented in this chapter the results of a detailed research I have conducted on the referential interpretation that the Spanish (non-reflexive) pronouns *mi*, *ti*, *él* etc. exhibit in the two following configurations: (i) in the absence of clitic doubling and (ii) in clitic doubling constructions, where pronouns appear in object (DO/IO) position and must be doubled either by a φ-clitic or by a D-clitic.

The goal of this investigation was to find and describe the different types of referential interpretations available for pronouns in these two different configurations, with the purpose of addressing the following two questions:

- Q1** In clitic doubling, do doubled pronouns trigger the same range of semantic interpretations that are independently available for them in the absence of clitic doubling?
- Q2** If the semantic/referential interpretation exhibited by a pronoun is not the same in these two syntactic constructions (in clitic doubling vs. non-clitic doubling structures), what is exactly the role that the object clitic plays in the semantic interpretation of the doubled pronoun?

- As for ***Question 1***, the results of my investigation can be broadly summarized as follows:

- (A) Pronouns must be *semantically* free in their LBD in all the syntactic configurations that we have studied: i.e., in φ - and D-doubling, as well as in the absence of clitic doubling.
- (B) Pronouns can be *syntactically* bound in their LBD by a coreferential DP bearing focus in φ -doubling constructions and in the absence of clitic doubling. However, they cannot be syntactically bound by a coreferential focused DP when they are doubled by a D-clitic pronoun.

What we can conclude from (A) is that all Spanish pronouns are subject to Büring's Principle B, according to which a pronoun must be *semantically* free (not bound by any binder prefix) in its LBD (section 2.2.2). Thus, with regard to Principle B, Spanish pronouns behave alike irrespective of their syntactic configuration; that is, they show exactly the same behavior in clitic doubling and in the absence of clitic doubling.

With regard to *syntactic* binding, I have shown that while Spanish pronouns can be syntactically bound by a coreferential focused DP both in the absence of clitic doubling and when they are doubled by a φ -clitic, crucially this is not possible when they are doubled by a D-clitic, as summarized in (B).

Thus, what (B) shows is that there exists a (previously unnoticed) difference in the referential possibilities that pronouns exhibit in D-doubling constructions and in the absence of clitic doubling. Accounting for this difference thus immediately falls under the scope of *Question 2*.

- ***Question 2:*** how specifically does the doubling D-clitic contribute to this change in the referential possibilities of the doubled pronoun?

To address this question, I have looked at: (i) the semantics properties that D-clitics and their non-clitic counterparts display in Spanish; and (ii) the syntactic relation that the D-clitic must establish with the doubled pronoun in D-doubling constructions.

- First, following C&S1999's influential work on defective pronouns, I have shown in section 2.3.2. that the D-clitics *lo(s)/la(s)/le(s)* turn out to be semantically defective in comparison with their non-clitic counterparts in Spanish. In particular, D-clitics must, but non-clitic pronouns are allowed to, refer to what C&S1999 call *prominent/familiar* discourse referents. This observation is important because focus-marked DP are commonly considered to represent new or non-familiar information in the discourse. Therefore, if C&S1999' observation is on the right track, D-clitics will not be compatible with a focus-marked antecedent: while D-clitics must refer to a prominent/familiar discourse referent, focused DP must refer to a discourse antecedent that represent new or non-familiar information in the discourse.
- Second, D-clitics and the object pronouns that they double must both refer to the same discourse referent. In section 2.3.3., I have proposed that this is possible because the D-clitic and the doubled pronoun must share the same referential index. Consequently, if this assumption is correct, the doubled pronoun should not be able to take a focus-marked DP as its syntactic binder. This is so because the doubled pronoun is coindexed with a D-clitic and the latter, due to its defective semantic status (C&S1999), is not able to corefer with a DP referring to a non-prominent/non-familiar discourse referent. As a consequence, the doubled pronoun coindexed with the D-clitic will not be able to corefer with a non-prominent discourse antecedent either; otherwise, the doubled pronoun and the D-clitic will end up referring to different discourse referents, which is not possible in clitic doubling.

Thus, **the two main conclusions we can draw from this chapter are the following:**

- i) The Spanish D-clitics *lo(s)/la(s)/le(s)* are semantically defective pronouns. However, despite this semantic deficiency, they still have the referential/semantic properties

necessary to affect the referential possibilities that are independently available for the doubled pronoun elsewhere (i.e., in the absence of clitic doubling).

- ii) In contrast, the Spanish φ -clitics *me/te/se/nos/os* do not affect the referential possibilities that are independently available for the doubled pronoun. This fact is crucial: it shows that unlike D-clitics, φ -clitics do not have the referential/semantic properties necessary to affect the referential interpretations that are independently available for the doubled pronouns.

These two facts together provide strong empirical evidence in favor of the hypothesis, defended in this thesis, according to which D-clitics are pronominal-like heads cliticizing to the verb while φ -clitics are verbal agreement morphemes on the verb that cross-reference an object DP (DO/IO) in a structurally lower position.

CHAPTER 3

The Syntax of *Anaphoric Doubling* in Spanish

3.1. Introduction.

In Spanish the reflexive pronouns in Table 3.1. must be obligatorily doubled by a φ-clitic (i.e., the Spanish 1st/2nd/3rd DO/IO φ-clitics *me/te/se/nos/os* in Table 3.4. below).

Table 3.1 **REFLEXIVE PRONOUNS (SPANISH)**

singular		plural		
	masculine	feminine	Masculine	feminine
1st	mí mismo	mí misma	nosotros mismos	nosotras mismas
2nd	ti mismo	ti misma	vosotros mismos	vosotras mismas
3rd	sí mismo	sí misma	sí mismos	sí mismas

Table 3.4 ***DO/IO φ-CLITICS (SPANISH)***

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

Although this is a well-known property of these Spanish reflexive pronouns, it has not yet received a proper account. The examples in (1) illustrate this type of structures. As shown in (1a-f), the DO and IO anaphors must obligatorily co-occur with a (DO/IO) φ -clitic attached to the finite verb.

(1) *Obligatoriness of φ -clitic doubling with reflexive*

- a. Yo *(me) vi a mí mismo por televisión.
I(NOM) 1.sg.DO saw A myself(ACC) for TV
'I watched myself on TV.'
- b. Nosotros *(nos) votamos a nosotros mismos.
We(NOM) 1.pl.DO voted A ourselves(ACC)
'We voted for ourselves.'
- c. Tú *(te) criticaste a ti mismo en ese artículo.
You(NOM) 2.sg.DO criticized A yourself(ACC) in this paper
'You criticized yourself in that paper.'
- d. Vosotros *(os) votasteis a vosotros mismos.
You(NOM) 2.pl.DO voted A yourselves(ACC)
'You voted for yourselves.'

- e. Juan y Pedro *(se) criticaron a sí mismos
 J. and P.(NOM) 3.sg/pl.DO criticized to themselves(ACC)
 en la radio.
 on the radio
 ‘Juan and Pedro criticized themselves on the radio.’

- f. Pedro *(se) votó a sí mismo.
 P.(NOM) 3.sg/pl.DO voted A himself(ACC)
 ‘Peter voted for himself.’

Here and elsewhere in this chapter, I will employ the term ***anaphoric φ-doubling*** to refer to this class of structures where an object agreement morpheme (the φ-clitics in Table 3.1 below) surfaces attached to the finite verb/auxiliary and cross-references a 1st/2nd/3rd DO/IO reflexive pronoun (see Table 3.1).

As can be seen in Table 3.1, repeated below for convenience, Spanish reflexive pronouns inflect for person, number and gender. It is important to mention that in the examples in (1a-d), which involve 1st/2nd φ-clitics *me/te/nos/os* doubling the reflexive pronoun, the clitic agrees with the pronoun in person and number, but *not* in gender. Notice also that, in the case of the φ-clitic *se*, this clitic only matches the 3rd person feature of the object reflexive pronouns *sí mism(o/a)(s)* (but it does *not* match it in number or gender), as shown in (1e-f).

Table 3.1 **REFLEXIVE PRONOUNS (SPANISH)**

singular		plural		
	mASCULINE	fEMININE	mASCULINE	fEMININE
1st	mí mismo	mí misma	nosotros mismos	nosotras mismas
2nd	ti mismo	ti misma	vosotros mismos	vosotras mismas
3rd	sí mismo	sí misma	sí mismos	sí mismas

If, as I contend in this thesis, the Spanish φ -clitics *me/te/se/nos/os* are *true* object agreement morphemes (i.e., the morphological reflex of an Agree relation established between v and a lower argument DP inside the VP), we then expect these clitics to lack all the relevant semantic features necessary to affect the semantic interpretation of the reflexive pronouns that they double. The reason is that under the minimalist theory of Agree (Chomsky 1998, 2000, 2001, Béjar 2003, Rezac 2003, Preminger 2011 a.o.) which I have adopted in this thesis, the φ -features values associated with v as a result of Agree are morphologically realized as φ -agreement morphemes at PF, but are never mapped to the LF interface. This is so because φ -feature values are not semantically interpretable in verbal-type categories like the head v. If these theoretical assumptions are correct, we expect the semantic interpretation of object anaphors in sentences like (1), where they are doubled by a φ -clitic, to be identical to the interpretation that these very same anaphors license in the absence of clitic doubling.

In order to check this prediction, in what follows I will examine in detail the binding behavior of the reflexive pronouns in Table 3.1. both: i) in the absence of clitic doubling, and ii) in φ -doubling constructions. Our goal here will be to identify and classify the referential interpretations available for these reflexive pronouns in these two syntactic configurations, with the purpose of determining whether they are the same and remain constant or whether they change from one syntactic configuration to the other.

With this purpose in mind, I will first examine in section 3.2. the structural conditions ruling the anaphoric relations that, in the absence of clitic doubling, the Spanish reflexive pronouns in Table 3.1 are allowed to hold with a local antecedent. On the basis of this study, I will argue that the widely-accepted assumption that in Spanish anaphors (in our case, reflexive pronouns) must have a c-commanding antecedent in its LBD (see e.g., Bosque 1992; Bosque & Demonte 1999; Bosque & Rexach 2009; Eguren 2012; Verdecchia & Gallego 2015, and references cited therein) is not empirically correct, and must be changed in accordance with the new paradigms that I will present and discuss in this section. More specifically, based on the notion of semantic binding that I have adopted in this thesis (Büring's 2005; see discussion in Chapter 2, section 2.2. above), I will defend that the Spanish reflexive pronouns (in Table 3.1) not only require a c-

commanding binder in their LBD (as it has been often assumed until now), but must also meet a second requirement: namely, they must be *semantically* bound by their binders.

With these results in mind, in section 3.3. I examine the referential interpretations that are available for reflexive pronouns when they are doubled by a φ-clitic. I will show that in Spanish the reflexive pronouns doubled by a φ-clitic display exactly the same range of semantic interpretations that are independently available for these pronouns in the absence of φ-clitic doubling.

From an empirical point of view, this section contributes to the discussion on the interpretation available for reflexive pronouns in the literature by showing that: (i) Spanish reflexive pronouns must be semantically bound in their LBD, and (ii) this requirement must be met in all the syntactic environments where reflexive pronouns are licensed, irrespective of whether they are doubled by a φ-clitic or not. From a theoretical point of view, the results of this section also provide support in favor of the superiority of Büring's analysis of Binding Theory over competing alternative analyses.

In sharp contrast with φ-clitics, the Spanish **D**-clitics *lo(s)/la(s)/le(s)* (in Table 3.3.) are *not* allowed to double object anaphors (that is, they cannot double the 3rd person reflexive pronouns *sí mismo(o/a)/(s)* in Table 3.1.). Sentences where an object anaphor is doubled by a D-clitic result in sharp ungrammaticality, as shown in (2) for the DO D-clitics *lo(s)/la(s)* and in (3) for the IO D-clitics *le(s)*.

Table 3.3 **DO/IO D-CLITICS (SPANISH)**

DAT/IO		ACC/DO	
		msc	fem
SG	le	lo	la
PL	les	los	las

(2) • *Inability of DO D-clitics to double reflexive pronouns (anaphors).*

- a. *Juan lo vio a sí mismo.
J.(NOM) 3.msc.sg.DO saw A himself(ACC)
(lit.) ‘Juan saw himself’
- b. *María la criticó a sí misma.
M.(NOM) 3.fem.sg.DO criticized A herself(ACC)
(lit.) ‘María criticized herself.’
- c. *Ellos los golpearon a sí mismos.
They(NOM) 3.msc.pl.DO kicked A themselves(ACC)
(lit.) ‘They kicked themselves.’

(3) • *Inability of IO D-clitics to double reflexive pronouns (anaphors).*

- a. *Juan le contó la noticia a sí mismo.
J.(NOM) 3.sg.IO told the new(ACC) to himself(DAT)
(lit.) ‘Juan told the news to himself’
- b. *Ellas les enviaron una carta a sí mismas.
They(NOM) 3.pl.IO sent a letter(ACC) to themselves(DAT)
(lit.) ‘They sent a letter to themselves.’

To the best of my knowledge, this restriction on the doubling possibilities of the Spanish D-clitics has never been discussed before. So, this Chapter contributes to the general debate on this topic both from an empirical and a theoretical point of view since, in addition to formalizing this generalization for the first time, in section 3.4. it will also offer a novel account of the contrast exhibited by φ-clitics and D-clitics regarding their ability to double object reflexive pronouns (anaphors) in Spanish.

My analysis of this asymmetry is based on the hypothesis that Spanish D-clitics are pronominal-like elements; this will allow us to explain the ungrammaticality of the D-doubling sentences in (3a-e) in an easy way. The line of reasoning goes as follows. In Spanish, reflexive pronouns and D-clitics have opposite binding requirements. This means that they will not be able to satisfy them simultaneously when they are contained

within the same LBD. This is so because, while the D-clitics *lo(s)/la(s)/le(s)* must be semantically *free* in their LBD (cf. Chapter 2, section 2.3.), the reflexive pronouns *sí mism(o/a)/(s)* must be semantically *bound* in their LBD. As a consequence of this, when the doubled reflexive pronoun (anaphor) is bound in its LBD, the doubling D-clitic coindexed with it will end up also being bound in its LBD, in violation of Principle B. If, on the contrary, the doubling D-clitic turns out to be free in its LBD, then the doubled object reflexive pronoun (anaphor) coindexed with it will end up being free in its LBD (causing a Principle A violation). This is what explains the ungrammaticality of the relevant structures (cf. Rizzi 1990, Woolford 1999, Baker & Kramer 2018 and references cited therein).

In section 3.4.1. I will turn to some apparent counterexamples to the claim that in Spanish, the D-clitics *lo(s)/la(s)/le(s)* cannot double reflexive pronouns (anaphors) like *sí mism(o/a)/(s)*. Although at first sight such counterexamples would appear to be problematic for the analysis of Spanish D-clitics as pronominal clitics, I will argue that, upon closer inspection, the fact that D-clitic are allowed to double reflexive pronouns (anaphors) does not argue against, but rather in favor of, the hypothesis that D-clitics are clitic pronouns.

To be more specific, I will show that the 3sg reflexive pronoun *sí mismo* can only be doubled by a 3sg D-clitic under the following binding conditions: namely, the antecedent of the anaphor *sí mismo* must bind *sí mismo* from outside the LBD where the doubling D-clitic must be semantically free, in such a way that the latter is allowed to satisfy its binding requirements: i.e., Principle B.

The conclusions in this section will lead me to examine in detail the licensing conditions under which the reflexive pronoun *sí mismo* is able to take a long-distance antecedent in Spanish. The main empirical result of this study is that the antecedent of the long-distance *sí mismo* must be the logophoric center of the clause: i.e., the individual whose mental state or attitude the content of the proposition describes (cf. Sells 1987; Reinhart & Reuland 1991; Speas 2004; Pearson 2015; Reuland 2017; Sundaresan 2018; Charnavel 2019 and references cited therein). By contrast, the local *sí mismo* (i.e., the one having a c-commanding antecedent in its LBD) can, but does not have to, be antecedent by the logophoric center of the clause. Based on this contrast, which has gone unreported

until now, between *local* vs. *long-distance* reflexive pronouns in Spanish, I will defend that the Spanish reflexive pronoun *sí mismo* is in fact ambiguous between a *true* anaphor and a *logophoric* pronoun. In the first case, the local reflexive pronoun *sí mismo* is an anaphor and as such it is governed by Principle A. By contrast, long-distance *sí mismo* is a logophoric pronoun in disguise: namely, a pronoun that must refer to the perspective-bearer of the clause and consequently, is governed by Principle B (rather than by Principle A).

On the basis of this analysis, it will be easy to explain why D-clitics can double the logophoric pronoun *sí mismo*, but not its homophonous local/reflexive anaphor. This is so because the logophoric pronoun *sí mismo* must be bound by a perspective-bearer from outside the LBD domain where the doubling D-clitic must be free. Consequently, the D-clitic that doubles this logophoric pronoun will be allowed to satisfy its binding requirements: i.e., the D-clitic ends up being bound by the antecedent of the doubled logophoric pronoun, but from outside the LBD where it needs to be free (in accordance to Principle B). In contrast with this, it will not be possible for the D-clitic to satisfy its binding requirement (Principle B) in those cases where it doubles the reflexive anaphor *sí mismo*: the reason is that this latter element is an anaphor and, consequently, it must be bound within the same LBD where the doubling D-clitic must be free (causing a Principle B violation).

Finally, in the last section of this Chapter, I will briefly explore the consequences that the syntax of *anaphoric* clitic-doubling I will defend has for the acquisition of φ - and D-clitics in Spanish. More specifically, I will argue that Binding Theory, conceived as an innate component of Universal Grammar, forces Spanish children to exclude an analysis of the Spanish φ -clitics as pronominal clitics. Rather, on the basis of the clitic-doubling structures that are part of the Primary Linguistic Data (PLD), the Spanish children will be led to analyze φ -clitics as object agreement. I will further show that, in contrast with φ -clitics, the PLD that is available for Spanish children will lead them to analyze **D**-clitics only as pronominal clitics (and not as object agreement morphemes).

3.2. Principle A in Non-Clitic Doubling Constructions.

Recall the members of the set of reflexive pronouns, in Table 3.1., and non-reflexive pronouns in Table 2.3., repeated here for convenience.

Table 3.1 *REFLEXIVE PRONOUNS (SPANISH)*

	singular		plural	
	masculine	feminine	masculine	feminine
1st	mí mismo	mí misma	nosotros mismos	nosotras mismas
2nd	tí mismo	tí misma	vosotros mismos	vosotras mismas
3rd	sí mismo	sí misma	sí mismos	sí mismos

Table 2.3 (*NON-CLITIC*) *PRONOUNS IN SPANISH.*

	SUBJ (NOM)				NON-SUBJ (ACC, DAT, OBL)			
	SG		PL		SG		PL	
	msc	fem	msc	fem	msc	fem	msc	Fem
1st	yo	yo	nosotros	nosotras	mí	mí	nosotros	nosotras
2nd	tú	tú	vosotros	vosotras	ti	ti	vosotros	vosotras
3rd	él	ella	ellos	ellas	él	ella	ellos	ellas

Similarly to what we have seen for the oblique non-reflexive pronouns *mí/tí/él* etc. in Chapter 2, the Spanish reflexive pronouns (in Table 3.1.) which surface as complements of lexical prepositions (like *de* ‘of’, *por* ‘for’, *en* ‘in’ etc.) bear oblique case and cannot be doubled either by a φ- or a D-clitic. This is shown in (4) and in (5) for φ- and D-clitics, respectively.

(4) *Incompatibility between φ-clitics and oblique non-reflexive pronouns*

- a. Yo (*me) confiaba en mí mismo.
 I(NOM) 1.sg.DO/IO trusted on myself(OBL)
 ‘I trusted myself.’

- b. Juan (*se) desconfiaba de sí mismo.
 J.(NOM) 3.sg/pl.DO/IO distrusted of himself(OBL)
 ‘Juan distrusted himself’

(5) *Incompatibility between D-clitics and oblique non-reflexive pronouns*

- a. Juan (*lo/*le) desconfiaba de sí mismo.
 J.(NOM) 3.msc.sg.DO/3sg.IO distrusted of himself(OBL)
 ‘Juan distrusted himself’

- b. Ellos sólo (*los/*les) temen por sí mismos.
 they(NOM) only 3.msc.pl.DO/3.pl.IO fear for themselves(OBL)
 ‘They are only afraid for themselves.’

In (4), the oblique reflexive pronouns *mí mismo* and *sí mismo* are not allowed to co-occur with a cross-referencing φ-clitic attached to the finite verb. And the same goes true for the D-clitics in (5), which cannot co-appear with the 3rd person oblique anaphors *sí mismo(s)* that appear inside the PP.

Based on these incompatibilities, I will employ the term *anaphoric* non-clitic doubling constructions as a convenient label to refer to this class of Spanish structures, where the reflexive pronouns *mí/ti/sí-mismo* etc. (see Table 3.1 in section 2.1.) occur as sisters to a lexical preposition like *de* ‘of’, *por* ‘for’, *en* ‘in’ etc. and are *not* doubled by any clitic.

In this section, I will examine the structural conditions under which these reflexive pronouns in Table 3.1 must establish an anaphoric relation with a local antecedent in non-clitic doubling examples like (4) and (5) in Spanish. More specifically, based on Büring’s (2005) notion of semantic binding, which I have adopted in Chapter 2, I will put forth the

hypothesis that these Spanish reflexive pronouns must be *semantically* bound in their LBD, in accordance with Büring's Principle A in (6):

- (6) *Principle A* (Büring 2005):

An anaphor must be semantically bound in its LBD.

- (7) A binder prefix λ *sem(antically)-binds* an NP at LF if and only if

- (a) λ and NP are coindexed
- (b) λ c-commands NP
- (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP is not bound by any binder prefix λ in a phrase marker P, we say that NP is semantically free in P.

[Büring 2005:130]

The rest of this section is organized as follows. I start by presenting the widely-accepted assumption that the Spanish reflexive pronouns in Table 3.1 are anaphors that must have a c-commanding antecedent in their LBD (*see e.g.*, Bosque 1992; Bosque & Demonte 1999; Bosque & Gutiérrez-Rexach 2009; Eguren 2012; Verdecchia & Gallego 2015, and references cited therein). Then I move on to discussing the empirical evidence in favor of the version of Principle A given in (6). According to this principle, anaphors like the reflexive pronouns in Table 3.1. not only require a c-commanding antecedent (i.e., a binder) in its LBD, but must also be semantically bound by their binder.

Finally, I will compare the binding behavior that reflexive and non-reflexive pronouns display in the absence of clitic doubling. Here my goal will be to demonstrate that, for the purposes of Binding Theory, reflexive and non-reflexive pronouns are in complementary distribution. Namely, reflexive pronouns must be bound in the same LBD where their non-reflexive counterparts (i.e., the Spanish non-reflexive pronouns in Table 2.3) must be free. As I will show in the sections to come, this fact will play a fundamental role in the analysis of the two different types of clitic doubling constructions found in modern Spanish: (i) φ -doubling constructions, which I will examine in section 3.3., and (ii) D-doubling structures, which will be the topic of section 3.4.

It is a widely-accepted assumption that in Spanish the reflexive pronouns in Table 3.1. must have a c-commanding antecedent in their LBD (see e.g., Bosque & Demonte 1999, Bosque & Gutiérrez-Rexach 2009, Eguren 2012, and references cited therein). To illustrate, consider the *anaphoric* non-clitic doubling examples in (8) and the structural relation that the 1sg reflexive pronoun *sí mismo* ‘myself’ must establish with a 1sg NP antecedent in each sentence.

- (8) a. Yo confiaba en mí mismo.
 I(NOM) trusted on myself(OBL)
 ‘I trusted myself.’
- b. *Un amigo mío nunca abusaría de mí mismo.
 A friend mine(GEN) never abused of myself(OBL)
 ‘*A friend of mine will never abuse myself.’
- c. *Yo creo [que Juan abusó de mí mismo].
 I(NOM) believe that J.(NOM) abused of myself(OBL)
 ‘*I believe that Juan abused myself.’

In (8a), the 1sg reflexive pronoun *mí mismo* has a c-commanding antecedent in its own clause (the 1sg nominative pronoun *yo* ‘I’), and the sentence is grammatical. In (8b), the antecedent of the 1sg reflexive pronoun *mí mismo* (the 1sg possessor DP *mío* ‘mine’) is embedded into a larger possessive DP and consequently does not c-command the reflexive pronoun (i.e., the oblique anaphor *mí mismo*). Thereby, the ungrammaticality of (8b) is due to the fact that in this structure the 1sg reflexive pronoun *mí mismo* lacks a c-commanding antecedent. Finally, the sentence in (8c), is ungrammatical because the antecedent of the 1sg reflexive pronoun *mí mismo* (the 1sg nominative pronoun *yo* ‘I’ in the matrix clause) c-commands this reflexive pronoun contained in the embedded clause from outside the LBD of the latter (i.e., the smallest TP that contains the reflexive pronoun *mí mismo* and a DP c-commanding *mí mismo*).

What the Spanish paradigm in (8) shows is that the 1sg reflexive pronoun *mí mismo* must have a c-commanding antecedent¹ in its LBD. Additional examples illustrating this point are given in (9) for the 3sg reflexive pronoun *sí mismo* ‘himself’, and in (10) for the 2pl reflexive pronoun *vosotros mismos* ‘yourselves’.

(9) 3sg non-clitic reflexive pronoun SÍ MISMO ‘himself’

- a. Juan confiaba en sí mismo.
J.(NOM) trusted on himself(OBL)
‘*Juan trusted on himself.’

- b. *La novia de Juan nunca desconfiaría de sí mismo.
the girlfriend of J.(GEN) never distrusted of himself(OBL)
‘*The girlfriend of Juan will never distrust himself.’

- c. *Él cree que yo abusé de sí mismo.
He(NOM) believes that I(NOM) abused of himself(OBL)
‘*He believes that I abused of himself.’

(10) 2pl non-clitic reflexive pronoun VOSOTROS MISMOS ‘yourselves’

- a. Vosotros confiabais en vosotros mismos.
You(NOM) trusted on yourselves
‘You trusted on yourselves.’

- b. *Un amigo vuestro nunca abusaría de vosotros mismos.
A friend you(GEN) never abused of yourselves(OBL)
‘*A friend of you will never abuse yourselves.’

- c. *Vosotros creéis que Juan abusó de vosotros mismos.
You(NOM) believe that J.(NOM) abused of yourselves(OBL)
‘*you believe that Juan abused yourselves.’

¹ This is exactly the same of what happens with its corresponding 1sg anaphor *myself* in English, as can be seen by the glosses (*see also* Chomsky 1981, 1986, Lasnik & Uriagereka 1988, Lasnik 1999, and much related work)

What we have seen so far is that, in the absence of clitic doubling, the reflexive pronouns in Table 3.1. require a c-commanding antecedent in their LBD.

However, as I will show next, this observation is not entirely accurate: in Spanish reflexive pronouns not only require a c-commanding antecedent in their LBD; there is a second requirement they must meet: namely, they, must be *semantically*, rather than syntactically, bound in their LBD by their binder.

Evidence from this comes from the fact that in non-clitic doubling constructions, reflexive pronouns must be obligatorily interpreted as bound variables. To illustrate this fact, consider the interpretation of the examples in (11)-(13), where the binder of the reflexive pronouns *mí/ti/sí mismo* corresponds to a referring focused DP.

- (11) Solo YO voté por mí mismo.
only I(NOM) voted for myself(OBL)
a. I am the only person x such that x voted for me. (✗coreference)
b. I am the only person x such that x voted for x. (✓variable binding)
- (12) Solo TÚ confiabas en ti mismo.
only you(NOM) trusted on yourself(OBL)
a. You were the only person x such that x trusted you. (✗coreference)
b. You were the only person x such that x trusted x. (✓variable binding)
- (13) Solo JUAN habló de sí mismo.
only J.(NOM) talked of himself(OBL)
a. Juan was the only person x such that x talked about him. (✗coreference)
b. Juan was the only person x such that x talked about x. (✓variable binding)

The Spanish sentences in (11)-(13) are grammatical under the bound variable reading in (11b)-(13b), but ungrammatical under the coreference construal informally represented in (11a)-(13a).

Bearing this in mind, let us consider the two possible LF representations that can be associated with each one of the Spanish sentences in (11)-(13). The LF representations

that correspond to the available reading of examples (11)-(13), the *sem-binding* LFs producing the legitimate variable binding interpretations of these examples, are given in (14a), (15a) and (16a), respectively. The alternative, but illicit, interpretation of examples (11)-(13), the construal that corresponds to the *syn-binding* LFs, is given in (14b), (15b) and (16b).

- (14) a. sem-binding LF of (11): $\checkmark_{[TP \text{ Solo } YO_1 [T \cdot \lambda_1 \text{ voté por mí mismo}_1]]}$
- b. syn-binding LF of (11): $\times_{[TP \text{ Solo } YO_1 \text{ voté por mí mismo}_1]}$

- (15) a. sem-binding LF of (12): $\checkmark_{[TP \text{ Solo } T\acute{U}_1 [T \cdot \lambda_1 \text{ confiabas en ti mismo}_1]]}$
- b. syn-binding LF of (12): $\times_{[TP \text{ Solo } T\acute{U}_1 \text{ confiabas en ti mismo}_1]}$

- (16) a. sem-binding LF of (13): $\checkmark_{[TP \text{ Solo } JUAN_1 [T' \lambda_1 \text{ habló de sí mismo}_1]]}$
- b. syn-binding LF of (13): $\times_{[TP \text{ Solo } JUAN_1 \text{ habló de sí mismo}_1]}$

In the *sem-binding* LFs in (14a)-(16a), the reflexive pronouns *mí mismo* in (14a), *ti mismo* in (15a) and *sí mismo* in (16a) are all semantically bound in their LBD by the focused DPs *YO*, *TÚ* and *JUAN*, respectively. Consequently, the oblique reflexive pronouns *mí/ti/sí-mismo* in the LFs in (14a)-(16a) satisfy Büring's Principle A in (6). Recall that, in the spirit of Büring's proposal for English anaphors, I have argued that in order to be licensed Spanish reflexive pronouns not only require a binder in their LBD, but must also be *semantically* bound by their respective binders in that very same domain.

By contrast, in the ill-formed *syn-binding* LFs in (14b)-(16b), the reflexive pronouns *mí/ti/sí-mismo* are *syntactically*, rather than *semantically* bound, by their binders. Consequently, the reflexive pronouns in (14b)-(16) are semantically free (not bound by any binder prefix) in their LBD, in violation of Principle A in (6).

It is also worth mentioning that the HLB! in (17), according to which semantic binding blocks syntactic binding when both construals produce the same meaning, does not exclude the *syn-binding* LFs in (14b)-(16b). This is so because the semantic interpretation of the LFs in (14b)-(16b), represented in (11a)-(13a) above, is not truth-conditionally equivalent to that of their corresponding *sem-binding* LFs in (14a)-(16a),

whose rough paraphrase is given in (11b)-(13b) above. Therefore, the *syn-binding* LFs in (14a)-(16b), where the anaphors *mí/ti/sí mismo* fail to be semantically bound in their LBD, are not excluded by the HLB! in (17), but rather by Büring's Principle A in (6) alone.

(17) *Have Local Binding!*

For any two DPs A and B, if A could semantically bind B (i.e., if it c-commands B and B is not semantically bound in A's c-command domain already), A must semantically bind B, unless that changes the interpretation. [Büring 2005: 270]

(6) *Principle A* (Büring 2005):

An anaphor must be semantically bound in its LBD.

Thus, Principle A in (6) achieves the following two things. On the one hand, it excludes the *syn-binding* LFs in (14b)-(16b), where the reflexive pronouns *mí/ti/sí-mismo* fail to be semantically bound in their LBD. On the other hand, it rules in the *sem-binding* LFs in (14a)-(16a), in which these very same reflexive pronouns are semantically bound in their LBD. In a nutshell, the Principle A in (6) correctly captures the fact that Spanish reflexive pronouns must be obligatorily interpreted as bound variables.

Additional evidence that the Principle A in (6) rules the interpretation of Spanish reflexive pronouns comes from the fact that they can only trigger sloppy readings in ellipsis, as illustrated by (18)-(20), where the interpretation corresponding to the strict reading is totally impossible.

(18) Yo no dependía de mí mismo, y tú tampoco.

I(NOM) not depended of myself(OBL) and you(NOM) neither

'I did not depend on myself, and nor did you.'

a. ..., and nor did you depend on yourself. (✓sloppy)

b. ..., and nor did you depend on me. (✗strict)

(19) (Ganaste el partido porque) <pro_{2pl}> confiabas en ti mismo, pero
you.won the match because trusted on yourself(OBL), but
tu oponente no.

your opponent(NOM) not

‘(you won the match because) you trusted yourself, but your opponent did not.

a. ..., but your opponent did not trust himself. (✓sloppy)

b. ..., but your opponent did not trust you. (✗strict)

(20) Juan habló de sí mismo, pero Pedro no.

J.(NOM) talked of himself(OBL), but P.(NOM) not

‘Juan talked about himself, but Pedro did not.’

a. ..., but Pedro did not talk about himself (✓sloppy)

b. ..., but Pedro did not talk about Juan. (✗strict)

Recall that, as we have seen in Chapter 2, sloppy readings come as a result of semantic binding. To illustrate this, let us consider the *sem-binding* LF representation producing the sloppy reading of the Spanish sentence in (20), roughly represented in (21) (ellipsis is indicated by the strikethrough).

(21) [Juan¹ [_{TPA} λ² habló de sí mismo²]], pero Pedro³ no [_{TP_E} <~~Pedro~~> λ² habló de sí
~~mismo~~²]

Since López’s (1999) grounding work on the syntax of TP-ellipsis in Spanish, it is widely accepted that TP-ellipsis structures like the one in (21) are derived by PF-deletion of the TP projection (represented as TP_E in (21)) of the second clause. As for the subject of the second clause in (21), i.e., *Pedro*, the standard assumption is that this DP overtly moves from [spec, TP_E] to a landing position in the left periphery of its clause, so that it escapes from being deleted along with the elided TP_E where it has originated (cf. Bosque 1984; Brucart 1987, 1999; Brucart & MacDonald 2012; Depiante 2000, 2004; Gallego 2016; López 1999, 2000; López & Winkler 2000; Saab 2003, 2008, 2009, 2010; and references cited therein).

However, for the purposes of this section, what is of interest to us here is that the sloppy reading of the Spanish example in (20) derives from the *sem-binding* LF structure

in (21); in this LF configuration, the two occurrences of the 3sg reflexive pronoun *sí mismo*² in (21) are bound by the two occurrences of the binder prefix λ^2 in TP_A and in TP_E . As a result of this, in (21) the overtly expressed anaphor *sí mismo* covaries with the DP subject of the 1st clause, i.e., *Juan*, and the elided anaphor *sí mismo*, in turn, varies with the DP subject of the 2nd clause, i.e., *Pedro*. That is, the two occurrences of the 3sg reflexive pronoun *sí mismo* in the LF in (21) turn out to be semantically bound by a binder prefix in their LBD in both TP_A and TP_E , in accordance with Principle A in (6).

Summarizing the discussion so far: the Spanish reflexive pronouns in Table 3.1. behave as anaphors and are subject to Principle A in (6). According to this principle, an anaphor must have a c-commanding antecedent that semantically binds the anaphor in its LBD. Evidence for the relevance of Büring's version of Principle A in (6) in Spanish comes from the fact that, as I have shown, in the absence of clitic doubling the reflexive pronouns in Table 3.1. can only be interpreted as bound variables, both in ellipsis and in focus constructions.

Importantly, this is exactly the opposite of what I have shown happened with the Spanish 1st/2nd/3rd person non-reflexive pronouns in Table 2.3 and the 3rd person DO/IO D-clitics *lo(s)/la(s)/le(s)*. As I have demonstrated in Chapter 2, these elements count as pronouns for the purposes of Binding Theory, and consequently must be semantically free in their LBD, in compliance with Büring's (2005) analysis of Principle B, repeated here as (22) (see Chapter 2, section 2.3.).

(22) *Principle B* (Büring 2005):

A pronoun must be semantically free in its LBD

Recall that in the absence of clitic doubling, the Spanish 1st/2nd/3rd person non-reflexive pronouns in Table 2.3 can corefer, but *not* covary, with a c-commanding focused DP in their LBD, as illustrated by the non-clitic doubling sentences in (23)-(25). Thus, examples in (23)-(25) trigger the coreference interpretation represented in (23a)-(25a), but are ungrammatical under the bound variable interpretation informally represented in (23b)-(25b). This means that in (23)-(25), the oblique pronouns inside the PP are *syntactically*, rather than semantically, bound in their LBD by their clause-mate subject (see Chapter 2, section 2.3.).

- (23) Solo YO voté por mí.
 only I(NOM) voted for me(OBL)
 a. I am the only person x such that x voted for me. (\checkmark coreference)
 b. I am the only person x such that x voted for x . (\times variable binding)
- (24) Solo TÚ confiabas en ti.
 only you(NOM) trusted on him(OBL)
 a. You were the only person x such that x trusted you. (\checkmark coreference)
 b. You were the only person x such that x trusted x . (\times variable binding)
- (25) Solo JUAN habló de él.
 only J.(NOM) talked of him(OBL)
 a. Juan was the only person x such that x talked about him. (\checkmark coreference)
 b. Juan was the only person x such that x talked about x . (\times variable binding)

Thus, in (23)-(25) the oblique non-reflexive pronouns *mí* ‘me’, *ti* ‘you’ and *él* ‘him’ must be semantically free² in the same LBD where their reflexive counterparts *mí mismo* ‘myself’, *ti mismo* ‘yourself’ and *sí mismo* ‘himself’ must be semantically bound in the configuration that corresponds to the non-clitic doubling examples we have previously analyzed in (11)-(13) above.

What all this shows is that in Spanish reflexive and non-reflexive pronouns have opposite binding requirements: (i) the reflexive pronouns in Table 3.1. are subject to Büring’s Principle A, repeated here as (26a); in contrast, (ii) the non-reflexive pronouns in Table 2.3 are governed by Principle B, repeated here as (26b) for convenience.

² As we have seen in Chapter 2, the non-clitic doubling Spanish examples in (23)-(25) are grammatical under the coreference reading in (23a)-(25a), but not under the bound variable reading represented in (23b)-(25b). In the case of syntactic binding, the non-reflexive pronouns *mí*, *ti* and *él* are syntactically bound in their LBD by their binders in (23)-(26), the focused DPs *YO*, *TÚ* and *JUAN*, respectively. By contrast, in the bound variable construal corresponding to the Spanish sentences in (23b)-(25d), the non-reflexive pronouns *mí*, *ti* and *él* are semantically bound in their LBD by their binders, causing a violation of the Principle B in (26b) (see Chapter 2, section 2.3.2., for additional examples and discussion).

- (26) a. *Principle A* (Büring 2005):

An anaphor must be semantically bound in its LBD.

- b. *Principle B* (Büring 2005):

A pronoun must be semantically free in its LBD

Summarizing the results in this section. I have shown that Büring's Principle A in (26a) rules the anaphoric relations that 1st/2nd/3rd reflexive pronouns (see Table 3.1.) must establish with another DP in Spanish. Evidence for the role of Principle A in Spanish non-clitic doubling constructions involving a reflexive pronoun comes from the fact that in the absence of clitic doubling, the reflexive pronoun must be obligatorily interpreted as a bound variable. Importantly, this stands in stark contrast to what happened with the 1st/2nd/3rd person non-reflexive pronouns in Table 2.3, which must be semantically free in their LBD, in accordance with Principle B in (26b) (*cf.* Chapter 2, 2.3.2.).

3.3. *Anaphoric φ-Doubling Constructions.*

Having determined in the previous section what the binding requirements of the reflexive pronouns in Table 3.1. are in Spanish, in this section I now turn to examine the binding behavior that these very same reflexive pronouns exhibit in *anaphoric φ-doubling constructions*, where they must be obligatorily cross-referenced by a φ-clitic attached to the finite verb/auxiliary.

As a result of this investigation, I will show that in Spanish the DO/IO reflexive pronouns in Table 3.1. must be semantically bound in their LBD. In other words, the Spanish reflexive pronouns must be semantically interpreted in the same way in all the syntactic configurations where they are licensed, irrespective of whether they are doubled or not by a φ-clitic.

To illustrate this, let us first consider the φ-doubling sentences in (27)-(29), where only the bound variable interpretation in (27b)-(29b) is possible.

- (27) Solo YO me voté a mí mismo.
 Only I(NOM) 1sg.DO voted A myself(ACC)
 a. I am the only person x such that x voted for me. (✗coreference)
 b. I am the only person x such that x voted for x. (✓variable binding)
- (28) Solo TÚ te criticastes a ti mismo.
 only you(NOM) 2sg.DO criticized A yourself(ACC)
 a. You were the only person x such that x criticized you. (✗coreference)
 b. You were the only person x such that x criticized x. (✓variable binding)
- (29) Solo JUAN se votó a sí mismo.
 only J.(NOM) 3.refl voted A himself(ACC)
 a. Juan was the only person x such that x voted for Juan. (✗coreference)
 b. Juan was the only person x such that x voted for x. (✓variable binding)

In (27)-(29), the object anaphors that appear in object position cannot corefer with the subject DP c-commanding them, but must be obligatorily interpreted as bound variables, as informally represented in (27b)-(29b).³

Bearing this in mind, let us consider the two possible LF representations corresponding to the Spanish sentences in (27)-(29): (i) the *sem-binding* LFs in (30a)-(32a) and (ii) their alternative *syn-binding* LFs structures represented in (30b)-(32b).³

- (30) a. *sem-binding* LF of (27):

$$\checkmark [_{\text{VP}} \text{solo YO}^1 [_{\text{v}} \lambda^1 [_{\text{v}} v_{[\varphi:1.\text{sg}]} [_{\text{VP}} \text{voté} [_{\text{DP}} a \text{ mí mismo}]^1]]]]]$$

- b. *syn-binding* LF of (27):

$$\times [_{\text{VP}} \text{solo YO}^1 [_{\text{v}} v_{[\varphi:1.\text{sg}]} [_{\text{VP}} \text{voté} [_{\text{DP}} a \text{ mí mismo}]^1]]]$$

³ In these structures, the φ-features located on v are marked by a strikethrough line, which I assume indicates deletion of uninterpretable features as a result of Agree. For ease of argumentation, we omit the parts of the LF structures in (30)-(32) that do not play any role in the syntax of φ-clitics

- (31) a. *sem-binding* LF of (28):

$$\checkmark [_{\text{vP}} \text{sol } T\acute{U}^1 [_{\text{v}} \lambda^1 [_{\text{v}} v_{[\phi:2.\text{sg}]} [_{\text{VP}} \text{criticastes } [_{\text{DP}} a \text{ ti mismo}^1]]]]]$$

- b. *syn-binding* LF of (28):

$$\times [_{\text{vP}} \text{sol } T\acute{U}^1 [_{\text{v}} v_{[\phi:2.\text{sg}]} [_{\text{VP}} \text{criticaste } [_{\text{DP}} a \text{ ti mismo}^1]]]]$$

- (32) a. *sem-binding* LF of (29):

$$\checkmark [_{\text{vP}} \text{sol } JUAN^1 [_{\text{v}} \lambda^1 [_{\text{v}} v_{[\phi:3.\text{sg}]} [_{\text{VP}} \text{voté } [_{\text{DP}} a \text{ sí mismo}^1]]]]]$$

- b. *syn-binding* LF of (29):

$$\times [_{\text{vP}} \text{sol } JUAN^1 [_{\text{v}} v_{[\phi:3.\text{sg}]} [_{\text{VP}} \text{voté } [_{\text{DP}} a \text{ sí mismo}^1]]]]$$

In the *sem-binding* LFs in (30a)-(32a), the DO reflexive pronouns *mí mismo*¹ in (30a), *ti mismo*¹ in (31a) and *sí mismo*¹ in (32a) are semantically bound by the binder prefix λ^1 in their LBD, in compliance of with Büring's Principle A. By contrast, in the *syn-binding* LFs in (30b)-(32b), these very same DO reflexive pronouns are syntactically bound by the DP subject in each structure. Consequently, Principle A in (26b) excludes the *syn-binding* structures in (30b)-(32b). Recall that this is so because in (30b)-(32b) the DO reflexive pronouns in object position are not semantically bound in their LBD, in violation of Principle A⁴. Hence, if we extend Büring's Principle A to this type of construction we can correctly capture the fact that in *anaphoric* φ -doublings sentences like (27)-(29), the DO reflexive pronouns *mí/ti/sí mismo* can only be interpreted as bound variables.

Further, in φ -doubling constructions, the doubled reflexive pronouns that surface in object position only give rise to sloppy readings under ellipsis. To illustrate this feature, consider the interpretation of the DO/IO reflexive pronouns *mí/ti/sí mismo* in the φ -doubling sentences in (33)-(35) in Spanish:

⁴ As seen in Chapter 2, section 2.3. the HLB! in (27), operative in the case of non-clitic reflexive pronouns in non-clitic doubling constructions in Spanish, does not force the *sem-binding* LFs in (30a)-(32a) to block their corresponding *syn-binding* LFs in (30b)-(32b). This is so because the *sem-binding* LFs in (30a)-(32a) and their corresponding *syn-binding* LFs in (30b)-(32b) produce different meanings: while the LFs in (30a)-(32a) produce the variable binding interpretation in (27a)-(29b), the LFs in (30b)-(32b) yield the coreference interpretation in (27a)-(29a). This means that only the Principle A in (26a), and not the HLB! in (27), excludes the *syn-binding* LFs in (30b)-(32b).

(33) Yo no me voté a mí mismo, y tú tampoco.

I(NOM) not 1.sg.DO voted A myself(ACC), and you(NOM) neither

‘I did not vote for myself, and nor did you.’

a. ..., nor did you vote for yourself. (\checkmark sloppy)

b. ..., nor did you voted for me. (\times strict)

(34) Si tú te puedes votar a ti mismo, Juan también.

If you(NOM) 2.sg.DO can vote A yourself(ACC), J.(NOM) too

‘If you can vote for yourself, then Juan can.’

a. ..., Juan can vote for himself, too. (\checkmark sloppy)

b. ..., Juan can vote for you, too. (\times strict)

(35) Por error, Juan se envió a sí mismo un email,

by mistake, J.(NOM) 3.sg/pl.IO sent to himself(DAT) an email(ACC),

y yo también.

and I(NOM) too

‘By mistake, Juan sent himself an email, and I did too.’

a. ..., and I sent myself an email too. (\checkmark sloppy)

b. ..., and I sent Juan an email, too. (\times strict)

The 1sg DO reflexive pronoun *mí mismo* in (33) and the 2sg DO reflexive pronoun *ti mismo* in (34), as well as the 3sg IO reflexive pronoun *sí mismo* in (35), trigger the sloppy interpretation represented in (33a)-(35a), but do not support the strict reading in (33b)-(35b). This is, in fact, exactly the same of what happened with these very reflexive pronouns in non-clitic doubling constructions in Spanish (see section 3.2.)

So far, I have provided strong evidence that Principle A, as defined in (26a), correctly captures the fact that the Spanish DO/IO reflexive pronouns like *mí/ti/sí mismo* etc. can only be interpreted as bound variables in *anaphoric* φ -doubling constructions.

Importantly, this stands in stark contrast to what happened with DO/IO non-reflexive pronouns like *mí, ti, él* etc. (Table 2.3) in *pronominal* φ -doubling constructions in Spanish (see section 2.4.). Recall that, in these constructions, the DO/IO non-reflexive pronoun is doubled by a φ -clitic and cannot be semantically bound in their LBD. This is

illustrated by (36)-(38), where only the coreferential interpretation represented in (36a)-(38b) is available.

- (36) Solo YO me voté a mí.

Only I 1.sg.DO voted A me

- a. I am the only person x such that x voted for me. (✓coreference)
- b. I am the only person x such that x voted for x. (✗variable binding)

- (37) Solo TÚ te criticaste a ti.

only you 2.sg.DO criticized A you

- a. You were the only person x such that x criticized you. (✓coreference)
- b. You were the only person x such that x criticized x. (✗variable binding)

- (38) Solo JUAN se votó a él.

only J. 3.sg/pl.DO voted A him

- a. Juan was the only person x such that x voted for Juan. (✓coreference)
- b. Juan was the only person x such that x voted for x. (✗variable binding)

In (36)-(38), a DO non-reflexive pronoun doubled by a φ-clitic can corefer, but not covary, with a focused c-commanding DP. As I have shown in greater detail in section 2.4., this follows if we apply Büring's Principle B in (26b) to the Spanish non-reflexive pronouns *mi/ti/él* etc. in Table 2.3. According to this principle, pronominal elements must be semantically free (i.e., not bound by any binder prefix) in their LBD.

What this shows is that the Spanish φ-clitics *me/te/se/nos/os* have the hallmarks of object agreement: their lack of referential properties allows them to double DPs which have opposite binding requirements:

- i) In what I have referred to as *anaphoric* φ-doubling constructions, the Spanish DO/IO reflexive pronouns *mi/ti/sí mismo* obligatorily co-occur with φ-clitic attached to the finite verb/auxiliary and must be semantically bound in their LBD, and

- ii) In *pronominal* φ -doubling structures, the Spanish DO/IO non-reflexive pronouns *mí*, *ti*, *él* etc. are also doubled by a φ -clitic, but must be semantically free in their LBD.

The doubling possibilities that the φ -clitics *me/te/se/nos/os* exhibit in Spanish thus fits remarkably well with the agreement-hypothesis I have discussed in Chapters 1 and 2, according to which these elements should be analyzed as object agreement morphemes. Under the minimalist theory of Agree that I have adopted in this thesis (Chomsky 1998, 2000, 2001 et seq.), I have assumed that the functional head v is selected from the lexicon and enters the derivation with a set of uninterpretable and unvalued φ -features, which must get a value during the course of the syntactic derivation. The operation Agree assigns values to unvalued and uninterpretable features and at the same time, deletes such uninterpretable features for the purposes of LF. Following this view, these Spanish φ -clitics are nothing but the morpho-phonological realization of an Agree relation established between the head v and a DP argument.

Under this approach, object agreement is not mapped to the interface with the semantics (i.e. LF); that is, it is invisible for LF. As a consequence of this, object agreement morphemes would lack the referential features required to affect the semantic interpretation of the DP argument that they Agree with. The discussion in this section has shown that this prediction is borne out in Spanish. This is so for the following two reasons:

- (i) The Spanish φ -clitics *me/te/se/nos/os* are able to double DPs with opposite binding requirements: both reflexive and non-reflexive pronouns, and
- (ii) In either case, these clitics do not affect the semantic interpretation of the doubled DPs, which exhibit exactly the same semantic interpretation that is independently available for them in the absence of clitic doubling.

By contrast, the Spanish D-clitics *lo(s)/la(s)/le(s)* count as pronouns for the purposes of semantic interpretation and Binding Theory in LF; as such, these clitics must be semantically free in their LBD, in compliance with Principle B in (26b) (see section

2.3.2.). Additional evidence for the status of D-clitics as true pronominal clitics will be considered in the next section, where I will argue that Principle B also prevents D-clitics from doubling the 3rd person DO/IO reflexive pronouns *sí mism(o/a)(s)* in Spanish.

3.4. D-Clitics are Pronouns. More Evidence from Binding Theory.

As I have shown in Chapter 2, the Spanish 3rd person non-reflexive pronouns *él/ella/ellos/ellas* doubled by, and coindexed with, a 3rd person DO/IO clitic (i.e., *lo(s)/la(s)/le(s)*) must be semantically free in the same LBD where the D-clitic doubling them must also be semantically free. To illustrate this, consider the *pronominal* D-doubling examples in (39)-(40) and the type of anaphoric relation that the D-clitics and the doubled non-reflexive pronouns establish with the subject of each sentence.

(39) DO *pronominal* D-doubling

- Los chicos los golpearon a ellos.
the boys 3.msc.sg.DO kicked A them
'The boys kicked them.'

(40) IO *pronominal* D-doubling

- Juan le contó la noticia a él.
J. 3.sg.IO told the new to him
(lit.) 'Juan told the news to him'

In (39), the 3pl DO D-clitic *los* and the doubled 3pl DO strong pronoun *ellos*, as well as the 3sg IO D-clitic *le* and the 3sg IO non-clitic pronoun *él* in (40), can only be interpreted as disjoint in reference with the DP that c-commands them in each sentence: i.e., *los chicos* 'the boys' in (39) and *Juan* in (40).

With this in mind, let us consider the underlying syntactic structure that corresponds to D-doubling sentence in (39), represented in (41). For expository purposes, we omit the part of the D-doubling structure sketched in (41) that is not relevant for the syntax of D-clitics.

$$(41) \quad [\text{VP } los \text{ } chicos^1 \text{ } \lambda^1 [\text{v}^* \text{ } [\text{v} \text{ } D_{los}^{2/*1} + \text{v}] \text{ } [\text{VP } V \text{ } [\text{DP } ellos^{2/*1} \text{ } t_D]]]]]$$

Following the Big-DP hypothesis that I have adopted in this thesis (Uriagereka 1988, 1995), in (41) the 3pl DO D-clitic *los* is first merged inside a Big-DP, from where it raises to adjoin to v. As a result of the D-movement undergone by the clitic, the DO 3pl strong pronoun *ellos* in (41) that is merged as the specifier of the Big-DP is left stranded in its original position inside the VP.

Our main concern in this section is to evaluate whether Principle B in (26b) is able to account for the syntactic distribution and meaning of Spanish non-reflexive pronouns D-clitics *lo(s)/la(s)/le(s)* and their 3rd person non-clitic counterparts *él/ella/ellos/ellas* in Table 2.3. Recall that under the version of the Principle B I have adopted, both of these two types of elements must be semantically free in their LBD (see section 2.3.). This prevents both the 3pl DO D-clitic *los* and the doubled 3pl DO non-clitic pronoun *ellos* in (41) from being semantically bound in their LBD. This means that in (41) both the D-clitic and the non-clitic pronoun that it doubles count as pronouns for the purposes of Binding Theory, and consequently, they cannot be bound by a binder prefix in their LBD (see Chapter 2 section 2.3 for additional examples and discussion).

(42=26)a. *Principle A* (Büring 2005):

An anaphor must be semantically bound in its LBD.

b. *Principle B* (Büring 2005):

A pronoun must be semantically free in its LBD

If the analysis of the Spanish D-clitics *lo(s)/la(s)/le(s)* I defend in this thesis as pronominal clitics is on the right track, we then expect sentences where a 3rd person reflexive pronoun is doubled by, and coindexed with, a 3rd person DO/IO D-clitic to

result in sharp ungrammaticality. This is so because a 3rd person DO/IO reflexive pronoun doubled by, and coindexed with, a 3rd person DO/IO D-clitic should be semantically bound in the same LBD where the the 3rd person DO/IO D-clitic needs to be semantically free. Therefore, it will be impossible for the D-clitic and the doubled anaphor to simultaneously satisfy their binding contradictory requirements without causing either a Principle A or a Principle B violation.

This is so because, if, on the one hand, the doubling D-clitic turns out to be free in its LBD, then the doubled anaphor coindexed with it will automatically end up being also free in its LBD, in violation of Principle A in (42a). If, on the other hand, the doubled anaphor is bound in its LBD, then the doubling D-clitic will also be bound in its LBD, in violation of Principle B in (42b).

As the ungrammatical *anaphoric* D-doubling sentences in (43a-b) demonstrate, this prediction is borne out. In these ungrammatical sentences, a 3rd person DO/IO reflexive pronoun (i.e., the 3pl DO *sí mismos* in (43a) and the 3sg IO *sí mismo* in (43b)) is doubled by a D-clitic covarying with the former in φ -features –i.e., the 3pl DO *los* in (43a) and the 3sg IO *le* in (43b).

(43) a. *DO anaphoric D-doubling*

*Los chicos los	golpearon	a sí mismos.
the boys	3.msc.pl.DO kicked	A themselves
(lit.) ‘The boys kicked themselves.’		

b. *IO anaphoric D-doubling*

*Juan le	contó la noticia	a sí mismo.
J.	3.sg.IO told	the new to himself
(lit.) ‘Juan told the news to himself’		

In order to illustrate how Binding Theory excludes *anaphoric* D-doubling sentences like (43a) and (43b) in Spanish, let us carefully examine the LF representation underlying the ungrammatical D-doubling sentence in (43a), which I have roughly represented in (44).

$$(44) \quad [_{\text{VP}} DP_1^{\text{ANT}} [_{\text{v'}} \lambda_1 [_{\text{v'}} [_{\text{v}} D_1+v] [_{\text{VP}} V [_{\text{DP}} DP_1^{\text{ANPH}} t_D]]]]]$$

In (44), the doubled reflexive pronoun (i.e. DP^{ANPH}) that appears inside the Big-DP is bound in its LBD by the binder prefix λ_1 , in satisfaction of the Principle A in (42a). However, the problem with the LFs in (44) is that the D-clitic D coindexed with the reflexive DP is also bound by the binder prefix λ_1 in its LBD, in violation of Principle B in (42b). Hence, this principle rules out the LF structure in (44), where the D-clitic D fails to be semantically free in its LBD.

Consider, now, the alternative LF representations corresponding to the *ungrammatical* D-doubling sentence in (43a), as roughly represented in (45).

$$(45) \quad [_{\text{VP}} DP_1^{\text{ANT}} [_{\text{v'}} [_{\text{v}} D_2+v] [_{\text{VP}} V [_{\text{DP}} DP_2^{\text{ANPH}} t_D]]]]]$$

In (45), the D-clitic is semantically free in its LBD, in satisfaction of Principle B in (42b). The problem with the LF in (45) is, however, that the reflexive DP coindexed with the D-clitic D fails to be semantically bound in its LBD, in violation of Principle A in (42a).

Summarizing the discussion in this section:

(i) I have shown that the Spanish **D**-clitics pronouns *lo(s)/la(s)/le(s)* are not allowed to double the DO/IO reflexive pronouns *sí mism(o/a)(s)* (*see* Table 3.1, in this section).

(ii) I have argued that this restriction on D-doubling can be easily explained within Binding Theory, if we adopt Büring's (2005) model. To be more specific, I have defended that a DO/IO reflexive pronoun doubled by, and coindexed with, a DO/IO D-clitic must be semantically bound in the same LBD where the latter must semantically free. *Anaphoric* D-doubling thus creates a syntactic configuration where the binding requirements of the doubled anaphor and the D-clitic are contradictory and cannot be simultaneously satisfied: either the D-clitic violates Principle B or the doubled anaphor in object position causes a violation of Principle A.

3.4.1. *Anaphoric D-Doubling of Long-Distance *sí mismo* in Spanish.*

In this section, I address some apparent counterexamples to the hypothesis I have put forth in the previous section that in Spanish the DO/IO D-clitics *lo(s)/la(s)/le(s)* cannot double reflexive pronouns. To my knowledge, this type of examples has not been previously discussed. My goal here will be to show that, under closer inspection, such counterexamples do not argue against, but rather in favor of, the hypothesis that D-clitics are pronominal clitics.

Some illustrative examples of *anaphoric* D-doubling in Spanish, where a D-clitic doubles a clause-mate 3rd person reflexive pronoun, are given in (46)-(54).⁵

- (46) Pedro¹ ha confesado [que le¹ sorprendió a sí mismo¹].
P. has confessed that 3.sg.IO surprised to himself
(lit.) ‘Peter has confessed that it surprised himself.’
- (47) Zarco¹ ha reconocido [que este rendimiento le¹ sorprendió a sí mismo¹].
Z. has recognized that this outcome 3.sg.IO surprised to himself
(lit.) ‘Zarco recognized the fact that this outcome surprised himself.’
- (48) Juan¹ se reintegró a la vida civil con una facilidad [que
J. 3.refl reintegrated to the life civil with an easiness that
le¹ sorprendió a sí mismo¹].
3sg.IO surprised to himself
(lit.) ‘Juan reintegrated into civil life in a way that surprised himself.’

⁵ The D-doubling examples in (46)-(54), which are grammatical for all the Spanish speakers I have consulted, have all been taken from internet. Specifically, a google search for the sequences “le agrada a sí mismo”, “le sorprende a sí mismo”, “le interesa a sí mismo” etc. returns the Spanish sentences in (46)-(54), among many others similar sentences that I have omitted for reasons of space.

- (49) Pedro¹ subió las escaleras con una facilidad [que le¹
 P. climbed the stairs with an easeness that 3.sg.IO
 sorprendió a sí mismo¹].

surprised to himself

(lit.) ‘Pedro climbed the stairs in a way that surprised himself.’

- (50) Juan¹ solo habla en función de lo [que le¹ interesa a sí mismo¹].

J. only talks in function of the that 3.sg.IO interests to himself

(lit.) ‘Juan only talks depending on what interests to himself.’

- (51) Cada cual¹ al final hace [lo que le¹ interesa a sí mismo¹].

each one at.the end does the that 3.sg.IO interests to himself

(lit.) ‘Generally, each one does what interests to himself.’

- (52) Nadie¹ puede despertar interés [en lo que no le¹ interesa a sí mismo¹].

no.one can arouse interest in the that not 3.sg.IO interest to himself

(lit.) ‘No one can arouse interest in what does not interest to himself.’

- (53) Juan¹ solo hace [lo que le¹ agrada a sí mismo¹].

J. only does the that 3.sg.IO likes to himself

(lit.) ‘Juan only does what himself likes.’

- (54) Él¹ se refiere [a cómo le¹ agrada a sí mismo¹ esa tipo de vida].

he 3.rfl refers to how 3.sg.IO like to himself that kind of life

(lit.) ‘He refers to how himself likes that kind of life.’

In all the Spanish D-doubling sentences in (46)-(54), the 3sg D-clitic *le* doubles the 3sg reflexive pronoun *sí mismo*, which bears dative case and corresponds to the experiencer argument of the psychological verbs⁶ *sorprender* ‘surprise’, *agradar* ‘like’ and *interesar* ‘interest’.

⁶ Additional examples of *anaphoric* D-doubling, involving the long-distance anaphor *sí misma* (the feminine form of *sí mismo* in Spanish) are given in (i) and in (ii):

(i) ??/? María¹ espera que Pedro no la¹ critique a sí misma¹ del mismo
 M. hopes that P. not 3sg.DO criticized A herself of.the same

What distinguishes the grammatical D-doubling sentences in (46)-(54) from the ungrammatical D-doubling examples discussed in previous section is that in (46)-(54), the dative reflexive pronoun *sí mismo* that is doubled by the D-clitic *le* is bound from outside its LBD (i.e., the smallest TP containing the dative anaphor *sí mismo* and a DP c-commanding *sí mismo*).

If, however, the dative reflexive pronoun *sí mismo* takes a local antecedent and is doubled by the 3sg D-clitic *le* within its LBD, then the result is sharply ungrammatical, as illustrated by (55)-(57).

- (55) *Juan¹ le¹ sorprendió a sí mismo¹.

J. 3.sg.IO surprised to himself
(lit.) ‘Juan surprised himself.’

- (56) *Juan¹ le¹ interesó a sí mismo¹ para el papel protagonista.

J. 3.sg.IO interested to himself for the role starring
(lit.) ‘Juan interested to himself for the protagonist.’

- (57) *María¹ le¹ agrada a sí mismo¹.

M. 3.sg.IO likes to himself
(lit.) ‘Mario liked himself.’

modo en que critica a los demás.
way in that he.criticized A the others
(lit.) ‘Mary hopes that Peter does not criticize herself in the same way that he uses to criticize other people.’

- (ii) ?María¹ pidió que no la¹ consideraran a sí misma¹ para el papel principal.
M. asked that not 3fem.sg.DO consider A herself for the role starring
(lit.) ‘Mary asked they didn’t choose herself as the protagonist.’

The long-distance anaphor *sí misma* corresponds to the accusative complement of the non-psychological verbs *criticar* ‘criticize’ in (i) and *considerar* ‘consider’ in (ii). In these sentences, the reflexive pronoun is doubled by the 3sg feminine DO D-clitic *la*. To my ear, neither (i) nor (ii) are totally out in Spanish, but are clearly more degraded and sound much less natural than their corresponding *anaphoric* D-doubling examples in (46)-(54) in Spanish, where the long-distance anaphor *sí mismo* corresponds to the experiencer argument of a psychological verb. For reasons that are unclear to me and need to be studied further in further research, D-doubling of the long-distance anaphor *sí mismo* sounds more natural in Spanish when *sí mismo* realizes the experiencer argument of a psychological verb like *agradar* ‘like’, *interesar* ‘interest’ or *sorprender* ‘surprise’, as in the *anaphoric* D-doubling examples in (46)-(54).

On the basis of the contrast in grammaticality between these two sets of examples, the syntactic generalization governing these facts can be thus described as follows:

- *The Local Anaphor Effect:*

The 3rd person reflexive pronoun *sí mismo* may be doubled by a D-clitic only in those cases where it takes a long distance antecedent (as in (46)-(54)). But it turns out to be ungrammatical when the doubled reflexive pronoun *sí mismo* takes a local antecedent (as in (55)-(57)).

What emerges from this generalization, which to the best of my knowledge have never been formulated before in the literature, is in fact fully compatible with the analysis of the Spanish D-clitics *lo(s)/la(s)/le(s)* as pronominal clitics I am pursuing in this dissertation.

For one thing, in Spanish D-clitics can only double the reflexive pronoun *sí mismo* when the latter is bound from outside the LBD where the D-clitic needs to be free, as informally represented in (58). As I will show immediately below, in (58) the D-clitic is able to satisfy its binding requirements because it is not (semantically) bound in its LBD, in accordance with Principle B.

(58) *D-doubling of long-distance SÍ MISMO (Spanish)*

[$Y \dots DP_1^{ANT} \dots [X \dots D\text{-clitic}_1 + \text{verb} \dots \text{sí mismo}_1] \dots]$ (\checkmark Principle B)

(where X stands for the LBD of the D-clitic relevant for Principle B of the Binding Theory, and Y is the domain from where the long distance *sí mismo* is bound)

Leaving momentarily aside the question as to why the reflexive pronoun *sí mismo* in the syntactic structure sketched in (58) can be bound from outside its LBD without causing a Principle A violation (to be fully discussed below in section 3.4.3.), what matters to us here is that Principle B of the Binding Theory does not exclude the *anaphoric* D-doubling structure sketched in (58). This is so because the long-distance anaphor *sí mismo* coindexed with the D-clitic in (58) is bound from outside the LBD where the D-clitic must be semantically free, and consequently, the D-clitic in (58) is allowed to satisfy its binding requirements: it ends up being free in its LBD.

By contrast, Principle B of the Binding Theory does in fact prevent D-clitics from doubling the reflexive DP *sí mismo* when the antecedent of the latter is within the same LBD where the D-clitic must be free, as in (55)-(57) (see also section 3.4.). This is so because the D-clitic *le* in (55)-(57) cannot be free in the same LBD where the local reflexive DP *sí mismo* is bound, as informally represented in (59). In this structure, the doubled reflexive pronoun *sí mismo* is bound by the DP antecedent (DP^{ANT}) in its LBD. This causes the D-clitic doubling the anaphor to be also bound in its LBD, in violation of Principle B.

(59) *D-doubling of the local anaphor sí MISMO (Spanish)*

[$X \dots DP_1^{ANT} \dots D\text{-clitic}_1 + verb \dots sí mismo_1 \dots$] (×Principle B)

(where X stands for the LBD where the D-clitic and the local anaphor *sí mismo* are bound)

Summarizing so far, I have shown that in Spanish, D-clitics are able to double the reflexive pronoun *sí mismo* whenever the antecedent of latter is outside the LBD where the doubling D-clitic must be free. Under the hypothesis that the Spanish D-clitics count as pronouns for the purposes of Binding Theory, the facts emerging from what I have referred above to as the *Local Anaphor Effect*, discovered and formulated here for the first time, can be easily explained. This is so because a D-clitic that doubles a long-distance reflexive DP is able to satisfy its binding requirements: the doubled reflexive pronoun is bound from outside the LBD where the D-clitic needs to be free, so that the latter ends up being free in its LBD, in satisfaction of Principle B.

Having spelt out the syntactic conditions under which D-doubling of the reflexive pronoun *sí mismo* can be licensed in Spanish, in next section I will examine the conditions under which the reflexive DP *sí mismo* can take a long-distance antecedent in this language.

3.4.2. Long-Distance *sí mismo* as a Logophoric Pronoun in disguise.

As I have shown in the previous section, the reflexive pronoun *sí mismo* can be properly bound from outside its LBD in the *anaphoric* D-doubling structures in (60), contrary to what Principle A in (46a) would lead us to expect.

- (60) a. Zarco¹ ha reconocido [que este rendimiento le sorprendió a sí mismo¹].
Z. has recognized that this outcome 3sg.IO surprised to himself
(lit.) ‘Zarco recognized the fact that this outcome surprised himself.’
- b. Zarco¹ solo habla en función [de lo que le interesa a sí mismo¹].
Z. only talks in function of the that 3sg.IO interests to himself
(lit.) ‘Zarco only talks depending on what interests to himself.’

In this section, I will examine the conditions under which long-distance *sí mismo* is licensed in D-doubling sentences like (60a) and (60b) in Spanish. Specifically, I will show that the antecedent of long-distance *sí mismo* must be a logophoric center: i.e., the individual from whose perspective the content of the proposition is evaluated (cf. Sells 1987, Reuland 2017, Charnavel 2019 and much related work).

In order to check whether a long-distance reflexive DP is anteceded or not by the perspective-bearer of the clause, Charnavel & Zlotan C&Z’ (2015) have proposed to use the epithet test summarized in (61), which I will explain immediately below.

- (61) *Epithet test:* replace the long-distance anaphor for a co-referring epithet, and check whether the sentence becomes unacceptable. [adapted from C&Z 2015:7]

C&Z’ (2015) test in (61) is based on Dubinsky & Hamilton’s (1998) observation that epithets (e.g., *el cabrón* ‘the bastard’, *el lerdo* ‘the idiot’ in Spanish) are anti-logophoric pronouns and as such, cannot be anteceded by the perspective-bearer of the clause. To illustrate this generalization, consider the Spanish sentences in (62), which exemplify the anti-logophoric nature of the Spanish epithets *el lerdo/el cabrón* ‘the idiot/the bastard’.

- (62) a. Hablando de Juan¹, el {cabrón/leido}¹ está casado con un genio.
 speaking of J. the bastard/idiot is married with a genius
 ‘Speaking of Juan, the bastard/idiot is married with a genius.’

- a. *Según Juan¹, el {cabrón/leido}¹ está casado con un genio.
 According.to J. the bastard/idiot is married with a genius
 ‘According to Juan, the bastard/idiot is married with a genius.’

In (62a), the DP *Juan* that surfaces inside the adverbial phrase *hablando de* ‘speaking of’ corefers with the epithets *el cabrón/leido*. Following Dubinsky & Hamilton (1998) analysis, we can propose that the epithets in (62a) can corefer with the DP *Juan* because the latter is not the perspective-bearer of the clause: i.e., the individual from whose perspective the attributive content of the epithet is evaluated. Put in other words, the individual that in (62a) believes *Juan* to be a bastard/idiot (i.e., the perspective-bearer) is not the same individual that the DP *Juan* refers to; rather, the individual who holds this belief is the speaker uttering the sentence. By contrast, in (62b) the expression *según* ‘according to’ makes its complement (in this case, the DP *Juan*) the explicit perspective-bearer. What we observe in this case is that in contrast to (62a), the DP *Juan* in (62b) (i.e. the perspective-bearer) cannot corefer with the epithets *el leido/bastardo*.

Drawing on Dubinsky & Hamilton’s (1998) observation, C&Z (2015) contend that the epithet test in (61) may be used to determine whether the antecedent of a long-distance anaphor must correspond or not with a perspective-bearer. The idea underlying C&Z’ test in (61) may be described in a nutshell as follows: if a long-distance anaphor must take the perspective-bearer as its antecedent, it would not be possible for a co-referring epithet to replace the long-distance anaphor. This is because, as argued by Dubinsky & Hamilton, epithets are anti-logophoric pronouns and as such, they cannot refer to (or corefer with) a perspective-bearer.

If we apply C&Z test in (61) to the Spanish D-doubling sentences in (60), repeated here for convenience, the resulting sentences become unacceptable, as shown in (63).⁷

- (60) a. Zarco¹ ha reconocido que este rendimiento le sorprendió a sí mismo¹.

Z. has recognized that this outcome 3sg.IO surprised to himself
(lit.) ‘Zarco recognized the fact that this outcome surprised himself.’

- b. Zarco¹ solo habla en función de lo que le interesa a sí mismo¹.

Z. only talks in function of the that 3sg.IO interests to himself
(lit.) ‘Zarco only talks depending on what interests to himself.’

- (63) a. *Zarco¹ ha reconocido que este rendimiento le sorprendió

Z. has recognized that this outcome 3sg.IO surprised
al cabrón¹.
to.the bastard

(lit.) ‘Zarco recognized the fact that this outcome surprised the bastard.’

- b. *Zarco¹ solo habla en función de lo que le interesa

Z. only talks in function of the that 3sg.IO interests
al lerdo¹.
to.the idiot

(lit.) ‘Zarco only talks depending on what interests to the idiot.’

⁷ Within the framework of Government and Binding, epithets are commonly considered to be R-expressions subject to Principle C of the Binding Theory. According to this principle, a R-expression must be free (see e.g., Lasnik 1999). However, as D& H (1998) shows, in English epithets (e.g., *the bastard*, *the idiot*) behave like pronouns, rather than R-expression, for the purposes of Binding Theory: more specifically, they can be bound by a c-commanding antecedent from outside their LBD, contrary to what Principle C would lead us to expect, as illustrated by (i) in English.

- (i) John¹ ran over a man that was trying to give the idiot^{1/him¹} directions.

[Dubinsky & Hamilton 1998: 688]

So it happens in Spanish. For example, the epithet *el lerdo* ‘the idiot’ may be bound by a c-commanding antecedent from outside its LBD, as shown in (ii).

- (i) Mi hermano¹ huyó de un hombre que el lerdo^{1/él¹} confundió con un ladrón.
my brother ran.away from a man that the idiot/he mistook with a thief
(lit.) ‘My brother ran a way from a man that the idiot/he mistook for a thief.’

The only difference between the ungrammatical sentences in (63) and their grammatical Spanish counterparts in (60), is that in (60) we have replaced the doubled reflexive DP *sí mismo* by an epithet co-referring with the same DP antecedent that *sí mismo* takes in the grammatical sentences in (60).

In short, the results of applying C&Z's (2015) epithet test in (61) to the Spanish cases under analysis confirm that anti-logophoric pronouns like the epithets *el cabrón* or *el lerdo* cannot be licensed in the same position where the long-distance reflexive DP *sí mismo* is. If so, we can safely conclude that in D-doubling sentences like (60) the Spanish long-distance *sí mismo* must be bound by the perspective-bearer of the clause.

By contrast, the local reflexive DP *sí mismo* (i.e., the one having a c-commanding antecedent in its LBD) does not require to be antecedeted by a perspective-bearer in Spanish. As shown below, this is true for both non-clitic doubling and φ -doubling constructions:

(64) *Non-clitic doubling of local SÍ MISMO.*

Hablando de Trump¹, el lerdo¹ no votó por sí mismo¹
Speaking of Trump the idiot(NOM) not voted for himself(OBL)
en las elecciones.
in the elections.

‘Speaking of Trump, the idiot did not vote for himself in the elections.’

(65) *φ -doubling of local SÍ MISMO.*

Hablando de Trump¹, el lerdo¹ no se votó a sí mismo¹.
Speaking of Trump the idiot(NOM) not 3.sg/pl.DO voted A himself(ACC)
en las elecciones
in the elections.

‘Speaking of Trump, the idiot did not vote for himself in the elections.’

In (64), the oblique reflexive DP *sí mismo* inside the PP is bound in its LBD by the epithet *el lerdo*, which at the same time is antecedeted by *Trump* in (64). That is, in (64) the binder of the *local* anaphor *sí mismo* (i.e., the epithet *el lerdo*) is an anti-logophoric

pronoun and as such, is not allowed to refer to the perspective bearer of the clause (cf. Dubinsky & Hamilton 1998). The same goes for the local reflexive DP *sí mismo* in the φ-doubling sentence in (65), where this element is bound in its LBD by the epithet *el lerdo* in (65).

This paradigm leads us to conclude that while long-distance *sí mismo* needs to take the perspective-bearer of the clause as its antecedent, its local counterpart (the local *sí mismo*) must be bound in its LBD by an antecedent DP, which does not need to be a perspective bearer.

In the remainder of this section, I will put forth a novel analysis of the Spanish reflexive pronoun *sí mismo*, according to which this element would actually be ambiguous between a reflexive anaphor and a logophoric pronoun. In the first case, reflexive *sí mismo* would be an anaphor that must have a binder in its LBD (in accordance with Principle A), while long-distance *sí mismo* should best analyzed as a logophoric pronoun in disguise: i.e., as a pronoun taking the perspective-bearer of the clause as its antecedent.

Various languages have a special set of logophoric pronouns which, as their name suggests, need to be anteceded by the logophoric center: i.e., the individual whose mental state or attitude the content of an embedded proposition describes (i.e., the perspective-bearer). To illustrate this, consider the following examples from Ewe (Niger-Kordofanian) in (66) and Tuburi (Volta-Congo) in (67).

- (66) Kofi¹ be yè^{1/*2} -dzo (Ewe)
 K. say he-left
 ‘Kofi says he left.’ [Sells 1987:448]

- (67) hí:ní dʒō nē¹ gā sē^{1/*2} lī? tʃigl. (Tuburi)
 fear make him that he fall illness
 ‘He was afraid that he would fall ill.’ [Hagége 1974]

In (66), the 3sg logophoric pronoun⁸ *yè* in Ewe must be anteceded by *Kofi* (the DP subject of the matrix clause), which represents the ‘source’ of information of the embedded statement. In (67), the Tuburi 3sg logophoric pronoun *sē* that appears inside the embedded clause must be anteceded by the 3sg pronoun *nē* of the matrix clause: the latter refers to the ‘source’ of the mental state that the embedded proposition describes (i.e., the antecedent of *sē* in (67) is the individual whose fear is to fall ill).

The long-distance *sí mismo* in Spanish –similar to the way that the logophoric pronouns *yé* in Ewe and *sē* in Tuburi do— must take the ‘source’ of information (i.e., the logophoric center) as its antecedent. To illustrate this, consider the D-doubling examples in (68), involving the long-distance *sí mismo* in Spanish.

- (68)a. Zarco¹ le dijo a Mario² que la noticia le sorprendió
 Z. 3sg.IO said to M. that la noticia 3sg.IO surprised
 a sí mismo^{1/*2}.
 to himself/herself
 (lit.) ‘Zarco¹ said to Mario² that the new surprised himself^{1/*2}.’

- b. Zarco¹ le escuchó a Mario² que la noticia le sorprendió
 Z. 3sg.IO heard to M. that la noticia 3sg.IO surprised
 a sí mismo^{*1/2}.
 to himself/herself
 (lit.) ‘Zarco¹ heard from Mario² that the news surprised himself^{*1/2}.’

The only acceptable antecedent of long-distance *sí mismo* in (68a) contained within the embedded clause is the DP subject of the matrix clause (in this case, the nominative DP

⁸ In addition to the logophoric pronoun *yè*, Ewe also has a ‘plain pronoun’ *e* which is like the 3rd person pronoun *he* in English (or like the 3rd person non-clitic pronoun *él* in Spanish in (ib)) in that it does not require to take the ‘source’ of information as its antecedent.

- (i) a. Kofi¹ be e^{1/2}-dzo (Ewe)
 K. said he-left
 ‘Kofi¹ said he^{1/2} left.’ [Pearson 2015:78]
- b. Kofi¹ dijo que él^{1/2} se marchó. (Spanish)
 K. said that he left.

Zarco), which refers to the ‘source’ of information of the embedded statement. By contrast, in (68b), the long-distance anaphor *sí mismo* inside the embedded clause cannot take the DP subject of the matrix clause as its antecedent, but only the IO DP argument of the matrix clause (i.e., the dative DP *Mario*). This is so because in (68), the source of information of the embedded statement is the IO argument of the matrix verb *escuchó* ‘heard’ (i.e., the DP *Mario*), rather than the DP subject *Zarco*.

What the Spanish paradigm in (68) shows us is that the antecedent of the long-distance anaphor *sí mismo* must refer to the ‘source’ of an embedded statement. This is in fact exactly the same of what happened with the antecedent of the logophoric pronouns *yè* and *sē* in Ewe and Tuburi, respectively. If so, what differentiates Spanish from languages like Ewe or Tuburi is that, in the former, the logophoric pronoun *sí mismo* happens to be homophonic with the 3rd person reflexive anaphor *sí mismo*. But crucially, the conditions under which long-distance/logophoric *sí mismo* is licensed in Spanish are, as I have demonstrated in this section, exactly the same conditions under which logophoric pronouns are licensed in languages like Ewe or Tuburi. More concretely, long-distance *sí mismo* must take the source of information (i.e. the logophoric center) as its antecedent.

If the analysis I have proposed of long-distance *sí mismo* as a logophoric pronoun⁹ is correct, we can easily explain why long-distance *sí mismo* can be properly bound from

⁹ A more sophisticated analysis of long-distance *sí mismo* in Spanish (that is, however, empirically equivalent to the analysis developed in this section) would be to analyze the long-distance anaphor *sí mismo* as consisting of two different elements: i.e., a logophoric pronoun bearing the features [3, sg, log(phoric), pro(noun)] and an emphatic apposition following the logophoric pronoun, as sketched in (ia).

- | | | |
|-----|---|--|
| (i) | a. long-distance/logophoric <i>sí mismo</i> | b. local/reflexive <i>sí mismo</i> |
| | 
<[3,sg,log,pro], /sí/> mismo | 
<[3, sg, reflexive], /sí mismo/> |

As illustrated by (ia), the *sí* part of the long-distance anaphor would be, under this analysis, the morphological realization of the features [3, sg, log, pro], while the adjective *mismo* adjoined to the logophoric pronoun *sí* would be used for emphatic purposes. In contrast to the long-distance/logophoric *sí mismo* in (ia), its homophonous reflexive anaphor *sí mismo* in Spanish would be, under this proposal, the morphological realization of the features [3, sg, reflexive] of a reflexive DP, as illustrated by (ib). It is, however, worth noticing that irrespective of whether we analyze the long-distance anaphor *sí mismo*, or a part thereof, as a logophoric pronoun, the same conclusion holds for the syntax of D-doubling constructions.

outside its LBD by a perspective-bearer without causing a Principle A violation. This would correlate with the fact that long-distance *sí mismo* is in fact a logophoric pronoun in disguise: namely, a pronoun that must be anteceded by a perspective-bearer. Consequently, this logophoric pronoun would not be subject to Principle A, but to Principle B. By contrast, its homophonous reflexive anaphor *sí mismo* in Spanish would rather correspond to an anaphor and as such, it needs to be bound in its LBD (irrespective of whether its antecedent is a perspective-bearer or not).

However, for the purposes of this Chapter, what matters to us here is that in Spanish only the local/reflexive anaphor *sí mismo*, but not its homophonous long-distance/logophoric pronoun *sí mismo*, is actually subject to Principle A. This is in fact fundamental to understand why D-clitics are only allowed to double the Spanish long-distance/logophoric pronoun *sí mismo*: the latter is bound by a perspective-bearer from outside the LBD where the doubling D-clitic needs to be semantically free. As a consequence of this, the D-clitic that doubles the logophoric pronoun *sí mismo* ends up being free in its LBD (in accordance with Principle B).

In contrast, it is not possible for D-clitics to double the local/reflexive anaphor *sí mismo*. As I have shown in detail in section 3.4., this is so because this element is an anaphor subject to Principle A and as such, needs to be bound in the same LBD where the D-clitic doubling it must be semantically free. As a result of this, when the doubled anaphoric DO *sí mismo* is bound in its LBD (in accordance with Principle A), the D-clitic coindexed with it will automatically end up being also bound in its LBD, in violation of Principle B.

in Spanish: i.e., D-clitics are able to double the logophoric pronoun *sí mismo*, but not its homophonous reflexive anaphor in Spanish. This is so because the latter, but not its homophonous logophoric pronoun, is an anaphor and consequently, it must be semantically bound within the same LBD where the D-clitic needs be free.

3.5. A brief Note on the Acquisition of Direct and Indirect Object clitics in Spanish.

Finally, to conclude this Chapter, I would like to point out the significance that the clitic doubling paradigms that we have discussed so far have for the acquisition of φ- and D-clitics in Spanish. To be more specific, I will argue that on the basis of the clitic-doubling structures that Spanish children have available as their PLD, Binding Theory (conceived as an innate component of UG) forces them to exclude an analysis of the Spanish φ-clitics in Table 3.3 (but not the D-clitics in Table 3.2) as pronominal clitics.

Table 3.3 *3RD PERSON DO/IO D-CLITICS*

	DAT/IO	ACC/DO	
		msc	fem
SG	le	lo	la
PL	les	los	las

Table 3.4 *DO/IO φ-CLITICS*

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

As we have seen in this Chapter, the Spanish φ-clitics in Table 3.3 must double the DO/IO reflexive pronouns *mi/ti/sí mismo*, while the D-clitics in Table 3.2 cannot¹⁰ (cf. section 3.4). An obvious and immediate consequence of this contrast between D- and φ-clitics is that, during the acquisition process, *anaphoric* D-doubling structures like (69) in Spanish (cf. examples (43a) and (43b) of section 3.4.1.) will not be part of the Primary Linguistic Data (PLD) available to Spanish children.

- (69) a. *Los chicos los golpearon a sí mismos.
 the boys 3.msc.sg.DO kicked A themselves
 (lit.) ‘The boys kicked themselves.’

¹⁰ For the ease of the argumentation, we ignore the logophoric pronoun *sí mismo* in Spanish that we have discussed in section 3.4.3 (see, however, fn. 11).

- a. *Juan le contó la noticia a sí mismo.
 J. 3.sg.IO told the new to himself
 (lit.) ‘Juan told the news to himself.’

The badness of the Spanish sentences in (69), as I have contended in this Chapter, can be easily explained within Binding Theory. To be more specific, in (69) a D-clitic (i.e., the 3pl DO D-clitics *los* in (69a) and 3sg IO D-clitic *le* in (69b)), which needs to be free in its LBD, doubles a reflexive pronoun in object position (the 3pl DO reflexive pronoun *sí mismos* in (69a) and the 3sg IO *sí mismo* in (69b)), which in turn must be semantically bound in the same LBD where the D-clitic needs to be free. Thus, as a consequence of their contradictory binding requirements, either the D-clitic would cause a Principle B violation (because it ends up being bound in the same LBD where the doubled anaphor must be bound) or the doubled anaphor triggers a Principle A effect (because it will be free in the same LBD where the doubling D-clitic needs to be free).

Note that, in contrast, the PLD available to Spanish children will include *anaphoric* φ-doubling structures like (70) in Spanish (cf. examples (1a)-(1d) of section 3.1.), where a DO/IO reflexive pronoun is mandatorily doubled by a φ-clitic in the same clause.

- (70) a. Yo *(me) voté a mí mismo.
 I 1..sg.DO voted A myself
 ‘I voted myself.’
- b. Tú *(te) criticaste a ti mismo.
 you 2.sg.DO criticized A yourself
 ‘You criticized yourself.’
- c. Juan *(se) votó a sí mismo.
 J. 3.sg/pl-DO voted A himself
 ‘Juan voted for himself.’
- d. Yo *(me) envié eso a mí mismo.
 I 1.sg.IO sent this to myself
 ‘I sent this to myself.’

e. Juan *(se) regaló un viaje a sí mismo.

J. 3.sg/pl.IO gave a trip to himself

'Juan gave a trip to himself.'

In contrast with the D-clitics in (69), the φ -clitics *me*, *te* and *se* in (70) double the DO/IO reflexive pronouns *mi/ti/sí mismo* without causing either a Principle A or a Principle B violation. Hence, *anaphoric* φ -doubling examples of the type exemplified in (70) will provide Spanish children with the positive evidence necessary to exclude an analysis of the φ -clitics in (70) as pronominal clitics. In other words, if they analyze the φ -clitics in (70) as pronominal clitics, such an analysis will lead them to a contradiction. This is so because, as explained before, it is impossible for a pronominal clitic that is coindexed with a reflexive pronoun to be semantically free in the same LBD where the latter needs to be semantically bound.

Suppose, however, that during the acquisition process, Spanish children decide to analyze the φ -clitics in Table 3.3 as reflexive clitics: i.e., as object anaphors that for independent reasons, need to cliticize-to the verb. Under this analysis, both the φ -clitics and the anaphors they double in (70) would require to be semantically bound in their LBD, in accordance with Principle A. Here the question is whether the PLD available for Spanish children provides them with positive evidence against an analysis of the Spanish φ -clitics along these lines (i.e., as a reflexive clitics).

Of course, the Spanish φ -clitics in Table 3.3. double the DO/IO non-reflexive pronouns *mi/ti/él* etc. which, as we have discussed in Chapter 2 at length, must be semantically free in their LBD. In this case, it is not possible to analyze the Spanish φ -clitics as reflexive clitics. But one might still argue that Spanish φ -clitics are ambiguous between pronominal and reflexive clitics. According to this ambiguous analysis, the Spanish φ -clitics in (70), which double the reflexive pronouns *mi/ti/sí mismo*, should be analyzed as reflexive clitics, which just happen to be homophonic with their non-reflexive counterparts.

Bearing this ambiguous analysis of the Spanish φ -clitics in mind, consider the Spanish φ -doubling sentences in (36)-(38), repeated here as (71)-(73) for convenience. In

these sentences, the non-reflexive pronouns appearing in object position are (i) doubled by a φ-clitic and (ii) are syntactically bound in their LBD by a co-referring DP bearing focus. For simplicity, we represent syntactic binding by means of two identical superscript numerical indices.

- (71) Solo YO¹ me voté a mí¹.

Only I 1.sg.DO voted A me

- a. I am the only person x such that x voted for me. (✓coreference)
- b. I am the only person x such that x voted for x. (✗variable binding)

- (72) Solo TÚ¹ te criticastes a ti¹.

only you 2.sg.DO criticized A you

- a. You were the only person x such that x criticized you. (✓coreference)
- b. You were the only person x such that x criticized x. (✗variable binding)

- (73) Solo JUAN¹ se votó a él¹.

only J. 3.sg/pl.DO voted A him

- a. Juan was the only person x such that x voted for Juan. (✓coreference)
- b. Juan was the only person x such that x voted for x. (✗variable binding)

In (71)-(73), it is not possible to analyze the φ-clitics that appear attached to the finite verb as object anaphors that, for independent reasons, need to cliticize to the verb. This is so because in Spanish anaphors must be semantically bound in their LBD. But the φ-clitics in (71)-(73) are not semantically bound in their LBD: if they were, then the non-reflexive pronouns doubled by them in (71)-(73) would have also been semantically bound in their LBD, causing a Principle B violation. But this is not what we see in (71)-(73). Instead, what we see in these examples is that the doubled non-reflexive pronouns cannot be semantically bound in their LBD. This is shown by the fact that the Spanish sentences in (71)-(73) do not support the variable reading informally represented in (71b)-(73b).

Furthermore, on the grounds of the results that we have obtained in Chapter 2, it will be also impossible to analyze the φ-clitics in (71)-(73) as pronominal clitics. Recall

that pronominal clitics like the Spanish D-clitics *lo(s)/la(s)/le(s)* count as deficient pronouns for the purposes of semantic interpretation (cf. C&S1999). Unlike their non-clitic counterparts *mi*, *ti*, *él* etc., the Spanish D-clitics must obligatorily refer to *prominent/familiar* discourse referents. As a consequence of this, neither D-clitics nor the non-reflexive pronouns doubled by (and coindexed with) them are able to corefer with a focused-marked DP (cf. section 2.3).

If this is correct, the φ -clitics in (71)-(73) cannot be analyzed as pronominal clitics. This is so because in (71)-(73), the non-reflexive pronouns are doubled by a φ -clitic and do in fact corefer with the DP subject that syntactically binds them in their LBD.

As I have shown in Chapter 2 in detail, this possibility is not available for the non-reflexive pronouns that are doubled by a D-clitic, as shown in (74). In this sentence, the 3sg DO D-clitic *lo* is coindexed with the doubled 3sg DO non-reflexive pronoun *él* and as a consequence of this, these two elements must corefer to the same discourse referent. Since D-clitics, as explained above (and in more detail in section 2.3.), cannot corefer with a focus-marked DPs, the non-reflexive pronoun that is doubled by (and coindexed with) the D-clitic in (74) is not allowed to corefer with a focus-marked DP either (in this case, the DP subject *JUAN*).

- (74) Solo JUAN² lo^{1/*2} criticó a él^{1/*2}.
 only J. (NOM) 3.msc.sg.DO criticized A him(ACC)
 ‘Only JUAN criticized him’
 a. Juan was the only person x such that x criticized Juan (\times coreference)
 b. Juan was the only person x such that x criticized x (\times variable binding)
 c. Juan was the only person x such that x criticized y (\checkmark disjoint reference)

The key point here is that Binding Theory (which, as mentioned above, I take to be an innate component of Universal Grammar) necessarily leads Spanish children to analyze the φ -clitics *me/te/se/nos/os* as object agreement. That is, based on the clitic-doubling structures that are part of their PLD, Spanish children have overt available positive evidence against the analysis of the φ -clitics as pronominal (or reflexive) clitics. By contrast, this kind of positive evidence does not appear to be available for the Spanish

D-clitics in Table 3.2. This is so because during the acquisition process, D-doubling structures of the type seen in (69), where the D-clitics *lo(s)/la(s)/le(s)* double a reflexive pronoun having a local antecedent, are not part of the PLD available to these children.¹¹ This means that during the acquisition process, Spanish children will not be able to find (in their PLD) any syntactic structure whose analysis would force them to exclude the hypothesis that the Spanish D-clitics are pronominal clitics.

3.6. Conclusions.

The main contributions of this Chapter can be summarized as follows:

- I have offered a new account for the fact that, in Spanish, reflexive pronouns having a local antecedent must be doubled by the φ -clitics *me/te/se/nos/os*, but cannot be doubled by the D-clitics *lo(s)/la(s)/le(s)*. Specifically, I have contended that this contrast can be easily explained under the hypothesis that Spanish **D**-clitics are pronominal clitics, while φ -clitics are *mere* object agreement morphemes lacking referential properties. In particular, I have argued that the restriction that D-clitics cannot double object anaphors derives from the fact in Spanish D-clitics and reflexive pronouns exhibit opposite binding requirements. While reflexive pronouns must be bound in their LBD, D-clitics need to be semantically free in their LBD. This forces the D-clitic to be bound in the same LBD where the doubled anaphor needs to be bound, causing a Principle B violation.

Striking support in favor of this analysis comes from the fact that under the right binding conditions, D-clitics do in fact double anaphors: this happens whenever the

¹¹ Note that, as we have seen section 3.2., D-clitics can double the long-distance anaphor *sí mismo* because the antecedent of the latter is outside the LBD where the D-clitic must be free. But crucially, the D-clitic does not violate Principle B even in this type of D-doubling structures in Spanish. This is so because the D-clitic ends up being semantically free in its LBD (*see* sections 3.2.1 for evidence in favor of the analysis of the long-distance anaphor *sí mismo* in these D-doubling structures in terms of a logophoric pronoun in disguise). This means that the PLD available to children does not contain any D-doubling structure where a D-clitic is bound in its LBD without causing a Principle B violation, contrary to what happened with the φ -clitics.

Spanish reflexive pronoun *sí mismo* takes an antecedent that binds *sí mismo* from outside the LBD where the D-clitic needs to be free, such that the latter is able to satisfy its binding requirements (Principle B). In addition to this, I have provided new evidence in favor of the analysis of the long-distance anaphor *sí mismo* in Spanish as a logophoric pronoun in disguise: i.e., as a pronoun that must refer to the perspective-bearer of the clause.

This theoretical assumption has allowed me to provide a principled explanation for the following two questions:

Q1 Why can *sí mismo* be bound from outside its LBD without causing a Principle A violation?

Q2 Why can D-clitics double the logophoric pronoun *sí mismo* (but not its homophonous reflexive anaphor in Spanish)?

- As for **Question 1**, I have defended that the logophoric pronoun *sí mismo* is, as its name indicates, a pronoun and consequently, it is not governed by Principle A, but by Principle B.
- As for **Question 2**, I have proposed that D-clitics are able to double the Spanish logophoric pronoun *sí mismo* because the antecedent of the Spanish logophoric pronoun *sí mismo* is outside the LBD where the D-clitic needs to be free, so that the latter ends up being free in its LBD.
- Finally, I have briefly discussed the significance that the clitic doubling paradigms that we have discussed so far have for the acquisition of φ-and D-clitics in Spanish. To be more specific, I have argued that on the basis of the clitic-doubling structures available for Spanish children (their PLD), Binding Theory forces children to analyze the Spanish φ-clitics as object agreement morphemes. Crucially, this alternative is not available for Spanish D-clitics. By inspecting their PLD, Spanish children cannot find any positive evidence against an analysis of the D-clitics *lo(s)/la(s)/le(s)* as pronominal clitics.

CHAPTER 4

The Role of Referentiality in D-doubling structures.

4.1. Introduction.

As I have argued in previous Chapters, object clitics split into two different classes in Spanish: namely, D-clitics and φ -clitics, illustrated in Table 4.1. and Table 4.2, respectively. While according to their semantic and binding properties, the D-clitics *lo(s)/la(s)/le(s)* are pronominal clitics (i.e., object pronouns which, for independent reasons, need to move from its original position inside the VP to cliticize to the head v), the φ -clitics *me/te/se/nos/os* should be best analyzed as object agreement morphemes lacking referential properties (i.e., as the mere morphological reflex of an Agree relation holding between the head v and a DP argument inside the VP).

Table 4.1 *D(ETERMINER)-CLITICS*
[(3rd person) pronominal clitics]

		DAT/IO	ACC/DO	
		msc	fem	
SG	le	lo	la	
PL	les	los	las	

Table 4.2 *φ -CLITICS*
[(1st/2nd/3rd person) DO/IO agreement morphemes]

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

The proposal that Spanish clitics split into agreement morphemes and pronominal clitics is not, however, new and has been independently developed by Bleam (1999) and Ormazabal & Romero (2013) (henceforth O&R). There are however important differences between those proposals and the one I defend in this dissertation.

One of the first features that distinguishes these analyses from the novel proposal I defend in this thesis is that the former only discuss the doubling possibilities that object clitics display in Spanish, but do not address the binding properties that the different types of object clitics exhibit in this language.

A second crucial difference between the aforementioned proposals and mine concerns the syntactic status of the IO D-clitics *le(s)*. Specifically, while I have proposed that, like the DO D-clitics *lo(s)/la(s)*, also the IO D-clitics *le(s)* are pronominal clitics, Bleam (1999) and O&R (2013) argue that the IO D-clitics *le(s)* should be characterized as object agreement morphemes. That is, according to these authors they should be removed from the D-clitics in Table 1.1. and should be classified as a subtype of the φ-clitics in Table 4.2.

Specifically, what Bleam and O&R claim is that IO D-clitics *le(s)* should not be classified together with DO D-clitics *lo(s)/la(s)* because, unlike the latter, the IO D-clitics *le(s)* display the hallmarks of object agreement: they do not impose “any restriction on the argument type that they can double” (O&R 2013: 311).

Since this is an important question, let us consider in detail which type of elements can be doubled by these clitics. A non-exhaustive list of the nominal arguments that the Spanish IO D-clitics *le(s)* are allowed to double includes¹: (i) full referential expressions (R-expressions, for short), like proper names and definite descriptions, and (ii) Quantificational Phrases (QPs), like wh-NPs and quantifiers.

¹ Recall that, as pointed out in several places throughout this thesis, IO D-clitics must double pronominal DPs in IO position.

(1) •Type of elements that can be optionally doubled by the IO D-clitics *le(s)* in Spanish

a. *IO D-Doubling of R-expressions [all dialects]*

(Le) han regalado eso al niño/a Pedro.
3.sg.IO have given this(ACC) to.the boy(DAT)/to P.(DAT)
'They have given this to the boy/Pedro.'

b. *IO D-Doubling of Wh-NPs [all dialects]*

¿A quiénes (les) han regalado eso?
A who.pl(DAT) 3.pl.IO have given this(ACC)
'Who did they give this?'

c. *IO D-Doubling of Quantifiers [all dialects]*

Le regalaron caramelos a cada niño/a todo dios.
3.sg.IO gave candies(ACC) to each boy(DAT)/to everybody(DAT)
'They offered candies to each boy/to everybody.'

In (1a), the 3sg IO D-clitic *le* can optionally double a fully referential DP in IO position. As illustrated by this example, this DP can be either a definite description (*el niño*) or a proper name (*Pedro*). In (1b), the 3pl IO D-clitic *les* optionally doubles the dative wh-phrase *quiénes* (the plural counterpart of *quién* 'who'). Finally, in (1c) the 3sg IO D-clitic *le* optionally co-occurs with a dative quantifier (either the distributive QP *cada niño* 'each boy' or the universal QP *todo dios* 'everybody').

The doubling possibilities available to the 3rd IO D-clitic *le(s)* illustrated in (1a-c) are similar to the ones available to 1st/2nd person φ-clitics. In this regard, O&R(2013: 311-312) explicitly point out that 1st/2nd person φ-clitics not only must double pronouns (as we have seen in Chapters 1 and 2), but also definite DPs, wh-phrases and quantifiers, as shown by the sentences in (2) (which I borrow from O&R (2013), ex. (15) and (18)).

(2) a. *φ-Doubling of R-expressions [all dialects]*

No *(nos/os) han visto a los estudiantes.
not 1sg.DO/2pl.DO have seen A the students(ACC)
'They have not seen (us/you) students.'

b. *φ-Doubling of Wh-phrases [all dialects]*

¿A quiénes * (os/nos) han contratado?

A who.pl(ACC) 1pl.DO/2pl.DO have hired

‘Who (of us/you) did they hire?’

c. *φ-Doubling of QPs and other non-referential expressions [all dialects]*

No *(nos/os) encontraron {a nadie/ a ningún chico}.

Not 1pl.DO/2pl.DO found A no.one(ACC)/ A no boy(ACC)

(lit.) ‘They have not found any one/any boy (of us/you).’

This empirical parallelism leads O&R (2013) to claim that, just like the 1st/2nd person φ-clitics *me/te/nos/os*, the 3rd person IO D-clitics *le(s)* do not impose any restriction on the type of argumental DPs they can double because these clitics “passed the cliticization stage and became agreement morphemes” in all Spanish dialects. In the same vein, Bleam (1999) contends that the Spanish IO D-clitics *le(s)* should be analyzed as agreement morphemes because “all dialects allow doubling of the indirect object, and there are almost no restrictions on the interpretation of the doubled NP” [Bleam 1999: 35].

In this regard, both 3rd person IO D-clitics *le(s)* and 1st/2nd person φ-clitics *me/te/nos/os* differ from Spanish DO D-clitics *lo(s)/la(s)* in the range of argument types that they are allowed to double. Thus, O&R (2013) and Bleam (1999) point out that, while doubling by the first two types of clitics (φ- and IO D-clitics) is widely available across all Spanish dialects, doubling by DO D-clitics *lo(s)/la(s)* is subject to dialectal variation (see also Jaeggli 1982, Súñer 1988, Bleam 1999, Zdrojewsky & Sánchez 2018, and references cited therein).

To illustrate some of these differences, consider the examples in (3-5) below. While DO D-clitics *lo(s)/la(s)* are only able to double pronouns in European Spanish, in Rioplatense Spanish (Argentina) these very same clitics are able to double both pronouns and R-expressions. Continuing with the comparison between these two varieties of Spanish, although they differ in the doubling possibilities I have just mentioned, they behave however in a *homogeneous* way regarding the possibility to double

quantificational NPs: neither Rioplatense nor European Spanish allow DO D-clitics *lo(s)/la(s)* to double QNPs/wh-NPs.

(3) *DO D-doubling of Non-Clitic Pronouns*

Lo	vieron a él	(✓EurSp, ✓RioSp,)
3msc.sg.DO	saw A them	
‘They saw them.’		

(4) *DO D-doubling of R-expressions*

Lo	atacaron	al Papa/a la abogada	(*EurSp, ✓RioSp,)
3msc.sg.DO	attacked	A.the Pope/A.the lawyer	
‘They attacked the Pope/the lawyer.’			

(5) *DO D-doubling of Strong Quantifiers*

*Lo	saludé	a cada estudiante	(*EurSp, *RioSp)
3msc.sg.DO	greeted	A each student	
‘They greeted each student.’			

Thus, leaving aside the (in)ability to double R-expressions (which is subject to dialectal variation and to which I will return in section 4.5.), the main difference between DO and IO D-clitics is that the IO D-clitics *le(s)* are allowed to double both referential DPs (pronouns and R-expressions) and non-referential expressions (wh-NPs and QPs), while the DO D-clitics *lo(s)/la(s)* can only double referential DPs.

However, despite the fact that DO D-clitics are not allowed to doubled QPs, I have shown in Chapters 1 and 2 with great care that the DO D-clitics *lo(s)/la(s)* behave like the IO D-clitics *le(s)* in terms of Binding Theory and other relevant aspects concerning their semantic interpretation. Crucially, these properties, which I have summarized in (6), remain constant across all varieties of Spanish and contrast with the semantic/binding properties exhibited by *true* object agreement morphemes (the Spanish ϕ -clitics in Table 4.2. above).

(6) • *Binding/Semantic Differences between (DO/IO) D-clitics and (DO/IO) φ-clitics:*

- (i) Both DO and IO **D**-clitics obey Principle B: they count as pronouns for the purposes of semantic interpretation and as such, they must be (semantically) free in their LBD. This is in contrast to what happens with φ -clitics, which are exempted from obeying this principle. As shown in Chapter 3, this difference is fundamental to explain why, unlike φ -clitics, D-clitics are not allowed to doubled anaphors. While anaphors must be (semantically) bound in their LBD (in accordance with Principle A), D-clitics must be (semantically) free in exactly the same LBD where the anaphors that they double need to be bound. That is, D-clitics are not allowed to doubled anaphors because the binding requirements of the former are in total contradiction with the binding requirements of the doubled anaphor.
- (ii) Both DO and IO **D**-clitics differ from φ -clitics in that the former have their own referential properties and are able to affect the semantic interpretation of the doubled NP. By contrast, φ -clitics lack the relevant referential/semantic features necessary to affect the semantic interpretation of the doubled NP. That is, while φ -clitics are ‘invisible’ for the purposes of semantic interpretation, D-clitics are pronominal-like D-heads and, like other pronominal expressions, possess the semantic features necessary to affect the semantic interpretation of the DP that they double. Specifically, D-clitics are defective pronouns (in the sense of C&S1999) and, unlike their non-clitic counterparts, they must obligatorily take a *prominent* discourse referent as their antecedent. As shown in Chapter 2, this forces the non-defective (non-clitic) pronouns that are doubled by a D-clitic to also take a *prominent* discourse referent as their antecedent. Crucially, this is in contrast to what happens with these non-defective pronouns (the non-clitic pronouns) in the other two structures where they surface: (i) in the absence of clitic doubling, and (ii) in φ -doubling structures, where they are doubled by a φ -clitic.

What we can thus conclude from the binding and semantic properties in (6) is that, contrary to what Bleam and O&R claim, both DO and IO D-clitics form a unitary class and display the hallmarks of pronominal clitics.

In the remainder of this Chapter I will show that the syntactic and the semantic properties characterizing all Spanish D-clitic doubling structures —including not only the DO D-clitics *lo(s)/la(s)*, as Bleam and O&R contend, but rather both the DO D-clitics *lo(s)/la(s)* and the *IO le(s)* in Table 4.1.—, can be explained under the analysis of D-clitics as pronominal clitics I have defended in this thesis. More specifically, I will show that in D-doubling structures the semantic and syntactic properties characterizing R-expressions and QNPs can be satisfied in a way compatible with the syntactic and semantic requirements of the D-clitic. This conclusion will provide strong additional evidence in favor of the analysis of D-clitics as pronominal clitics I have proposed.

With this goal in mind, in section 4.2. I will examine in detail the binding properties exhibited by R-expressions in Spanish. This will help us determine whether, in configurations involving D-clitic doubling, both the D-clitic and the doubled R-expression are able to simultaneously satisfy their respective binding requirements within the relevant binding domain. On the basis of this analysis, I will show that although in Spanish D-clitics and R-expressions are subject to different binding requirements (Principle B and Principle C, respectively), D-clitics are allowed to double R-expressions because the binding requirements of the latter are not in contradiction with those of the doubling D-clitic.

I will then move to section 4.3., where I will examine the licensing conditions for quantificational expressions (more specifically, wh-NP and quantifiers), with a special emphasis on the movement operations (wh-movement and Quantifier Raising) that these elements must undergo to reach their scope positions. As I will show, the pronominal status of the Spanish D-clitics (which count as pronouns for the purposes of Binding Theory) does not interfere with the licensing conditions that wh-phrases and quantifiers display in Spanish. To that end, I will examine in detail the assumptions underlying the Big-DP analysis that I have adopted in this work (cf. Uriagereka 1995, 1998 and references cited therein), and will propose to add some technical modifications that will help us to explain the semantics of head-movement chains headed by a D-clitic. On these theoretical and empirical grounds, I will provide a uniform account of how the semantic relation between the clitic and the doubled DP (be it a pronominal, an R-expression or a quantificational expression) gets established.

4.2. Full-referential D-doubling structures in Spanish.

The term *full-referential* D-doubling (that I will use here and elsewhere in this Chapter) refers to a well-studied class of clitic doubling structures in Spanish where the D-clitics *lo(s)/la(s)/le(s)* co-occur with a R-expression that surfaces in object position (DO or IO). As we have seen at the start of this Chapter, in all Spanish dialects the IO D-clitics *le(s)* are allowed to double R-expressions, while the DO D-clitics *lo(s)/la(s)* can double R-expressions in Rioplatense, but not in European Spanish (see e.g., Jaeggli 1982, 1986, Uriagereka 1988, 1995, Bleam 1999, Zdrojewski 2013, Ormazabal & Romero 2013 and references cited therein).

- (7) a. *Full-referential IO D-doubling* (all dialects of Spanish)
- (Le) han regalado eso al niño/ a Pedro.
3.sg.IO have given this to.the boy/to P.
'They have given this to the children/some children.'
- b. *Full-referential DO D-doubling* (Rioplatense Spanish only)
- (Lo) atacaron al Papa/al abogado.
3.msc.sg.DO attacked A.the Pope/A.the lawyer
'They attacked the Pope/the lawyer.'

In this section, I will examine in detail the binding properties exhibited by R-expressions in Spanish, with the purpose of determining whether R-expressions and D-clitics can simultaneously satisfy their respective binding requirements in D-clitic doubling structures like (7) (i.e., in syntactic configurations where a R-expression is doubled by, and coindexed with, a D-clitic).

To that end, in the next subsection I first will examine in detail the binding conditions under which R-expressions must be licensed in the absence of clitic doubling. Then, on the basis of this study, in section 4.2.2. I will show the way in which both the D-clitic and the doubled R-expression can satisfy their respective binding requirements simultaneously in D-doubling constructions.

4.2.1 Principle C in the absence of Clitic Doubling.

Within Binding Theory, Principle C establishes the licensing conditions for R-expressions like names or definitive descriptions (see e.g., Chomsky 1981, 1986, Lasnik & Uriagereka 1988, Lasnik 1989, Chomsky & Lasnik 1995 and much related work). According to the *classical* definition of this principle, a R-expression needs to be free everywhere: i.e., not bound by any element anywhere. The definition of binding relevant to the *classical* analysis of Principle C in (8) is given in (9).

- (8) Principle C (Chomsky 1981):

A R-expression must be free

- (9) a. A binds B only if

b. A c-commands B, and

c. A and B are coindexed.

[Chomsky 1981]

Principle C in (8) automatically rules out the illegitimate, coreferential, interpretation of the Spanish sentences in (10) below. In these examples, this construal is ruled out because under this interpretation a R-expression like the DP *María* (inside the PP [PP *por María*]) would be bound by a coreferential DP (either the pronominal subject *Ella* in (10a) or the matrix subject DP *La abogada* in (10b)). Notice that the coreferential interpretation is illegitimate irrespective of whether the DP *María* is bound from within or from outside its own clause, as shown in (10a) and in (10b), respectively.

- (10) a. *Ella¹/La abogada¹ votó por María¹.

she/the lawyer voted for M.

‘She/The lawyer voted for María.’

- b. *Ella¹/La abogada¹ [cree que Marcos votó por María¹].

she/the lawyer believes that M. voted for M.

‘She/The lawyer believes that Marcos voted for María.’

Under the *classical* version of Principle C in (8), what differentiates R-expression from pronouns is that pronouns only need to be free in their LBD, while R-expressions must be free everywhere (that is, they can never be bound).

However, for the reasons I have explained in detail in Chapter 2, in this thesis I have departed from the *standard* definition of binding in (9), which is the definition that underlies Chomsky's *classical* analysis of Principle C in (8). Instead, following Büring (2005), I have adopted the assumption that at LF there exist two different types of binding relations that are relevant for the purposes of Binding Theory: *syntactic* and *semantic* binding.

To be more specific, with regard to the class of pronouns (which in Spanish includes both pronominal DPs and D-clitics), in Chapter 2 I have shown that, in accordance with Büring's Principle B in (11), all sorts of pronouns must always be *semantically* free. However, I have also shown that the Spanish non-reflexive (non-clitic) pronouns *mi/ti/él* etc. can be *syntactically* bound in their LBD whenever the HLB! in (12) does not block syntactic binding: namely, in those cases where syntactic and semantic binding produce meanings that are not truth-conditionally equivalent (e.g., in focus constructions).

(11) Principle B (Büring 2005):

A pronoun must semantically free in its LBD

(12) A binder prefix λ sem(antically)-binds an NP at LF if and only if

- (a) λ and NP are coindexed
- (b) λ c-commands NP
- (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP α is not bound by any binder prefix in a phrase marker P, we say that α is semantically free in P. [Büring 2005:130]

(13) *Have Local Binding! (HLB!)*

For any two NPs A and B, if A could semantically bind B (i.e., if it c-commands B and B is not semantically bound in A's c-command domain already), A must semantically bind B, unless that changes the interpretation.

[Büring 2005: 270]

If, as I have contended in Chapter 2, in order to capture the whole range of binding properties that the different types of pronouns exhibit in Spanish we need to appeal to Büring's (2005) version of Principle B, then the question that immediately arises is whether Principle C is similar to Principle B in that it involves reference to *semantic* binding alone, or whether it differs from Principle B and needs to involve reference to both *syntactic* and *semantic* binding. Put in other words, the question that needs to be answered is whether R-expressions must be *semantically* free or need to be both *semantically* and *syntactically* free.

In order to address this question and provide a principled answer for it, we must determine which one the following two hypotheses turns out to be empirically correct in Spanish:

• *Hypothesis 1*

If, as it happened with pronominal DPs, R-expressions must be *semantically* free, but are allowed to be *syntactically* bound by a coreferential DP bearing focus, then we would be led to conclude that, for the purposes of Principle C, the relevant binding relation for R-expressions is *semantic* binding. If that was the case, the conclusion that would follow from this result is that the only relevant type of binding for R-expressions is *semantic* binding: a R-expression must be semantically free everywhere, it does not matter whether it is *syntactically* bound. Under this scenario, the only relevant binding condition for Principle C would be *semantic* binding; this would be totally parallel to the conclusion we arrived at for Principle B in Spanish, where only *semantic* binding turned out to be relevant. If so, this would mean that *syntactic* binding is only ruled by the HLB!, which licenses *syntactic* binding whenever *syntactic* and *semantic* binding produces meanings that are not truth-conditionally equivalent (as for instance, in focus constructions).

- *Hypothesis 2*

If R-expressions must be both *semantically* and *syntactically* free (preventing them from being bound by a focalized DP), this will mean that the way in which we need to define Principle C differs from that in which we have defined Principle B: while Principle B only needs to appeal to *semantic* binding, Principle C must involve reference to both *syntactic* and *semantic* binding.

Büring (2005) contends that out of these two hypotheses the correct one for English is *Hypothesis 1*. Specifically, what this author shows is that R-expressions cannot be coreferential with a non-focalized c-commanding DP, as shown in (14a), but they can corefer with a c-commanding DP when the latter is focalized, as shown in (14b) (see also Reinhart 1973).

- (14) a. He¹ likes John^{*1/2}. (English)
b. Only HE¹ likes John^{1/2} [Büring 2005]

- (15) *Principle C (English) (Büring 2005):*
A R-expression must be semantically free.

According to Büring (2005), Principle C in (15) must involve reference to *semantic* binding (but not to *syntactic* binding), in a way totally parallel to Principle B in (11). The reason is that in English R-expressions are allowed to be *syntactically* bound in those cases where the HLB! does not block *syntactic* binding: namely, in those cases where *syntactic* and *semantic* binding produce meanings that are not truth-conditionally equivalent, as the grammatical English sentence in (14b) involving focus demonstrates.

However, as I will show next, Büring's Principle C in (15) does *not* make the correct predictions for Spanish. Rather, in the case of Spanish out of the two hypotheses above the correct one is not Hypothesis 1, but *Hypothesis 2*. This is so because Spanish differs from English in those cases where the binder of a R-expression corresponds to a focalized DP: while in English a R-expression can be syntactically bound by this focalized DP, this is impossible in Spanish, where R-expressions must be obligatorily interpreted as disjoint in reference from the focalized DP. This means that only *Hypothesis 2* can provide an analysis of the data which is empirically correct for Spanish.

Consequently, in contrast with Büring's analysis of Principle C in English, in Spanish this principle must involve reference to both *semantic* and *syntactic* binding.²

With this roadmap in mind, consider the interpretation available for the Spanish sentences in (16)-(18), where the DP subject is focalized.

² Since I defend the view that in Spanish Principle C must involve reference to both *semantic* and *syntactic* binding, my analysis is compatible with the idea that Principle C is subject to parametric variation, as argued e.g., by Lasnik (1989). Based on a comparative analysis of Principle C in English, Thai and Vietnamese, Lasnik (1989) argues that Chomsky's Principle C in (8) is subject to parametric variation and cannot be thus analyzed as an invariable principle of UG.

Elaborating on this, Lasnik (1989) shows that, in contrast to R-expression in English, which must be free everywhere (see fn. 1 in Chapter 4), R-expressions in Thai and Vietnamese may be bound by another R-expression from outside their LBD, as shown in (i). In addition to this, Vietnamese differs from Thai in that, in the former, a R-expression must free in its LBD, as shown in (iia), while this requirement does not hold in the latter, as illustrated by (iib).

- | | | |
|------|---|--------------------------------------|
| (i) | a. cœon ¹ khít waa cœon ^{1/2} cháláát.
John thinks that John is smart. | (Thai) |
| | b. John ¹ tin John ^{1/2} se thang
John thinks John will win | (Vietnamese)
[Lasnik 1989: 153] |
| (ii) | a. cœon ¹ chœp cœon ^{1/2}
John likes John | (Thai) |
| | b. John ¹ thuong John ^{*1/2}
John likes John | (Vietnamese)
[Lasnik 1989: 153-4] |

Based on these facts, Lasnik (1989) suggests that Chomsky's Principle C in (18) must be parameterized at least in three different ways, which are summarized in (iii).

- (iii) Principle C

 - a. A R-expression must be free (English)
 - b. A R-expression must be free in its LBD. (Vietnamese)
 - c. no requirement (Thai)

If Lasnik's analysis of Principle C turns out to be correct, then the idea that R-expressions might also vary crosslinguistically in the way they must be free (with the option of them being either *semantically* or *syntactically* free, or both, being subject to parametric variation) does not appear to be unreasonable. Exploring this possibility goes, however, far beyond the scope of this dissertation and I will leave it for further research.

- (17) Solo ELLA confia en la abogada.
 only she trusts in the lawyer
 ‘Only SHE trusts the lawyer.’
- a. She is the only x such that x trusts y ($y=she$) (*coreference)
 - b. She is the only x such that x trusts x (*variable binding)
 - c. She is the only x such that x trust y ($y\neq x$) (✓ disjoint reference)
- (18) Solo ÉL cree que confian en Messi.
 only he believes that trust in M.
 ‘Only HE belives that they trust Messi.’
- a. He is the only x such that x believes they trust y ($y=He$) (*coreference)
 - b. He is the only x such that x believes they trust x (*variable binding)
 - c. He is the only x such that believes they trust y ($y\neq x$) (✓ disjoint reference)

In (16)-(18) the oblique DPs that surface inside the PP (namely, the proper name *Maria* the definite description *la abogada* and the proper name *Messi*, respectively) must be obligatorily interpreted as disjoint in reference from the DP in subject position (i.e., the definite DP *LA ABOGADA* and the pronominal DPs *ELLA* and *ÉL*), as informally represented in (16c)-(18c). In other words, as shown in (16a)-(18a) it is not possible for the oblique DPs and their clause-mate subjects in (16)-(18) to be interpreted as coreferential. Crucially, this is so irrespective of the fact that the HLB! does not block *syntactic* binding: the bound variable (*semantic* binding) interpretation in (16b)-(18b) is not truth-conditionally equivalent to the coreference (*syntactic* binding) interpretation in (16a)-(18a).

What the Spanish paradigm in (16)-(18) shows us is that, contrary to what happened with R-expressions in English, their corresponding R-expressions in Spanish cannot be either *syntactically* or *semantically* bound by any DP anywhere. On this empirical ground, I propose that in Spanish Principle C must be defined as in (19):

(19) Principle C (Spanish)

A R-expression must be FREE. α is FREE only if:

- a. α is *semantically* free, and
- b. α is *syntactically* free.

My version of Principle C in (19) differs, on the one hand, from Chomsky's (1981) *classical* Principle C in (8) above, in that the former does, but the latter does not, involve reference to the way R-expressions must be interpreted in the semantics. Specifically, the version of Principle C I have proposed in (19) states that R-expressions can neither corefer nor covary with any c-commanding DP in the clause. On the other hand, the Principle C in (19) also differs from Büring's (2005) analysis of this principle in (15) in the formulation of the type of conditions that must be taken into account when defining "to be free". My version of Principle C in (19) takes two different types of conditions to be relevant: it states that both *syntactic* and *semantic* binding are relevant when defining these conditions; more specifically, it states that a R-expression must be FREE (i.e., both *semantically* and *syntactically* free).

The reason why I have been led to adopt the formulation of Principle C as in (19) with both *semantic* and *syntactic* binding playing a role is, as explained before, empirical. This decision has been based on the fact that in Spanish R-expressions cannot obviate Principle C violations under the same conditions where their corresponding R-expression in English do obviate Principle C violations (i.e., in cases where the HLB! in (13) does not block *syntactic* binding because *syntactic* and *semantic* binding produce different meanings). To put it differently, I have shown that Büring's (2005) proposal that Principle C regards only *semantic* binding, not *syntactic* binding (or coreference), cannot be extended to the analysis of Principle C in Spanish. This is because in this language R-expressions must be both *semantically* and *syntactically* free (i.e., FREE) everywhere.

Having determined the structural conditions governing the anaphoric possibilities that Spanish R-expressions exhibit in the absence of clitic doubling (which I have captured by proposing the modified version of Principle C in (19)), in the next section I will examine in detail the binding possibilities that R-expressions exhibit in *full-referential* D-doubling structures, with the aim of determining whether it is possible for

the D-clitic and the R-expression to simultaneously satisfy their respective binding requirements.

4.2.2. Principle C in D-Doubling Constructions in Spanish.

My version of Principle C in (19), according to which a R-expression must be FREE (i.e., neither semantically nor syntactically bound by any element), rules out the ungrammatical Spanish D-doubling examples in (20). In these sentences, a R-expression (the dative DP *María*) is doubled by the 3sg IO D-clitic *le* and is not allowed to be bound by a covarying/coreferential DP (the clause-mate subject in (20a) and the matrix subject in (20b)). For ease of presentation, I will momentarily omit the index of the D-clitic.

(20) *D-clitic doubling of full referential IOs (all dialects)*

- a. *Ella¹/*La abogada¹ le regaló eso a María¹.
she/the lawyer 3sg.IO gave this to M.
‘She/The lawyer gave this to Mary.’

- b. *Ella¹/*La abogada¹ cree que Marcos le regaló eso a María¹.
she/the lawyer believes that M. 3sg.IO gave this to Mary
‘She/the lawyer believes that Marcos gave this to Mary.’

The same goes for the ungrammatical D-doubling examples in (21) in Rioplatense Spanish; in these sentences, a DO R-expressions (the accusative DP *María*) is doubled by 3sg DO D-clitic *la* and cannot be bound by a covarying/coreferential DP (see e.g., Jaeggli 1982, Súñer 1988, Zdrojewsky 2013 and references cited therein).

(21) *D-clitic doubling of full referential DOs (Rioplatense Spanish)*

- a. *Ella¹/*La abogada¹ la votó a María¹.
she/the lawyer 3fem.sg.DO voted A M.
‘*She¹/*The lawyer¹ voted for Mary¹.’

- b. *Ella¹/*La abogada¹ cree que Marcos la votó a María¹.
she/the lawyer believes that M. 3fem.sg.DO voted A M.
‘*She¹/*The lawyer¹ believes that Marcos voted for María¹.’

The version of Principle C I have proposed in (19) does not, however, rule out the grammatical IO D-doubling examples in (22) in Spanish. In these sentences what we have is an IO R-expression (the dative DP *María*) which is coindexed with, but not c-commanded by, the pronominal DP *ella* inside the DP subject. The reason why this coreferential reading is legitimate is because in (22) the doubled R-expression (the DP *María*) turns out to be FREE: i.e., neither *semantically* nor *syntactically* bound by the DP coindexed with it, in accordance with Principle C in (19).

(22) *D-clitic doubling of full referential IOs (all dialects)*

- a. [Un buen amigo [de ella]¹] le regaló eso a María¹.
a good friend of her 3sg.IO gave this to M.
‘A good friend of her¹ gave this to Mary¹.’
- b. [Un buen amigo [de ella]¹] cree que Marcos le
a good friend of her believes that M. 3sg.IO
regaló eso a María¹.
gave this to Mary
‘A good friend of her¹ believes that Marcos gave this to Mary¹.’

So it happens with DO R-expressions doubled by DO D-clitics *lo(s)/la(s)* in Rioplatense Spanish, as illustrated by the grammatical D-doubling sentences in (23). In these examples, the 3sg DO D-clitic *la* doubles a DO R-expression (the accusative DP *María*), which is FREE in each sentence.

(23) *D-clitic doubling of full referential DOs (Rioplatense Spanish)*

- a. [Un buen amigo [de ella]¹] no la votó a María¹.
a good friend of her not 3fem.sg.DO voted A M.
‘A good friend of her¹ did not vote for Mary¹.

- b. [Un buen amigo [de ella]¹] cree que Marcos no la
 a good friend of her believes that M. not 3fem.sg.DO
 votó a María¹.
 voted A M.
 ‘A good friend of her¹ believes that Marcos voted for María¹.’

Leaving aside the dialectal variation between Rioplatense and European Spanish concerning the doubling possibilities exhibited by the DO D-clitics *lo(s)/la(s)*, the binding conditions under which a R-expression may be doubled by the D-clitic *lo(s)/la(s)/le(s)* seem to be the same in all dialects, at least in terms of Binding Theory. I formulate this generalization in (24).

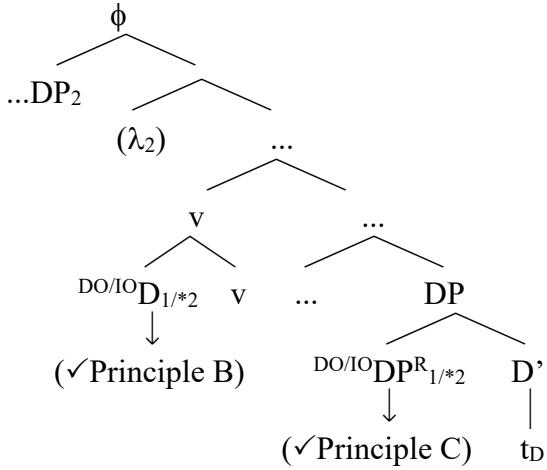
(24) *Generalization on the D-clitic Doubling of a R-expression (all Spanish dialects)*

A R-expression (call it DP_R) can be doubled by a D-clitic only if DP_R does not violate Principle C in (19) according to which a R-expression must be FREE (i.e., neither semantically nor syntactically bound by any element).

At first sight, what (24) says appears to be rather trivial: i.e., a R-expression doubled by a D-clitic is subject to the same binding requirements that this very same R-expression is independently subject to in the absence of clitic doubling. However, under the analysis of Spanish D-clitics as pronominal clitics, the consequences of (24) for the analysis of D-doubling constructions are not trivial at all. This is so because D-clitics and R-expressions are subject to different binding requirements (Principle B and Principle C, respectively); therefore, if the analysis of D-clitic as pronominal clitics is on the right track, when they are coindexed and are interpreted as coreferential, these two elements should be able to simultaneously satisfy their respective binding requirements for the derivation to be allowed.

With this in mind, let us consider in detail the Big-DP structure represented in Figure 1 [For expository purposes, I will assume that ϕ stands for the relevant LBD of the D-clitic]:

Figure 1. Syntactic configuration corresponding to D-clitic doubling of *full referential* DO/IOs (Spanish)



In the structure sketched in Fig. 1, the Big-DP consists of a DO/IO R-expression (called $^{DO/IO}DP_R$) which is coindexed with a $^{DO/IO}D$ -head, which moves to v as a result of head-movement. Under the assumption, adopted in Chapter 2, that the $^{DO/DO}D$ -head which has adjoined to v in Fig. 1 does not c-command the $^{DO/IO}DP_R$ that is left behind as a result of D-movement (see section 2.3.2.1), neither the $^{DO/DO}D$ -head adjoined to v nor its copy/trace inside the Big-DP c-commands the $^{DO/IO}DP_R$ in this syntactic configuration.

This assumption is important to determine whether the $^{DO/DO}D$ -head and the doubled $^{DO/IO}DP_R$ are able to simultaneously satisfy their respective binding requirements, which can be summarized as follows: while the $^{DO/DO}D$ -head must be *semantically* free in its LBD, the doubled $^{DO/IO}DP_R$ must be *FREE* (i.e., neither *semantically* nor *syntactically* bound any element). Since nothing precludes the doubled $^{DO/IO}DP_R$ in Fig. 1 to be *FREE* in the same LBD where the $^{DO/DO}D$ -head must be semantically free, the binding requirements of these two elements (although different) can be simultaneously satisfied without causing either a Principle B or a Principle C violation.

Note, however, that if a $^{DO/IO}D$ -head doubles a $^{DO/IO}DP_R$ (i.e., a R-expression) and this $^{DO/IO}D$ -head is in turn bound by a semantic binder from outside its LBD, although the $^{DO/IO}D$ -head will not violate Principle B and will still meet its licensing requirements, this will have immediate undesired consequences for the doubled $^{DO/IO}DP_R$: to be more specific, this referential expression will not be *FREE* and as a result this will cause a Principle C violation, as represented in (25).

(25) ... DP₂ (*λ₁) ... [ϕ ... [^{DO/IO}D₁ +v] ... [DP ^{DO/IO}DP_R¹ [D· t]]]

(where ϕ stands for the LBD of the ^{DO/IO}D-head)

In order for the ^{DO/IO}DP_R coindexed with the ^{DO/IO}D-head in (25) to be FREE, the latter cannot be sem(antically)-bound by the binder prefix λ₁. It goes without saying that this configuration does not prevent the ^{DO/IO}D-head in (25) from satisfying Principle B. This is because Principle B licenses the ^{DO/IO}D-head in (25) irrespective of whether the latter turns out to be free or semantically bound from outside its LBD. That is, Principle B only states that a pronoun must be semantically free in its LBD; consequently, the pronoun can (but does not have to) be semantically bound from outside its LBD.

Summarizing what we have seen so far, in this section I have shown that in Spanish R-expressions and D-clitics are subject to different Binding Principles (namely, Principle B and Principle C, respectively). I have further shown that although R-expressions and D-clitics are subject to different binding requirements, D-clitics are allowed to double R-expressions because (depending on the structural context where both types of expressions are inserted) the binding requirements of the latter need not be in contradiction with those of the doubling D-clitic. To be more specific, in *full-referential* D-doubling structures (where R-expressions are doubled by, and coindexed with, a D-clitic) nothing precludes these two elements from satisfying their respective binding requirements: while, in accordance with the version of Principle C I have proposed in (19), the doubled R-expression must always be FREE (that is, neither *syntactically* nor *semantically* bound by any element) everywhere, the D-clitic only needs to be free in its LBD (in order for it to satisfy Principle B).

4.3. The Syntax and Semantics of *Quantificational D-Doubling* in Spanish.

In addition to R-expressions, in all Spanish dialects the IO D-clitics *le(s)* are allowed to double quantificational expressions (wh-NPs and quantifiers). For terminological purposes, I will introduce the term *quantificational D-doubling* to refer to those clitic doubling structures where the Spanish IO D-clitics *le(s)* double a quantificational expression, with the aim of distinguishing them from the rest of D-doubling constructions discussed so far.

As we have seen at the beginning of this Chapter, in all Spanish dialects *quantificational D-doubling* is possible with the IO D-clitics *le(s)*, as shown in (26A), but D-doubling is not allowed with the DO D-clitic *lo(s)/la(s)*, as illustrated by (26B).

- (26) A. *Inability of DO-clitics to double QNPs* (all dialects)

- a. ¿A quién (*lo) vieron?
a who(ACC) 3msc.sg.DO saw
'Who did they see?'
- b. (*Los) vieron a todos los chicos.
3msc.pl.DO saw A all the boys(ACC)
'They saw all the boys.'

- B. *Ability of IO D-clitics to double QNPs* (all dialects)

- a. ¿A quiénes (les) han regalado eso?
to who.pl(DAT) 3pl.IO have given this(ACC)
'Who did they give this?'
- b. Le regalaron caramelos a cada niño/a todo dios.
3.sg.IO gave candies(ACC) to each boy(DAT)/to everybody(DAT)
'They offered candies to each boy/to everybody.'

A well-known difference between R-expressions and quantificational expressions that will be fundamental for the analysis of *quantificational* D-doubling sentences like (26A-B) is that, unlike R-expressions, quantificational expressions must undergo syntactic movement to a position where they can take scope. Thus, a brief note on the syntax and semantics properties characterizing wh-movement and Quantifier Raising in this language will be in order here before delving into the analysis of the Spanish D-doubling sentences in (26).

With regard to wh-phrases (e.g., elements like *quién* ‘who’ *qué* ‘what’ *cuánto* ‘how much’, etc. in Spanish), the standard assumption is that they move to a position where they take scope (to a specifier in the left periphery, identified with [spec, CP] under the *classical* analysis of wh-movement). As a result of wh-movement, the moved wh-phrase leaves behind a non-distinct copy that is deleted for the purposes of PF³ (see e.g. Chomsky 1995, 1998, 2000; Nunes 1995, 2001, 2004; Bošković 2001 and much related work).

To illustrate this, let us consider the syntactic representation underlying the Spanish sentence in (27), where the accusative wh-phrase *a quién* has undergone movement to the left periphery of the sentence and, as mentioned before, cannot be doubled by a (DO) D-clitic. For convenience, copies that are not phonetically realized at the PF component are represented by strikethroughs.

- (27) a. *¿A quién atacó la policía?* (all dialects)
 A who attacked the police
 ‘Who did the police attacked?’
 b. LF: [CP a quién [C' atacó la policía <~~a quién~~>]]
 c. For which person x (the police attacked x).

³ Under the “copy theory of movement”, proposed and discussed in Chomsky (1995, 1998, 2000), Nunes (1995, 2001, 2004), Bošković (2001) a.o., the idea that moved NPs leave a coindexed trace (i.e., a phonologically empty category that has the relevant interpretative properties of the moved NP) is abandoned in favor of the hypothesis that “a trace is a copy of the moved element that is deleted in the phonological component [...], but is available for interpretation at LF” [Nunes 2004:2]. Although I adopt the copy theory in this dissertation, occasionally I make use of traces in this thesis for ease of representation.

The LF in (27b) is the result of moving the accusative wh-phrase *a quién* in (27b) to [spec, CP] in overt syntax (prior to LF). In the mapping from syntax to the phonological component, the lower of copy of *a quién* in (27) is deleted for the purposes of PF (see e.g., Chomsky 1995, 1998, 2000, Nunes 1995, 2001, 2004 and much related work). In turn, (27c) is the informal representation of the LF in (27b) (in terms of standard logic). In the LF in (27c), the material in brackets corresponds to the scope of the accusative wh-phrase *a quién*. The syntactic wh-movement operation in (27b) translates into the semantic LF representation in (27c) in a fairly transparent way: the scope of the moved wh-phrase *a quién* can be defined as the c-command domain of its upper copy at LF.

As for QPs, I will adopt the hypothesis, proposed and developed in May's (1977, 1985) influential work on quantification, that QPs (e.g., *cada uno* 'each one', *todo dios* 'everyone', *todos* 'all' etc.) undergo syntactic movement (usually referred to as Quantifier Raising, QR). QR is a syntactic operation that takes a QP and moves it to a scope position (overtly in some languages, and covertly at LF in other cases).

Bearing this in mind, let us consider (28b), which corresponds to the LF representation associated with the quantificational sentence in (28a) (adapted from Bosque and Gutiérrez-Rexach (2009:483)).

- (28) a. La policía atacó a cada estudiante.
the police attacked A each one
'The police attacked everyone.'
- b. LF: [_{IP} a cada estudiante [_{IP} la policía atacó <a cada estudiante>]]
- c. For each x (x: a student) [the police attacked x]

The LF in (28b) is the result of moving the accusative QP *todo dios* to a position from where it can take scope. Following Bosque & Gutiérrez-Rexach (2009:483), I assume that, in the case of the QP in DO position in (28)⁴ (the distributive QP *cada estudiante*), QR adjoins it as a segment of IP: an A'-position from where the QP takes scope over the

⁴ For different interpretations of QR and different ways to accommodate QR within minimalism, see a.o. Hornstein (1994), Fox (1995), or Beghelli & Stowell (1997).

entire sentence.⁵ Very roughly and leaving some technical details aside which are not crucial for our discussion of clitic doubling, for the purpose of semantics the scope of the QP will correspond to the c-command domain of the final landing site of the QP.

The standard assumption is that the application of QR at LF, represented by the covert movement operation in (28b), gives rise to the standard logic representation in (28c). From this respect, notice that there is a parallelism between the LF proposed for the case of wh-movement (in (27b-c)) and the one proposed for QR (in (28c)). In both cases the scope of the QNP (*a quién* in (27) and *a todo dios* in (28)) can be defined as the c-command domain of the highest copy of these elements at LF. The main difference between the two examples analyzed above involving wh-movement and QR is that the former movement of the wh-phrase to [Spec,CP] has taken place in the overt syntax, while QR usually takes place in the LF component in Spanish.

With regard to the semantics of wh-movement and QR, I will adopt a unified analysis of these two syntactic operations and propose the Movement Interpretation Rule (MIR) in (29), which I have formalized following Heim & Kratzer (1998: CH5) (see also Ruys 1992, 2004, Fox 1995, 2000, Büring 2005 and much related work).

(29) *Movement Interpretation Rule:*

In a structure formed by NP movement, NP [$\varphi \dots NPs \dots$], the derived sister of NP, φ , is interpreted as a function that maps an individual x to the meaning of $\varphi^{[n \rightarrow x]}$, where $\varphi^{[n \rightarrow x]}$ is like φ except that every copy of NP in φ is replaced by the index n .

$$(a) \quad NP[\varphi \dots <NP> \dots] \rightarrow NP \lambda x. [[\varphi' \dots n \dots]]^{g[n \rightarrow x]}$$

What the MIR in (29) basically says is that, as a result of NP-movement, the lower copy of a NP must be interpreted as a numerical index n , which is in turn interpreted as variable bound by the higher copy of the NP in the derived position.

⁵ For the purposes of this Chapter, what is of interest to us about QPs is not the landing position where they move at LF, but the fact that, like wh-NPs, QPs undergo A'-movement and that, as a result of A'-movement, the chain containing the higher and the lower copy of the QP is interpreted as an Operator-variable relation in the semantic component. This is in fact the only aspect of QR that will be relevant for the analysis of *quantificational D-doubling* structures that I will put forth in next section.

To see how the MIR works, let us consider the interpretation corresponding to the LF structure of the non-clitic doubling sentence in (30), where the accusative QP *a todo dios* ‘everyone’ surfaces in its original argument position inside the VP. For convenience, the lexical entry corresponding to the universal quantifier (*a*) *todo dios* is given in (30b).⁶

- (30) La policía atacó a todo dios.

The police attacked A every one

'The police attacked everyone.'

(a) LF: [a todo dios [la policía atacó <a todo dios>]] (by QR)

(b) $\llbracket(a) \text{ todo dios} \rrbracket = \lambda P. [\forall x P(x)]$

(c) a todo dios $\lambda x. \llbracket[\text{la policía atacó } n] \rrbracket^{g[n \rightarrow x]}$ (by MIR)

(d) $\llbracket\text{a todo dios}\rrbracket(\lambda x. \llbracket[\text{la policía atacó } n] \rrbracket^{g[n \rightarrow x]}) = 1 \text{ iff}$

$\llbracket\text{a todo dios}\rrbracket(\lambda x. [\text{la policía atacó } x]) =$

$\forall x. [\text{la policía atacó } x]$

The LF in (30a) is the result of raising the accusative QNP *a todo dios* to its scope position by QR. In the mapping to the semantic component, the MIR causes the lower copy of the QNP *a todo dios* in (30a) to be interpreted as an index bound by its upper copy, as shown in (30c-d). The MIR thus allows us to interpret the accusative QNP *a todo dios* not in the lower position where it is phonetically realized in (30), but in the derived, higher position where it takes scope at LF.

The MIR in (29), as it stands, will suffice us to understand how the doubled quantificational expressions (wh-NPs and quantifiers) are semantically interpreted in Spanish in *quantificational D-doubling*, a question that I will discuss more in detail in the next section.⁷

⁶ See Bosque & Gutiérrez-Rexach (2009:483) for an extensive account of the different types of QPs existing in modern Spanish.

⁷ Exploring the way the MIR can be extended to the analysis of other scope phenomena goes beyond the scope of this dissertation and I will leave it for further research (for related discussion, see Büring 2005: CH8) who makes an explicit proposal to capture weak cross-over effects in English under a version similar to the MIR in (29), with the difference that Büring formalizes the rule serving for the interpretation of NP-movement in terms of traces, rather than copies).

4.3.1. Conditions on *Quantificational D-Doubling* in Spanish.

As discussed in the previous section, in contrast with referential DPs (proper names or definite descriptions), wh-NP and QNPs are quantificational expressions and, as such, do not *refer* to specific individuals in the discourse. If so, in the Spanish sentences in (32) and in (33), neither the IO wh-phrases in (32) nor the QPs in (33) will rely on the assignment functions for their interpretation (see Chapter 2 for discussion). According to Büring's (2005) indexing convention in (31) (which I have adopted in this thesis), this means that in (32)-(33) the QPs that are doubled by the D-clitics *le(s)* lack a referential index.

- (31) *Indexing convention (Büring 2005):*

All and only non-quantificational NPs bear index.

- (32) *¿A quiénes/cuántos/qué chicos (les) han regalado un libro?*

to who/how many/which boys (3pl.IO) have gave a book

'Who/How many/Which boys did they give a book?'

- (33) *Juan (le) ha regalado un libro a todo dios/cada uno*

J. 3sg.IO has gave a book to every one/each one

'Juan gave a book to everyone/each one.'

An immediate and important consequence of (31) for the analysis of the Spanish sentences in (32)-(33) is that, in the syntactic structure underlying these sentences, the D-clitic *le(s)* cannot be coindexed with the doubled QPs (either in the case of the wh-phrase in (32) or the quantifier in (33)).

If this is correct, we cannot then assume that, in structures involving quantificational clitic doubling, the D-clitic and the quantificational expression that it doubles corefer. Rather, according to Büring's convention in (31), the assumption that the D-clitics *le(s)* covary with the doubled quantificational expression becomes inevitably: i.e., the D-clitic must be interpreted as a bound variable

Recall that, as I have shown in Chapter 2 (section 2.3.), in order for a D-clitic to be able to covary with a QP that it doubles, the D-clitic must be *semantically* free in its LBD, in accordance with Principle B in (36). Put in other words, we must assume that the D-clitic must covary with the doubled QP, but this is only possible if the doubled QP does not semantically bind the D-clitic; otherwise, if this happens, it will cause a Principle B violation.

(34) *Principle B (Büring 2005):*

A pronoun cannot be sem(antically)-bound.

(35) A binder prefix λ sem(antically)-binds an NP at LF if and only if

- (a) λ and NP are coindexed
- (b) λ c-commands DP
- (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a DP is not bound by any binder prefix λ in a phrase marker P, we say that DP is semantically free in P.

[Büring 2005:130]

Thus, assuming that the analysis that I have proposed of D-clitics as pronominal clitics is correct, I propose the generalization in (36) to capture the conditions⁸ under which the D-clitics will be allowed to double wh-phrases and QPs:

(36) *Generalization on quantificational D-doubling:*

A D-clitic pronoun D can double a quantificational expression Q if

- (a) D is interpreted as an individual variable bound by Q, and
- (b) D does not violate Principle B.

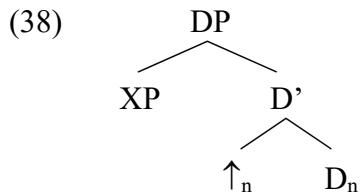
⁸ It goes without saying that (36) must be understood as a necessary, but not as a sufficient condition for licensing *quantificational* D-doubling. If a D-clitic does not double quantificational NPs in a given dialect d (e.g., DO D-clitics *lo(s)/la(s)* in European Spanish), we cannot conclude from this that the D-clitics of the relevant dialect d do not meet the conditions in (36). This is because *quantificational* D-doubling could be subject to additional conditions that, for independent reasons, the D-clitics of the relevant dialect d is not able to meet.

In the remainder of this section, I will develop an analysis of D-doubling of quantificational expressions based on the two conditions in (36). For reasons that I will explain below in this Chapter, this analysis will force us to modify some of the assumptions that I have earlier adopted. However, as I will show in section 4.3.3 in detail, the changes I will introduce in this section are compatible with the empirical evidence in favor of the analysis of D-clitics as pronominal clitics that I have put forth in previous Chapters, and will also shed new light on some aspects of the semantic of D-clitics that, to my knowledge, have not received a satisfactory account in the previous literature on the topic.

To account for the way D-clitics are able to covary with the doubled wh-phrase and QP, I will introduce an extra device which will serve for this purpose. Specifically, I will adopt Büring's (2005) \uparrow_n operator in (37). As I will explain below in detail, this operator turns a free variable indexed n into an argument position and will play a fundamental in explaining why the IO D-clitics *le(s)* are able to covary with the doubled QP.

$$(37) \quad \llbracket \uparrow_n \alpha \rrbracket = \lambda x. \llbracket \alpha \rrbracket^{g[n \rightarrow x]} \quad [\text{Büring } 2005:252]$$

As for the syntax of \uparrow_n , I will simply assume that the \uparrow_n operator freely adjoins to a D-clitic in the course of a syntactic derivation. Following this view, the structure sketched in (38) represents the case where the \uparrow_n operator is adjoined to the D-head inside the Big-DP.



- (39)
- a. $\llbracket XP \rrbracket = y$
 - b. $\llbracket D_n \rrbracket^g = g(n)$
 - c. $\llbracket [D' \uparrow_n D_n] \rrbracket^g = \lambda x. \llbracket D_n \rrbracket^{g[n \rightarrow x]} = \lambda x. [g[n \rightarrow x](n)] = \lambda x. x$
 - d. $\llbracket [DP \; XP [D' \uparrow_n D_n]] \rrbracket^g = \lambda x. x(y) = y$

For explanatory purposes, let us suppose that in (38) the doubled XP denotes an individual variable, as represented in (39a). In this structure, the \uparrow_n operator maps the denotation of its sister D-head, i.e., $g(n)$, to the lambda expression $\lambda x. [[D_n]]^{g[n \rightarrow x]}$, which (after assigning the value x to the index n bound by \uparrow_n) becomes an identity function: i.e., $\lambda x.x.$, as shown in (39c). In turn, the resulting identity function combines with the XP sitting in the specifier of the Big-DP in (38): i.e., $[\lambda x.x] ([[XP]])$. As a result of this, the denotation of the entire Big-DP ends up being identical to the denotation of the XP in its specifier, as shown in (39d). That is, the operator \uparrow_n causes the denotation of the XP in the specifier of the Big-DP in (38) to ‘absorb’ the meaning of the D-head, in such a way that the latter ends up covarying with the doubled XP, as shown in (39d).

Before explaining in more detail the way in which the \uparrow_n operator contributes to explain the semantics of *quantificational* D-doubling structures in Spanish, a brief note on the semantic interpretation of Head-Movement configurations is in order here. So far, to account for the syntax and the semantics that characterize the Spanish D-clitics *lo(s)/la(s)/le(s)*, I have adopted the two assumptions in (40) (see Chapter 2; section 2.3.):

- (40) (i) D-clitics are D-heads that originally start in an argument position and later on move to v as a result of Head-Movement (henceforth, HM).
- (ii) The copy of the D-clitic that counts for the purposes of semantic interpretation and Binding Theory at LF corresponds to the one which is adjoined to v (the higher one).

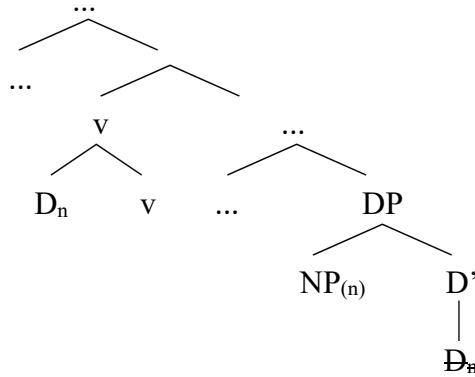
However, as I will show next in this section, the assumption in (ii) will turn out to be incompatible with the MIR that I have adopted in previous Chapters. This is so because, as a result of HM, the copy of the D-clitic that is adjoined to v does not c-command its lower copy and, as a consequence of this, the MIR (which requires the moved copy to c-command its lower copy) cannot apply to HM chains.

To overcome this problem, I will propose to eliminate (ii) in favor of the assumption that D-heads must receive their semantic interpretation in the position where

they are first merged (so that only the copy of the D-head that remains inside the VP will be semantically interpreted).

To illustrate the incompatibility between HM and the MIR, let us start by examining the syntactic structure sketched in (41), which gives an illustration of the two assumptions in (i)-(ii) that I have adopted so far. For convenience, the copy that does not count for the purposes of semantic interpretation in LF is indicated with strikethroughs.

- (41) *LF-Deletion of the lower copy of the D-clitic.*



Under the hypothesis represented in (41), it is the upper copy of the D-clitic D_n that is adjoined to v as a result of HM which is assumed to count for the purposes of LF. The lower copy which remains inside the Big-DP is ignored for the 'purpose of semantic interpretation.

However, if we entertain seriously the idea that in (41) the D-clitic (i.e., D_n) adjoins to v as the result of HM (see Chapter 1), then the assumption that the upper copy of the D-clitic D_n in (41) corresponds to the one interpreted in the semantic component turns out to be problematic. This is so because in (41) the upper copy of D_n adjoined to v as a result of HM does not get to c-command its lower copy: the reason is that the first branching node that immediately dominates the upper copy of D_n in (41), the head v , does not dominate the lower copy of D_n (Reinhart 1976). Hence, the derived sister of the upper copy of D_n in (41), v , does not dominate its lower copy and, as a consequence of this, the MIR (repeated here as (42) for convenience), would apply vacuously: i.e.,

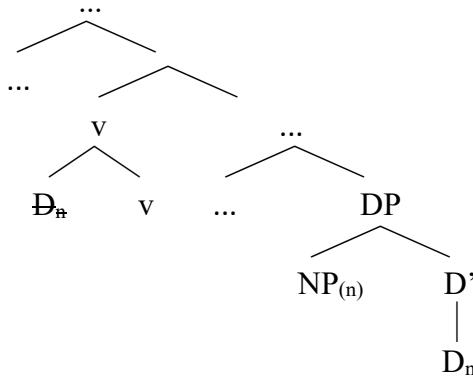
$$\left[\begin{array}{c} D_1 \\ \diagdown \\ D_1 \end{array} \quad v \right] \rightarrow D_1 \lambda x. [\![v]\!]^{g[n \rightarrow x]}.$$

(42) *Movement Interpretation Rule:*

$$\text{NP } [\varphi \dots <\text{NP}> \dots] \rightarrow \text{NP } \lambda x. [[\varphi' \dots n \dots]]^{g[n \rightarrow x]}$$

If so, it will be impossible for the MIR in (42) to interpret the two copies of the D-head in (41) as a movement chain (i.e., the lower one inside the Big-DP and the higher one adjoined to v). To overcome this problem, I will assume that it is the lower, rather than the higher, copy of the D-clitic the one that is taken into account at LF for the purposes of semantic interpretation. This alternative hypothesis is illustrated in the Big-DP structures in (43).

(43) *LF-Deletion of the upper copy of the D-clitic.*



The only difference between (41) and (43) is that, in the latter case, the higher copy of the D-clitic that moves to v in overt syntax is deleted at LF, so that this copy is not available for the semantic component.⁹

Although the assumption that the higher copy of head movement does not count for the purpose of semantic interpretation might look as a stipulation at first sight, it is still consistent with many works in the literature, starting among others with Chomsky (1995), which suggests that Head-Movement should be best analyzed as a phonological, rather than a syntactic, operation (see also Brody 2000, Hale & Keyser 2002, Bury 2003, Harley 2004, Platzack 2013 and much related work), and it is also fully compatible with works like Boeckx & Stjepanovic (2001), among many others, which have argued that head movement has no semantic import.

⁹ I will continue assuming that at PF only the higher copy of the D-head that moves to v is overtly expressed.

If so, then the auxiliary assumption that in (44) the upper copy of the D-clitic is invisible for the purposes of semantic interpretation turns out to be quite a natural hypothesis. If HM is a phonological operation, then the upper copy of the D-clitic that in (44) is adjoined to v will be generated only in the mapping from overt syntax to the phonological component and, consequently, it is natural to expect that only the lower copy of the D-clitic will be available for the LF component. Alternatively, if HM is a syntactic operation which happens to have no semantic import, this would be one more case where the upper copy should not be taken into account for the purpose of semantic interpretation.

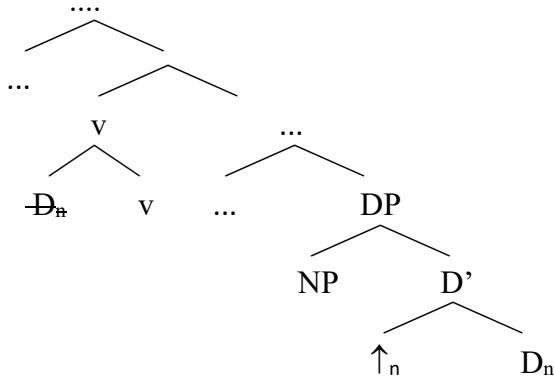
On the basis of this discussion, for the purposes of this Chapter, I will adopt the hypothesis represented in (43) and assume that D-clitics receive their semantic interpretation in the syntactic positions where they are first merged, rather than in the derived positions where they move as a result of HM.

For terminological purposes, I will refer to this analysis as the First Merge Position Interpretation (FMI) of D-clitics. This analysis introduces two novel assumptions concerning the syntax and the semantics of D-clitics, which are summarized in (44a-b).

(44) *First Merge Position Interpretation (FMI) of D-clitics (Spanish):*

- (a) The higher copy of the D-clitic that is created as a result of HM to v is invisible at LF for the purposes of semantic interpretation (indicated with strikethroughs in (44c)). As a consequence of this, only the lower copy of the D-clitic D_n that is sister to the \uparrow_n operator receives an interpretation in the mapping from LF to the semantic component, as represented in (44c).
- (b) The operator \uparrow_n that adjoins to the lower copy of the D-clitic forces the latter to covary with the doubled NP occupying the specifier of the Big-DP.

(c)



Since the main difference between (44) and the analysis of D-clitics that I have previously adopted in the preceding chapters concerns the syntactic position where the D-clitic must be semantically interpreted, there are two important questions that the FMI in (44) analysis must be able to answer:

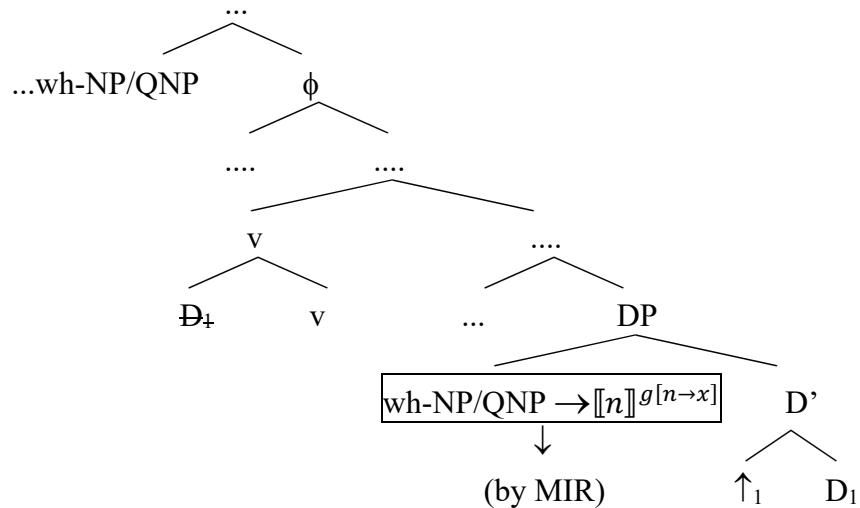
- (i) Can the FMI analysis of D-clitics account for the syntactic and semantic properties characterizing *quantificational* D-doubling structures in Spanish?
- (ii) Can this analysis be extended to the rest of D-doubling structures that I have discussed in this dissertation (i.e., *pronominal*, *anaphoric* and *referential* D-doubling structures).

In the remainder of this section, I will show that the assumptions on which the FMI analysis of D-clitic relies can easily account for the syntactic and semantic properties that *quantificational* D-doubling constructions exhibit in Spanish. In addition to this, in section 4.3.2., I will argue that FMI analysis summarized in (44) can be extended to the whole set of Spanish D-doubling constructions I have discussed in this dissertation. By adopting the FMI hypothesis of D-clitics in (44) I will be able to provide a uniform account of the way in which the semantic relation between the clitic and the XP (be it a pronominal, an R-expression or a quantificational expression) in the specifier of the Big DP is established and how it gets licensed.

With this roadmap in mind, let us first consider how the operator \uparrow_n contributes to explain the semantics of *quantificational* D-doubling. To illustrate its contribution, I will

examine in detail the D-doubling structure sketched in (45), where the specifier of the Big-DP corresponds to the lower copy of a wh-NP/QNP which results from the application of wh-movement or QR, respectively.

(45)



(47) *Movement Interpretation Rule:*

$$\text{NP } [\phi \dots \text{NP} \dots] \rightarrow \text{NP } \lambda x. [[\varphi' \dots n \dots]]^{g[n \rightarrow x]}$$

Following our discussion above, as the result of the MIR the lower copy of the doubled wh-NP/QNP in (45) is interpreted as an individual variable bound by the higher copy of the quantificational expression, as shown in (46a). To be more specific, the MIR in (47) transforms the lower copy of the wh-NP/QNP sitting in the specifier of the Big-DP in (45) into an index n that is bound by the upper copy of the wh-NP/QNP, as roughly illustrated in (46a). In turn, the \uparrow_1 operator maps the denotation of its sister D-clitic D_1 in (45), $g(1)$, to an identify function, $\lambda x.x$, as shown in (46b). The identity function $\lambda x.x$ resulting from applying \uparrow_1 to D_1 combines with the lower copy of the *wh-NP/QNP* in the specifier of the Big-DP in (45) which, as just mentioned, must be interpreted as an individual variable as a result of the MIR. Hence, the denotation of the Big-DP ends up

being identical to the denotation of the *wh-NP/QNP* occupying the specifier of the Big-DP: namely, an individual variable bound by the higher copy of the *wh-NP/QNP*, as shown in (46c). From this perspective, the contribution of the \uparrow_1 operator for the semantics of the *quantificational* D-doubling structure sketched in (45) is to force the D-clitic D_I to covary with the doubled wh-NP/QNP in the specifier of the Big-DP.

If this is correct, we can now account for the first part of the conditions under which *quantificational* D-doubling is allowed to take place, summarized in (38a) above (repeated here as (48) for convenience).

(48=38a) *Generalization on quantificational D-doubling (Spanish):*

- A D-clitic pronoun D can double a quantificational expression Q if
 - (a) D is interpreted as an individual variable bound by Q, and
 - (b) D does not violate Principle B.

As for the second part of (48), the question we need to ask is whether the proposed D-doubling structure in (46) involving the \uparrow_n operator inside the Big-DP is ruled out or not by Principle B. To this end, let us look, once again, at the way Büring's (2005) defines Principle B in (49).

(49) Principle B (Büring 2005):

- A pronoun cannot be sem(antically)-bound.

(50) A binder prefix λ sem(antically)-binds an NP at LF if and only if

- (a) λ and NP are coindexed
- (b) λ c-commands NP
- (c) there is no binder prefix λ' which is c-commanded by λ and meets (a) and (b).

If a NP is not bound by any binder prefix λ in a phrase marker P, we say that DP is semantically free in P.

[Büring 2005:130]

According to Büring's Principle B in (49) a pronoun cannot be bound by a binder prefix λ in its LBD. That is, a pronoun must be *semantically* free. In the preceding chapters I have argued in favor of adopting Büring's version of Principle B and extending it to account for the behavior of the Spanish D-clitics *lo(s)/la(s)/le(s)*. Under Büring's formulation of this principle, the interpretation of the binder prefix λ depends on the Binder Index Evaluation Rule (BIER) in (51), which I have earlier adopted in Chapter 2 to account for the whole range of referential interpretations available for the different types of pronouns in Spanish.

(51) Binder Index Evaluation Rule (Büring 2005:85):

$$[\![\lambda_n \alpha]\!] = \lambda_x. [\![\alpha]\!]^{g[n \rightarrow x]}(x)$$

(52) $[\![\uparrow_n \alpha]\!] = \lambda_x. [\![\alpha]\!]^{g[n \rightarrow x]}$ (Büring 2005:252)

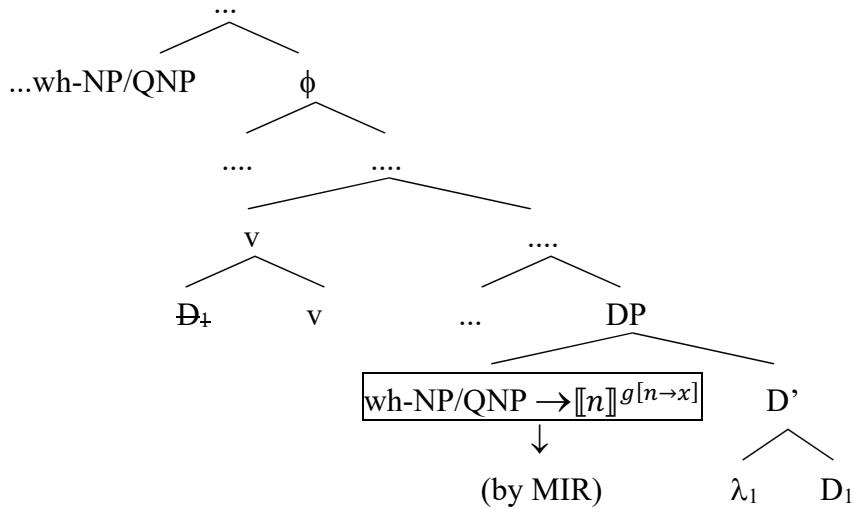
Notice that the semantics of the binder prefix λ_n in (51) is similar to that of the operator \uparrow_n , (repeated here as (52) for ease of comparison). The only difference between these two elements is that the binder prefix λ_n in (51) not only binds variables in α , but it also saturates an internal argument of α . This corresponds to the fact that a NP acting as a semantic binder is sister to a constituent that has an open argument slot (i.e. a predicate), as illustrated by the semantic derivation corresponding to the English reflexive structure in (53). In the semantic derivation corresponding to (53), which I have provided in (54), the semantic binder of the reflexive pronoun *himself* (that is, the pronoun *he*) saturates the open argument slot of its sister constituent: $[\beta_1 \text{ loves himself}_1]$. This is in contrast to what happens with the \uparrow_n operator, which, as just mentioned, does not take predicates but individuals as its argument. As I will show next, this difference between the \uparrow_n operator and the binder prefix λ_n will be fundamental to explain why the \uparrow_n operator (but not the binder prefix λ_n) can be adjoined inside the Big-DP at LF.

(53) $[\text{He}_1 \lambda_1 \text{ loves himself}_1]$

- (54) a. $\llbracket he_1 \rrbracket^g = g(1)$
 b. $\llbracket loves \ himself_1 \rrbracket^g = \lambda y. \lambda x. [y \ loves \ x] (g1) = \lambda y. [y \ loves \ g(1)]$
 c. $\llbracket \lambda_1 \ loves \ himself_1 \rrbracket^g = \lambda_x. \llbracket loves \ himself_1 \rrbracket^{g[1 \rightarrow x]} (x) =$
 $\lambda x. [\lambda y. [y \ loves \ g[1 \rightarrow x](1)]](x) = \lambda x. [x \ loves \ x]$
 d. $\llbracket \lambda_1 \ loves \ himself_1 \rrbracket^g (\llbracket he \rrbracket^g) = \lambda x. [x \ loves \ x] (j)$

Bearing this in mind, let us go back to the structures involving *quantificational* D-doubling in (55), which differ minimally from the alternative D-doubling structure in (46) discussed above in that in (55), the binder prefix λ is adjoined to the sister constituent of the lower copy of the wh-NP/QNP, in place of the operator \uparrow_n .

(55)



- (56) a. wh-NP/QNP $[\phi \dots \text{wh-NP/QNP} \dots] \rightarrow$
 $\text{wh-NP/QNP } \lambda x. [[\phi \dots n \dots]]^{g[m \rightarrow x]}$ (by MIR)
 b. $\llbracket D_1 \rrbracket^g = g(1)$
 c. $\llbracket [D' \lambda_1 D_1] \rrbracket = \lambda x. [\alpha]^{g[1 \rightarrow x]} (x) = \lambda x. g[1 \rightarrow x](x) = x$

The result of combining the binder prefix λ with the lower copy of the D-clitic in (55) yields not a bound, but a free variable, as shown in (56c). This corresponds to the fact that λ_1 's sister constituent in (56), D_1 , is not a predicate with an open argument slot, but an individual variable. As a consequence of this, the semantic binder (in this case, the lower copy of the wh-NP/QNP) does not saturate any argument slot of λ_1 's sister constituent in (i.e., the D-clitic D_1). Hence, the paradoxical consequence of this is that the D-clitic in (55), D_1 , ends up being semantically bound by the lower copy of the wh-

NP/QNP without covarying with the latter. However, the main problem raised by the D-doubling structure in (55) is not that semantic binding does not involve variable binding, but rather that the denotation of the Big-DP in (55), $\llbracket [DP \text{ wh} - NP/QNP [[D' \lambda_1 D_1]]] \rrbracket$, cannot be obtained by means of Function Application, the compositional rule that I have adopted in Chapter 2.

(57) Function Application (Heim & Kratzer 1998):

If A is a branching node and {B,Y} is the set of A's daughters, then A is in the domain of $\llbracket [.] \rrbracket$ if both B and Y are, and $\llbracket [B] \rrbracket$ is a function whose domain contains $\llbracket [Y] \rrbracket$. In this case, $\llbracket [A] \rrbracket = \llbracket [B] \rrbracket(\llbracket [Y] \rrbracket)$.

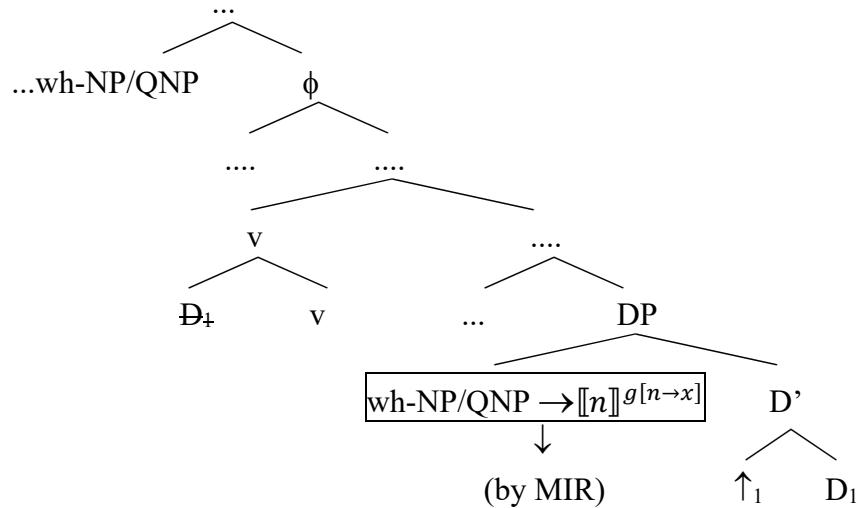
In (55), the Big-DP is a branching node whose daughter nodes (i.e., the lower copy of the wh-NP/QNP and the node D') both denote, as explained before, individual variables. As a consequence of this, neither the lower copy of the wh-NP/QNP in (55) is in the domain of D' nor the other way around. It follows from here that in (55) the interpretation of the Big-DP (if any) cannot be obtained by any of the compositional rules that are part of the semantic model that I have adopted in this thesis¹⁰ (see section 2.2).

If this is correct, the main problem with the D-doubling structure in (55) is not that the D-clitic D_1 turns out to be bound in its LBD by the binder prefix λ_1 (in violation of Principle B), but rather than the application of semantic binding inside the Big-DP in (55) cannot be properly interpreted in the semantic component: the resulting Big-DP fails to get a denotation by means of FA (or by any other compositional rule).

However, as I will show now, these two problems, do not arise in the analysis of the D-doubling structure in (46) that we have discussed above, repeated here as (58) for convenience. This structure differs from the ill-formed structure in (55) in that in (58) the \uparrow_1 operator (rather than a binder prefix, as (55)) adjoins to the sister constituent of the lower copy of the wh-NP/QNP.

¹⁰ Of course, one might come up with an *ad hoc* compositional rule serving only for the purposes of interpreting Big-DP structures of the type seen in (55). It goes without saying that an analysis along these lines would be, however, highly stipulative and should be rejected on conceptual grounds.

(58)



In (58), the operator \uparrow_n , maps its sister D-clitic D_1 into an identify function, i.e., $\lambda x.x$. In turn, the resulting identity function ends up being saturated by the lower copy of the *wh-NP/QNP* that occupies the specifier of the Big-DP in (58). As a consequence of this, the D-head ends up covarying with the doubled *wh-NP/QNP* that occupies the specifier of the Big-DP, as shown in (59).

What is more, in (58) the D-clitic D_1 is not bound in its LBD by any binder prefix λ , and consequently, it is *semantically* free in its LBD. Hence, Principle B in (64) does not exclude the D-doubling structure in (58). This is so because this principle only excludes pronouns to be bound in its LBD by a binder prefix λ (see Chapter 2), but crucially the \uparrow_n operator does not count as a binder prefix for the purposes of Binding Theory. If this is correct, then the FMI analysis of D-clitics that I have proposed in this section is also able to account not only for the first part of the condition in (48) (repeated below under (60)), but also for the second part of this condition: i.e., the one concerning Principle B in (60b).

(60) *Generalization on quantificational D-doubling:*

- A D-clitic pronoun D can double a quantificational expression Q if
- (a) D is interpreted as an individual variable bound by Q, and
 - (b) D does not violate Principle B.

Summarizing what we have seen so far in this section. I have shown that, in *quantificational* D-doubling, the D-clitic must covary, rather than corefer, with the QP it doubles (either a wh-NP or a quantifier). This is so because QPs do not *refer* (see section 2.2.) and, consequently, cannot corefer with a D-clitic. Furthermore, in order for the D-clitic to covary with the doubled QNP, the former cannot be *semantically* bound in its LBD by the latter; otherwise, if it were semantically bound, the D-clitic would not meet its licensing requirements and would cause a Principle B violation.

To account for the way in which D-clitics are allowed to covary with the doubled QNP without the latter semantically binding the former, I have borrowed the \uparrow_n operator (Büring 2005), which maps the denotation of the lower copy of the D-clitic (i.e. an individual variable) into an identity function (i.e., $\lambda x.x$). The resulting identity function combines in turn by FA with the lower copy of the wh-NP/QNP, so that the D-clitic ends up covarying with latter. That is, what the \uparrow_n operator does is ‘assimilate’ the denotation of the D-clitic into that of the doubled NP in the specifier of a Big-DP, so that the former ends up covarying with the latter. In addition to this, I have further shown that the \uparrow_n operator does not count as a binder prefix for the purposes of Binding Theory and consequently, the D-clitic (to which the \uparrow_n operator adjoins at LF) is able to covary with the doubled QNP without the former causing a Principle B violation.

Having determined the contribution of the \uparrow_n operator for the semantics of *quantificational* D-doubling, in next section I will briefly explore the consequences of the FMI analysis of D-clitics for the analysis of the rest of Spanish D-doubling constructions that I have previously discussed in this dissertation: namely, *pronominal*, *anaphoric* and *full-referential* D-doubling constructions.

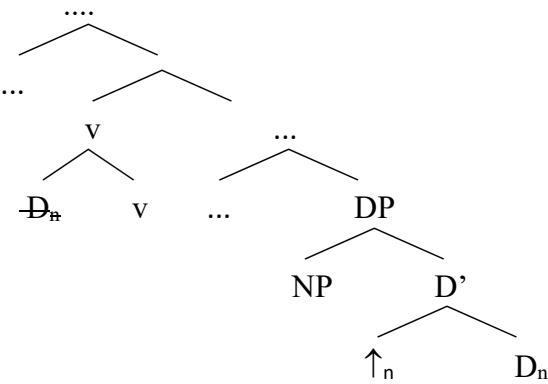
4.3.2 Beyond Quantificational D-Doubling.

The main goal of this section is to show that the FMI analysis of D-clitics, summarized in (61), can be extended to the whole set of D-doubling constructions in Spanish that we have discussed in this dissertation: namely, *pronominal*, *anaphoric* and *full-referential* D-doubling constructions. An advantage of extending this mechanism to all sort of structures involving D-clitic is that we can provide a uniform and single analysis of the way in which clitic doubling chains involving D-clitics and different types of argumental DPs get their semantic interpretation. The two main assumptions underlying this analysis may be succinctly summarized as in (61).

(61) *The First Merge Interpretation (FMI) Analysis of D-clitics (Spanish):*

- (a) The higher copy of the D-clitic that is created as a result of HM to v is invisible at LF for the purposes of semantic interpretation (indicated with strikethroughs in (62)). As a consequence of this, only the lower copy of the D-clitic D_n that is sister to the operator \uparrow_n receives an interpretation in the mapping from LF to the semantic component.
- (b) The operator \uparrow_n that adjoins to the lower copy of the D-clitic causes the latter to covary with the doubled NP occupying the specifier of the Big-DP.

(62)



With the goal of developing a uniform analysis of the semantics of clitic doubling for all structures involving D-clitics, irrespective of the type of XP that is licensed in the specifier of the Big DP and is doubled by the D-clitic, in section 4.3.2.1. I will first address D-clitic structures involving *pronominal* D-doubling constructions. More specifically, I

will present arguments in favor of the hypothesis that the FMI analysis of D-clitics in (64) can be extended (with minor qualifications) to this type of structures, where the D-clitic doubles a pronominal DP.

Then, in sections 4.3.2.2. and 4.3.2.3, I will show that this analysis can be further extended to include *anaphoric* D-doubling constructions and *full-referential* D-doubling constructions.

Finally, in section 4.3.2.4. I will discuss a further contribution of the \uparrow_n operator to the Big-DP analysis of clitic doubling. To be more specific, I will argue that the \uparrow operator helps us to explain why the D-clitic and the doubled NP are able to saturate the same argument slot of the verbal predicate, in such a way that the D-clitic and the doubled NP count as a single argument of the verbal predicate selecting the Big-DP that dominates them. To the best of my knowledge, this characterizing property of the semantics of D-doubling construction has never been accounted for in the extensive literature on clitic doubling (cf. Jaeggli 1982, 1986, Uriagereka 1985, 1998, Torrego 1998, Bleam 1999, Roberts 2010, Nevins 2011, Baker & Kramer 2018 and much related work). As I will show below, it is very difficult to explain this property without the help of the \uparrow_n operator that I have adopted in section 4.3.1.

4.3.2.1. *Pronominal D-Doubling Constructions.*

Let us start by considering the semantic interpretation of the Big-DP structure in (63), where a non-clitic pronoun DP, i.e., $[\text{pron}_1]$, is coindexed with the D-clitic heading the Big-DP.

$$(63) \quad \begin{array}{c} \llbracket \text{DP} \rrbracket^g = \lambda x. x.(g(1)) = g(1) \\ \swarrow \qquad \searrow \\ \text{DP} \qquad \qquad \qquad \text{D}' \\ \triangle \qquad \qquad \qquad \uparrow_1 \qquad \qquad \qquad D_1 \\ \llbracket \text{pron}_1 \rrbracket^g = g(1) \qquad \llbracket \uparrow_1 \rrbracket^g = \lambda x. \llbracket D_1 \rrbracket^{g[1 \rightarrow x]} = \lambda x. [g[1 \rightarrow x](1)] = \lambda x. x \end{array}$$

As explained in section 4.3.1, the \uparrow_n operator maps the denotation of its sister D-clitic in (63), $g(1)$, to an identity function, $\lambda x.x$. In turn, the non-clitic pronoun in the specifier of the Big-DP in (63), $pron_1$, saturates the identity function resulting from applying \uparrow_1 to its sister D-clitic D_1 . As a consequence of this, the denotation of the Big-DP in (63) turns out to be identical to the denotation of the doubled non-clitic pronoun. It follows from here that the D-clitic D_1 in (63) ends up covarying (in the sense explained in section 4.3.1.) with the pronominal DP occupying the specifier of the Big-DP. However, notice that, as a result of this, the D-clitic itself (whose meaning ends up being identical to the meaning of the doubled DP) does not seem to make any contribution to the semantic interpretation of the Big-DP in (63).

But as I have extensively argued throughout this dissertation, the idea that the DO/IO D-clitics *lo(s)/la(s)/le(s)* do not contribute to the semantic interpretation of the D-doubling structures where they are contained is not empirically correct.

Recall, first, that as I have shown in detail in Chapter 2, the Spanish D-clitics *lo(s)/la(s)/le(s)* impose an important restriction on the semantic interpretation of the 3rd person non-clitic pronouns *él/ella/ellos/ellas* that they double. More specifically, I have provided evidence that the Spanish 3rd person DO/IO non-clitic pronouns (*él/ella/ellos/ellas*) *can* corefer in their LBD with a *non-prominent* antecedent (in the sense of Cardinaletti & Starke 1999) in **non-clitic doubling** and **ϕ -doubling** constructions in Spanish (examples (64) and (65)), but crucially they *cannot* corefer in their LBD with a *non-prominent* antecedent¹¹ (for instance, with a DP which has the same

¹¹ Recall C&S' notion of “(non-)prominent antecedent” is related to the visibility that a given element needs to have to become an accessible/prominent referential antecedent for another element (which as in the case of D-clitics lack deictic force and need to get “referentially anchored” to an independently established and visible referential antecedent). More specifically, the referent of the D-clitic not only needs to be already introduced in the previous discourse, but must also be the most prominent individual among the set of individuals that have been already introduced in the discourse. This is what differentiates D-clitics from their non-clitic counterparts, which only require an antecedent that is part of the common ground (irrespective of whether such an antecedent is prominent or not).

It is in this regard that I understand their definition of “(non)-prominent antecedent”. When Focus introduces for the first time a new element in the discourse this element is prominent from the point of view of discourse information, but the reference that this element introduces has not been part of the common ground, and consequently it does not constitute a prominent *antecedent* (an already established and available referential antecedent). Consequently, the new element introduced by Focus cannot be a visible/prominent referential antecedent for a D-clitic. If, on the other hand, Focus does not introduce a new element, but emphasizes a discourse element over the others, this means that the referent that this focalized element denotes does not count as a prominent antecedent for the D-clitic for the following reason: if an

φ -features but has been first introduced in the context by means of informational focus) when they are **doubled by a DO/IO D-clitic**. The contrast in grammaticality and interpretation between (64-65) vs (66-67) bears witness of this difference.

(64) *Non-clitic doubling*

Solo JUAN¹ habló de él¹.

only J. talked of him

a. Juan is the only x such that x talked about y(=Juan) (\checkmark coreference)

b. Juan is the only x such that x talked about x (*variable binding)

(65) *φ -doubling*

Solo JUAN¹ se criticó a él¹.

only J. 3sg/pl.DO criticized A him

a. Juan is the only x such that x criticized y(=Juan) (\checkmark coreference)

b. Juan is the only x that x criticized x (*variable binding)

(66) *DO D-doubling*

*Solo JUAN¹ lo¹ criticó a él¹.

only J. 3.msc.sg.DO criticized A him

a. Juan is the only x such that x criticized y(=Juan) (*coreference)

b. Juan is the only x such that x criticized x (*variable binding)

(67) *IO D-doubling*

*Solo JUAN¹ le¹ envió la carta a él¹.

only J. 3.sg.IO sent the letter to him

a. Juan was the only x such that x sent the letter to y(=Juan) (*coreference)

b. Juan was the only x such that x sent the letter to x (*variable binding)

element needs to be emphasized by means of focus over other similar discourse elements, this means that the referent of this focalized element is by definition *non-prominent*; otherwise, this element would count already as a prominent discourse referent, and consequently there would not be any need to emphasize (focalize) it.

In Chapter 2, I have put forth the hypothesis that the badness of the Spanish D-doubling sentences in (68) and in (69) is due to the ‘defective’ semantics of the D-clitics *lo(s)/la(s)/le(s)*, which cannot corefer in their LBD with a *non-prominent* antecedent (see section 2.3.) and impose this restriction to the 3rd person non-clitic pronouns *él/ella/ellos/ellas* doubled by, and coindexed with, them.

The fact that the D-clitics *lo(s)/la(s)/le(s)* actually affect the semantic interpretation of the doubled pronominal DPs in (66) and in (67) is thus at odds with the idea that D-clitics do not contribute to the semantic interpretation of the D-doubling sentences where they surface.

Suppose, however, that the requirement that the 3rd person D-clitics *lo(s)/la(s)/le(s)* must have a *prominent* discourse referent is encoded by means of the feature [prom(inence)], as in (68a). This feature denotes a function from individual to individuals ($\langle e, e \rangle$) and adds an (identity) presupposition: i.e., the individual that this function returns is a member of the *PROM(INENCE)* set; otherwise, if the actual referent of the D-clitic does not belong to this set, its denotation will not be defined by the interpretation function $[[.]]^g$. Following C&S (1999), I take this set to contain only those individuals that, given their prominence in the relevant background discourse, are accessible as possible referents for defective pronouns.

- (68) a. $[\text{prom}] = \lambda x : x \in \text{PROMINENCE}(x).x$
 b. $[[\text{prom}]D_m]_g = g(m) \text{ if } g(m) \in \text{PROMINENCE}(x); \text{ undefined otherwise.}$

Notice further that the analysis I have just proposed of the feature [PROM] in (68) is based on Heim & Kratzer’ (1998) *classical* analysis of the semantics of φ -features. As shown in (69a), the feature [masc(uline)] denotes a function from individuals to individuals, and adds in turn the presupposition that the resulting individual is a male. Thus, as shown in (69b), when the function denoting the feature [msc] applies to a D-clitic with an index m, it returns the individual $g(m)$ if $g(m)$ is a male.

- (69) a. $[\text{msc}] = \lambda x : x \in \text{MALE}(x).x$
 b. $[[\text{msc}]D_m]_g = g(m) \text{ if } g(m) \in \text{MALE}(x); \text{ undefined otherwise.}$

On the basis of this analysis, we can now redefine Cardinaletti & Starke' (C&S 1999) generalization (introduced in Chapter 2), according to which clitic pronouns, but not their non-clitic counterparts, must have a *prominent* referent in the discourse as in (70).

- (70) Clitic pronouns must, but their non-clitic counterparts do not have to, carry the feature [prom].

As we have seen in the first part of the thesis the notion of “*prominent* referent” has been very useful in letting us account for the semantic interpretation available to D-clitics. As I will show now, by adopting my version of C&S’ generalization that I have provided in (70), we can exclude the ungrammatical D-clitic sentence in (71) in Spanish.

- (71) DO D-clitics

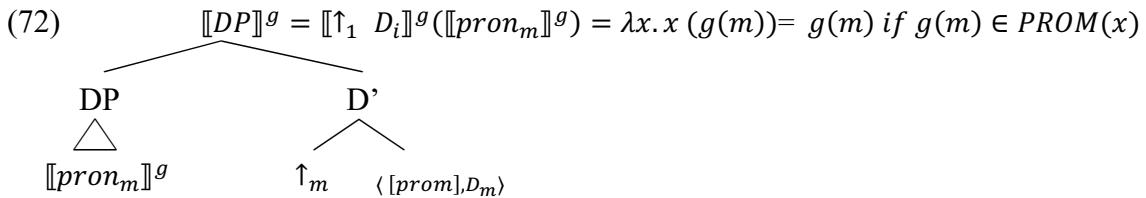
*Solo JUAN ¹	lo _{[prom]¹}	criticó.
only J.	3msc.sg.DO	criticized
Juan is the only x that x criticized y(=Juan) (*coreference)		

In (71), a DO D-clitic, i.e., *lo*, is *syntactically* bound in its LBD by a focalized DP (i.e., the DP *JUAN*). As I have shown in Chapter 2 (section 2.3.), Principle B does not exclude the indexing corresponding to the structure in (71): although the D-clitic *lo* is syntactically bound by the focus-marked DP *JUAN* (i.e., *lo* and the focalized DP *JUAN* that c-commands it share the same referential index), the former is *semantically* free in its LBD (not bound by any binder prefix), in accordance with Principle B.

The problem with the indexing corresponding to (71) is that it is impossible for the D-clitic to corefer with the focalized DP *JUAN*. This is because in (71) *lo* and *JUAN* are not able to independently refer to the same discourse referent: while the D-clitic *lo* bears the feature [prom] and consequently, its denotation will be undefined unless it refers to a *prominent* discourse referent, the DP *JUAN* is focalized and cannot count as a *prominent* discourse referent (see fn. 7). Therefore, if in (73) *JUAN* and *lo* share the same index, they will be forced to refer to the same discourse referent. But, given that the focalized DP *JUAN* is not able to denote a *prominent* discourse referent, the D-clitic coindexed with *JUAN* in (71) will not refer to a *prominent* discourse antecedent either;

as a consequence of this, the denotation of the D-clitic in (71) will be undefined. This is so because in (71) the D-clitic bears the feature [prom] but does not refer to a *prominent* discourse referent.¹²

Furthermore, to account for the fact that the pronominal DPs *él/ella/ella/ellos* doubled by a D-clitic cannot corefer in their LBD with a *non-prominent* antecedent, we only need to assume that the \uparrow_n operator does not cancel the presupposition of the feature [prom] carried by the D-clitic, in such a way that the doubled DP ends up inheriting such a presupposition from the D-clitic, as shown in (72). That is, if the D-clitic bears the feature [prom], then the doubled DP will inherit the PROM-presupposition of this feature of D-clitic.¹³



- a. $\llbracket pron_m \rrbracket^g = g(m)$
- b. $\llbracket D_i \rrbracket^g = g(i)$ if $g(i) \in PROM(x)$; undefined otherwise.
- c. $\llbracket D' \uparrow_m D_m \rrbracket^g = \lambda x. \llbracket D_i \rrbracket^{g[i \rightarrow x]} = \lambda x. [g[m \rightarrow x](i)] = \lambda x: x \in PROM(x). x$

¹² Notice that this is similar to what happens with the structure underlying the illegitimate reading of (i) in (ia). In this structure, the feminine pronoun *ella* and the D-clitic *lo* share the same index. This structure is not ruled out by Principle B because *ella* does not (semantically) binds *lo*: both elements are coindexed but the former does not c-commands the D-clitic. However, the coreferential interpretation produced by (ia) is ill-formed. This is so because *ella* and *lo* have different φ-features ([fem] and [masc], respectively) and, according to these respective φ-features, they must refer to different discourse antecedents. Consequently, the problem with (ia) is that *ella* and *lo* share the same index but are not able to corefer.

- (i) El padre de ella lo aprecia.
 The father of her 3sg.msc.DO likes
 'Her father likes him.'
 (a) [[El padre [de ella¹]] lo¹ aprecia]

¹³ Similarly, if the D-clitic bears the feature [msc]/[fem] or [sg]/[pl], then the doubled DP will also inherit all the presuppositions triggered by these features. Needless to say, this will force the doubled DP to have the same φ-features as the D-clitic (or at least, the φ-features of doubled DP must be compatible with those carried by the D-clitic).

The pronominal DP occupying the specifier of the Big-DP in (74), *pron_m*, does not carry any requirement regarding the type of discourse referent it must denote, but the D-clitic in (72), *D_m*, crucially does. Thus, if, as just said, the \uparrow_m operator does not cancel the PROM(INENCE)-presupposition carried by the D-clitic *D_m* that it applies to in (72), then the doubled pronominal DP, *pron_m*, will end up ‘inheriting’ the presupposition carried by the D-clitic *D_m*, as shown in (73c).

Hence, every pronominal DP doubled by a D-clitic will inherit the PROM(INENCE)-presupposition carried by the D-clitic and, as a consequence of this, it will be impossible for the doubled pronominal DP to corefer in their LBD with a *non-prominent* antecedent, as desired. Put in other words, the analysis of the Big-DP structure in (74), which involves the \uparrow_n operator, allows us to keep the explanation that I have proposed in Chapter 2 for the restriction that the pronominal DPs *él/ella/ellos/ellas* cannot be *syntactically* bound by a coreferential focalized DP when they are doubled by a D-clitic.

4.3.2.2. Anaphoric D-Doubling Constructions.

As I have shown in Chapter 3, sentences where the DO/IO reflexive pronouns *sí mismo(o/a)(s)* are doubled by, and coindexed with, the 3rd person D-clitic *lo(s)/la(s)/le(s)* result in sharp ungrammaticality in Spanish, as illustrated by (73) and (74). I will refer to this type of structure as *anaphoric* D-doubling since (as I have shown in Chapter 3), the reflexive pronoun in this type of structures exhibit the binding properties of an anaphor.

(73) Anaphoric IO D-doubling

- a. *Juan le pasó el anillo a sí mismo.
J. 3sg.IO passed the ring to himself
'John passed the ring to himself.'

- b. *Juan le resolvió el problema a sí mismo.
 J. 3sg.IO solved the problem to himself
 ‘Juan solved the problem to himself.’

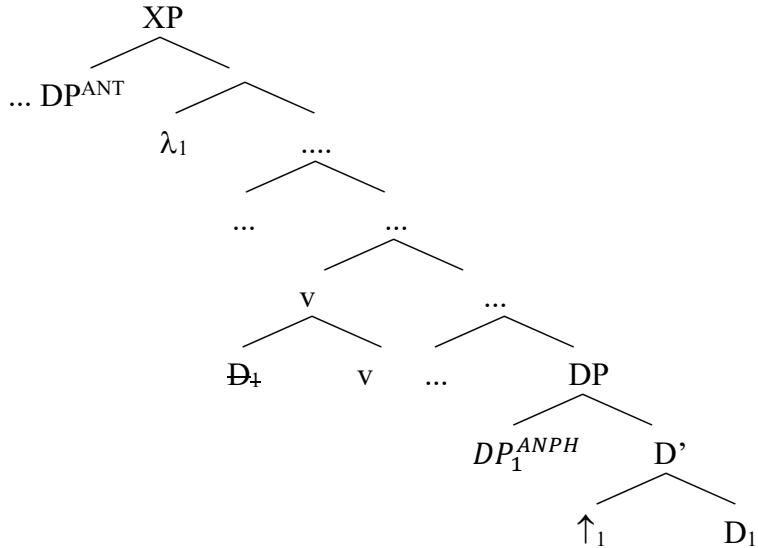
(74) *Anaphoric DO D-doubling*

- a. *Juan lo criticó a sí mismo.
 J. 3msc.sg.DO criticized A himself
 ‘Juan criticized himself.’
- b. *Juan lo embaucó a sí mismo.
 J. 3msc.sg.DO duped A himself
 ‘Juan duped himself.’

As I have contended in Chapter 3, the badness of the anaphoric D-doubling sentences in (73) and in (74) can be easily explained within Binding Theory. For one thing, D-clitics *lo(s)/la(s)/le(s)* are object pronouns governed by Principle B and as such, they must be *semantically* free in the same LBD where the reflexive pronouns *sí mism(o/a)/(s* must be semantically bound in Spanish (in accordance with Principle A). As a consequence of this, in (73) and in (74), neither the D-clitics nor the doubled reflexive pronouns are able to simultaneously satisfy their binding requirements without causing either a Principle A or a Principle B violation (Chapter 3, section 3.3.).

Bearing this explanation in mind, let us consider the *anaphoric* D-doubling structure sketched in (75) below; in this structure, the \uparrow_n operator is adjoined to the D-clitic and the specifier of the Big-DP is occupied by a DP anaphor (the reflexive pronoun which I will refer to as DP^{ANPH}). For expository purposes, I will assume that the XP dominating the semantic binder in (75), DP^{ANT} , corresponds to the relevant LBD where the DP anaphor and the D-clitic must satisfy their respective binding requirements (Principle A and Principle B, respectively). In the configuration in (75), therefore, the reflexive pronoun and the D-clitic share the same LBD.

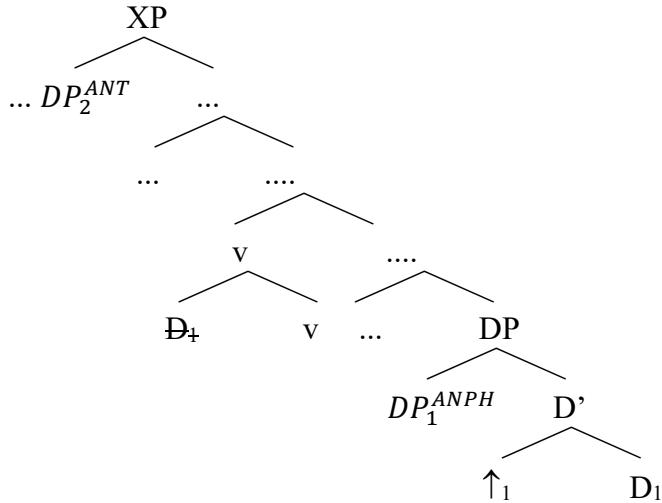
(75)



In (75), the DP anaphor that occupies the specifier of the Big-DP, DP_1^{ANPH} , is bound in the LBD it shares with the reflexive pronoun by the binder prefix λ_1 , in satisfaction of Principle A. However, since the D-clitic D_1 in (75) (a pronominal element) must be coindexed with the doubled DP anaphor, DP_1^{ANPH} in this LBD, it ends up being *semantically* bound (that is, ends up not being semantically free) in its LBD (the same LBD where the doubled DP_1^{ANPH} needs to be semantically bound). This is why the structure in (75) is excluded by Principle B: the D-clitic D_1 is not *semantically* free in its LBD, because due to the fact that it must be coindexed with the reflexive pronoun (which is an anaphor) it ends up being semantically bound in its LBD, violating Principle B.

Consider, now, the alternative D-doubling structure sketched in (76), where there is no binder prefix λ adjoined to the sister constituent of the DP^ANT dominated by XP , which stands for the relevant LBD of both the doubled anaphoric DP and the D-clitic.

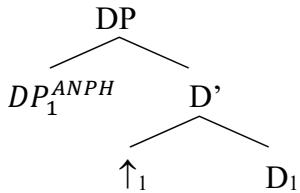
(76)



The D-clitic in (76) is semantically free in its LBD, in satisfaction of Principle B. But the DP^{ANPH} in the specifier of the Big-DP in (76) fails to be semantically bound in its LBD, causing a violation of Principle A, according to which an anaphor must be semantically bound in their LBD.

To conclude, I have shown that it is not possible for the D-clitic and the DP anaphor to satisfy their binding requirements simultaneously within the LBD they share in a Big-DP structure like in (77), where the ↑₁ operator adjoins to the D-clitic.

(77)



And this is so because, if the D-clitic is semantically bound in the same LBD where the DP^{ANPH} (the reflexive pronoun) needs to be semantically bound, then this will trigger a Principle B effect, as shown in (75). If, on the contrary, the D-clitic is semantically free in the same LBD where the doubled DP anaphor needs to be semantically bound, then the latter will violate Principle A, as shown in (76).

If the analysis I have entertained is correct, the analysis of the Big-DP structure sketched in (77), where the ↑ operator is adjoined to the D-clitic, allows us to keep the explanation I have proposed in Chapter 3 for the restriction that prevent the D-clitics *lo(s)/la(s)/le(s)* from doubling the DO/IO non-clitic anaphors *sí mism(o/a)/(s)* in Spanish.

4.3.2.3 Full-Referential D-Doubling Constructions.

As I have shown in this Chapter, in Spanish a D-clitic can double clause-mate R-expressions if the latter do not violate Principle C, repeated here under (78).

- (78) Principle C (Spanish)

A R-expression must be FREE.

- (79) A is FREE only if

- a. A is *semantically* free, and
- b. A is *syntactically* free.

My version of Principle C in (78) excludes the ungrammatical *full-referential* D-doubling sentences in (80). In each of these examples, an IO R-expression (*María*) is doubled by the 3sg IO D-clitic *le* and is also bound by a covarying or a coreferential nominal, either a pronoun (*ella*) or another R-expression (*la abogada* ‘the lawyer’). For ease of argumentation, I will leave momentarily aside the index of the 3sg IO D-clitic *le*.

- (80) *IO full-referential D-doubling* (all dialects)

- a. *Ella¹/*La abogada¹ (λ_1) le regaló eso a María¹.

she/the lawyer 3sg.IO gave this to M.

‘She/The lawyer gave this to Mary.’

- b. *Ella¹/*La abogada¹ (λ_1) cree que Marcos le regaló eso a María¹.

she/the lawyer believes that M. 3sg.IO gave this to Mary

‘She/the lawyer believes that Marcos gave this to Mary.’

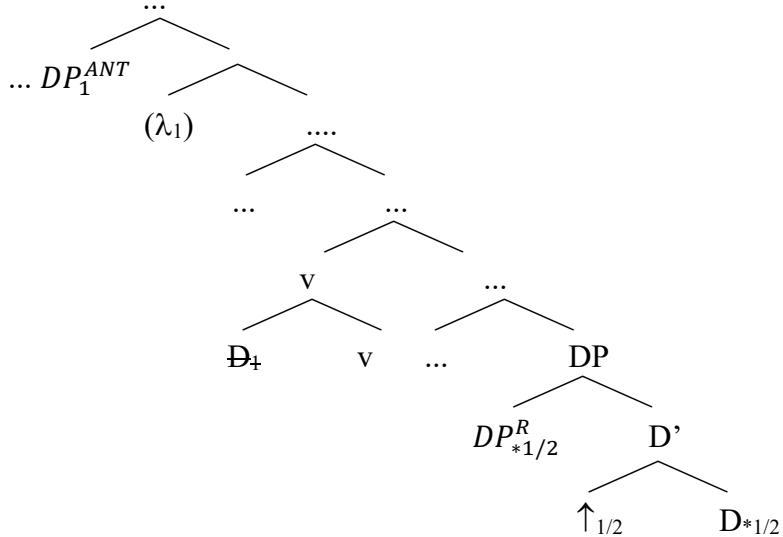
The ungrammatical *full-referential* D-doubling sentences in (80) become grammatical if the R-expression doubled by the 3sg IO D-clitic *le* (the DP *María*), is neither semantically nor syntactically bound, as roughly represented in (81). In these sentences, the doubled DP (*María*) and the DP subject (*Ella* ‘she’/*La abogada* ‘the lawyer’) refer to different individuals, so the former is FREE.

(81) *IO full-referential D-doubling* (all dialects)

- a. Ella₁/La abogada¹ le regaló eso a María².
she/the lawyer 3sg.IO gave this to M.
'She/The lawyer gave this to Mary.'
- b. Ella₁/La abogada¹ cree que Marcos le regaló eso a María².
she/the lawyer believes that M. 3sg.IO gave this to Mary
'She/the lawyer believes that Marcos gave this to Mary.'

Bearing this in mind, let us now consider the D-doubling structure sketched in (82), where the DP occupying the specifier of the Big-DP corresponds to a R-expression (call it DP^R) and the ↑₁ operator adjoins to the D-clitic *D*₁ heading the Big-DP.

(82)



In (82), the doubled R-expression *DP*_{*1/2}^R, is subject to Principle C and must therefore be FREE: that is, it cannot be either syntactically or semantically bound by the *DP*₁^{ANT} in (82). This is so irrespective of whether the D-clitic *D*_{*1/2} coindexed with the doubled R-expression in (82), *DP*_{*1/2}^R, could be properly sem-bound from outside its LBD by *DP*₁^{ANT}, without causing a Principle B violation. Although Büring's (2005) Principle B does not preclude pronouns from being sem-bound from outside their LBD, the D-clitic *D*_{*1/2} in (82) is coindexed with *DP*_{*1/2}^R and, as a consequence of this, the former will not be allowed to be sem-bound from potential binders outside its LBD. This is because in (82) the doubled *DP*_{*1/2}^R is subject to Principle C and therefore must be FREE; thereby, if the

D-clitic is semantically bound, then the doubled $DP_{*1/2}^R$ coindexed with it in (82) will end up being semantically bound, in violation of Principle C. It goes without saying that this configuration, where the D-clitic is not allowed to be sem-bound from outside its LBD, still allows the D-clitic to satisfy its binding requirements: namely, Principle B. The reason is that, as extensively discussed in Chapter 2, the Spanish D-clitics *lo(s)/la(s)/le(s)* only need to be sem(antically)-free in their LBD in order to satisfy Principle B. Hence, both the doubled DP_1^R and the D-clitic D_I coindexed with it in (82) are able to simultaneously satisfy their binding requirement without causing either a Principle B or a Principle C violation.

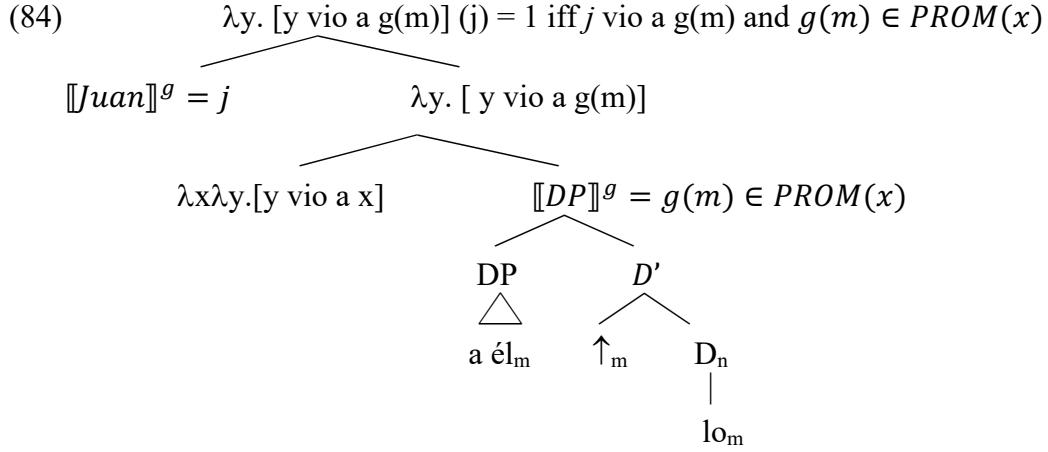
Summarizing so far. In this section, I have shown that the assumption that the \uparrow_n operator ‘assimilates’ (in the way I have explained in section 4.3.1) the denotation of the lower copy of the D-clitic into that of the doubled NP not only helps us to explain the syntactic and semantic properties characterizing *quantificational* D-doubling constructions in Spanish (cf. section 4.3.1), but can also be extended (with minimal qualifications) to the analysis of the rest of D-doubling constructions that I have discussed in previous Chapters: namely, *pronominal*, *anaphoric* and *full-referential* D-doubling constructions.

4.3.2.4. A Big-DP is less than the Sum of its Parts.

To conclude the general discussion in this Chapter, I would like to briefly mention a further contribution of the \uparrow_m operator to the Big-DP analysis that I have adopted in this dissertation. Specifically, I will show that the \uparrow_m operator helps us to understand the way in which the D-clitic and the doubled NP that form a Big-DP are able to saturate just one single argument slot of the verbal predicate, ensuring that the D-clitic and the doubled NP count as a single argument for the purposes of semantic interpretation at LF.

To illustrate this, consider the semantic derivation corresponding to the *pronominal* D-doubling sentence in (83) in Spanish, roughly given in (83).

- (83) Juan lo vio a él.
 J. 3msc.sg.DO saw A him
 ‘Juan saw him.’



- (85) a. $\llbracket (a) \acute{\text{e}}\text{l}_m \rrbracket^g = g(m)$
 b. $\llbracket l_o_i \rrbracket^g = g(i) \text{ if } g(i) \in \text{PROM}(x)$
 c. $\llbracket D' \uparrow_m D_m \rrbracket^g = \lambda x. \llbracket D_i \rrbracket^{g[i \rightarrow x]} = \lambda x. [g[m \rightarrow x](i)] = \lambda x: x \in \text{PROM}(x). x$

The denotation of the Big-DP in (83) corresponds to the denotation of the DP occupying the specifier of Big-DP, i.e., $a \acute{\text{e}}\text{l}_m$, plus the lexical presuppositions associated with the DO D-clitic l_o_m that the \uparrow_m operator adjoins to. It is the denotation of the Big-DP ($\llbracket DP [DP a \acute{\text{e}}\text{l}_m [D' l_o]] \rrbracket^g = g(m)$ if $g(m) \in \text{PROM}(\text{INENCE})(x)$) that saturates the internal argument slot of the verbal predicate, *vio* ‘saw’. That is, the \uparrow_m operator inside the Big-DP in (84) causes the DO D-clitic l_o_m and the doubled non-clitic pronoun $a \acute{\text{e}}\text{l}_m$ to count as a single argument for the purposes of semantic interpretation.

In a nutshell, as it should be evident by now, the \uparrow_n operator that I have adopted in section 4.3.2. of this chapter provides us with a very simple mechanism to account for the fact that the D-clitic and the doubled NP are not interpreted as two independents arguments for the purposes of semantic interpretation, but rather as a single argument of the verbal predicate selecting the Big-DP that dominates them. This corresponds to an important characterizing property of Spanish D-doubling constructions that is difficult to explain without the \uparrow operator and which, to the best of my knowledge, has not yet received a satisfactory account within the extensive literature on clitic doubling (see e.g.,

Uriagereka 1988, 1995, Torrego 1998, Bleam 1999, Anagnostopoulou 2003, 2017, Roberts 2010, Nevins 2011, Baker & Kramer 2018 and references cited therein).

To conclude, the FMI analysis of D-doubling that I have introduced in section 4.3.2. to account for the syntax of *quantificational* D-doubling constructions not only can be extended to the rest of D-doubling constructions that I have discussed in this dissertation, but also helps us to understand the reason why the D-clitic and the doubled NP count as a single argument for the purposes of semantic interpretation.

4.4. Conclusions and opening lines of research.

- Previous *heterogeneous* analyses to the syntax of the D-clitics *lo(s)/la(s)/le(s)* (cf. Bleam 1999, O&R 2013, and references cited therein) differ from the analysis I have advocated for in this dissertation in defending that this group of clitics does not form a unitary class in Spanish. To be more specific, these authors argue that while the 3rd person IO D-clitics *le(s)* are simply the morpho-phonological manifestation of object agreement, the 3rd person DO D-clitics *lo(s)/la(s)* should be analyzed as pronominal clitics. To support this proposal, these analyses rely on the observation that, unlike the DO D-clitics *lo(s)/la(s)*, the IO D-clitics *le(s)* can double any type of argumental DPs: that is, they can double proper names, definite descriptions as well as quantificational expressions (like wh-NPs or QPs).
- I would like to emphasize however that this observation is *not* empirically correct. The line of reasoning goes as follows:

As shown in Chapter 3 in detail, the IO D-clitics cannot double anaphors and the same goes true for the DO D-clitics, which in all Spanish dialects must obligatorily double pronouns, but are not allowed to double anaphors in any dialect. By contrast, the φ -clitics *me/te/se/nos/os* must double both anaphors and pronouns (and, as originally observed by O&R, they can also double R-expressions and QNPs). Consequently, there exists at least

one type of argumental DPs that φ -clitics *can*, but the IO D-clitics *cannot*, double in Spanish: anaphors.

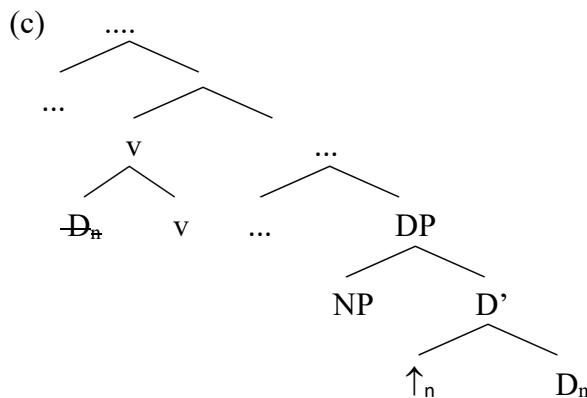
As I have shown in different parts of this thesis, the fact that, unlike φ -clitics, the IO D-clitics *le(s)* are not allowed to double anaphors brings strong empirical evidence against the hypothesis defended by Bleam (1999) and O&R (2013) that the IO D-clitics *le(s)* should be analyzed as object agreement morphemes, rather than as pronominal clitics. This is so because, unlike φ -clitics, the IO D-clitics *le(s)* count as pronouns for the purposes of Binding Theory and, as such, they must be semantically free in their LBD (in accordance to Principle B). Hence, when a IO D-clitic doubles an anaphor in IO position, the former ends up being bound in the same LBD where the doubled anaphor needs to be semantically bound, resulting in a Principle B violation. However, if, as Bleam and O&R contend, IO D-clitics were object agreement morphemes, we would have rather expected IO D-clitics to behave like φ -clitics, which are able to double any type of argumental DP irrespective of the binding requirements of the latter. But as I have shown extensively, this prediction is not met.

- Regarding the doubling of R-expressions and quantificational expressions, I have shown in this Chapter that the semantic and syntactic properties that characterize them in Spanish are fully compatible with the analysis of D-clitics as pronominal clitics I have pursued. So, the fact that D-clitics are allowed to double both R-expressions and quantificational expressions does not bring empirical support for the analysis of these clitics as object agreement morphemes. Rather, all the evidence I have gathered throughout this thesis strongly points out that, according to their binding and semantic properties, DO and IO D-clitics *lo(s)/la(s)/le(s)* behave alike and display the hallmarks of *true* pronominal clitics: i.e., they are object pronouns.
- To bring further support to the *pronominal* analysis I have defended of D-clitics, I have offered a novel analysis of the semantics of D-clitic doubling structures which is able to account in a unified way of the semantic relation holding between the D-clitic and its associated DP (irrespective of whether the latter is a referential DP or a non-referential QP like wh-phrases or quantifiers). More specifically, I have argued: (i) that only the copy of the D-clitic that appears inside the VP receives a semantic interpretation at the semantic

component, and (ii) that the interpretation of the D-clitic depends on the \uparrow_n operator, which is adjoined to the D-clitic at LF and causes the latter to covary with the doubled DP. On the basis of these two assumptions, I have proposed the FMI analysis of D-doubling, which is summarized in (86).

(86) *The First Merge Interpretation analysis of D-clitics (Spanish):*

- (a) The copy of the D-clitic that moves to v as a result of HM to v is deleted at LF for the purposes of semantic interpretation (as indicated in (86c) with strikethroughs). As a consequence of this, only the lower copy of the D-clitic D_n that is sister to the \uparrow_n operator receives an interpretation in the mapping from LF to the semantic component, as represented in (86c).
- (b) The operator \uparrow_n that adjoins to the lower copy of the D-clitic causes the latter to covary with the doubled NP occupying the specifier of the Big-DP.



- I have shown that, provided with the *FMI* analysis in (86), we can also explain why, in *quantificational* D-doubling constructions, D-clitics are allowed to covary with the doubled QPs without causing a Principle B violation. This is so because the \uparrow_n operator that is adjoined to the D-clitic maps it into an identity function, which is in turn saturated by the doubled QP occupying the specifier of the Big-DP, as shown in (86c). As a result of this, the D-clitic ends up covarying with the doubled QNP without the former causing a Principle B violation: the reason for this is that the \uparrow_n operator does not count as a binder prefix for the purposes of Binding Theory.

- I have further shown that the *FMI* analysis can be extended to the rest of D-doubling constructions in Spanish discussed in this thesis; namely, *pronominal*, *anaphoric* and *full-referential* D-doubling constructions. In addition to this, I have argued that this novel analysis also offers a simple account for the fact that the D-clitic and the doubled NP cannot be interpreted as two independent arguments for the purposes of semantic interpretation, but must be semantically interpreted as a single argument of the verbal predicate selecting the Big-DP that dominates them. This is in fact an important property characterizing D-doubling constructions that has never received a satisfactory explanation within the extensive literature on clitic doubling (see e.g., Uriagereka 1988, 1995, Torrego 1998, Bleam 1999, Anagnostopoulou 2003, 2017, Roberts 2010, Nevins 2011, Baker & Kramer 2018 and references cited therein).
- Once I have summarized the details and advantages of my analysis, I would like to point out some **open questions** that I would like **to address in future research**.
 - The first question I would like to investigate has to do with micro-variation, more specifically with variation across dialects. The second topic of research is also related to variation, but not across dialects but across D-clitics. I explain both questions next.
 - (A) With regard to the question of micro-variation across dialects, we have seen in section 2 in this chapter that Binding Theory does not preclude 3rd person DO D-clitics *lo(s)/la(s)* to double R-expressions in all Spanish dialects: both elements can simultaneously satisfy their binding requirements without causing either a Principle B or a Principle C violation. This raises the question as to why the 3rd person DO D-clitics *lo(s)/la(s)* can double R-expressions in Rioplatense, but not in European Spanish. How can we account for micro-variation of this sort?

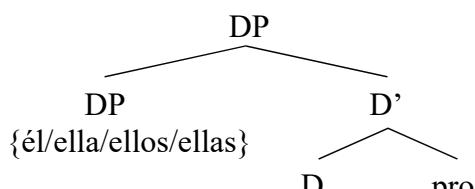
In order to account for the doubling possibilities that the DO D-clitics *lo(s)/la(s)* exhibit in these two different Spanish varieties, O&R (2013) suggest that in European Spanish DO D-clitics are pronominal clitics, while in Rioplatense Spanish these very same DO D-clitics are actually ambiguous between pronominal clitics and object agreements morphemes (see also Zdrojewsky 2013). O&R (2013) further suggest that in Rioplatense Spanish, DO D-clitics cannot double QNPs because in this Spanish dialect, object agreement is restricted “to

contexts where a [+definite] DP headed by the DOM *a* is available" [O&R 2013: 333].

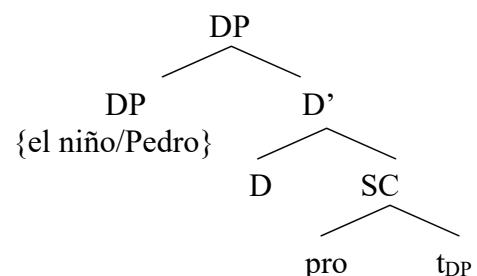
Bleam (1999) offers an analysis alternative to O&R's proposal and contends that the DO D-clitic *lo(s)/la(s)* are pronominal-like D-heads in all Spanish dialects. According to Bleam, the only difference between European and Rioplatense Spanish would rely on the internal structure that each dialect associates to the Big-DP containing the (DO) D-clitic. Specifically, Bleam's analysis, which relies on a slightly different version of Big-DP hypothesis than the one I have adopted in thesis thesis (Uriagereka 1988, 1995 and references cited therein), may be summarized as follows:

- (i) In both European and Rioplatense Spanish, D-heads (i.e., the DO D-clitics *lo(s)/la(s)*) can be associated with the syntactic structure represented in (87a) below. In this structure, the D-head takes a silent pronoun (i.e. little *pro*) as its complement, and it can optionally take an overtly expressed pronoun (*él/ella/ellos/ellas*) as the specifier of the resulting Big-DP structure.
 - (ii) In addition to the silent *pro* complement in (87a), in Rioplatense (but not in European) Spanish the D-head can alternatively select a small clause (SC) as its complement, as illustrated in (87b). This SC which is available to the D-head in Rioplatense Spanish consists of a silent pronoun (i.e., *pro*), and a definite DP; a characteristic of this structure is that the definite DP inside the SC will further undergo A-movement to the specifier of the Big-DP.

(87) a. European/Rioplatense Spanish



b. Rioplatense Spanish



In future research I would like to address this point of variation in the grammar of Spanish, discuss the hypotheses in the literature and evaluate whether they are appropriate to account for the micro-variation I have just discussed or whether an alternative analysis is necessary, and if so, in which terms.

- (B) The second topic of research is also related to variation, but not across dialects but across D-clitics. We have seen that in all Spanish dialects the 3rd person IO D-clitics *le(s)* are allowed to double wh-NPs and quantifiers. This is, however, in contrast to what happens with their corresponding 3rd person DO D-clitics *lo(s)/la(s)*, which can double referential DPs but not QPs. Thus, an important question that must be addressed in the future is why *quantificational* D-doubling appears to be restricted to 3rd person IO D-clitics *le(s)* in most Spanish dialects.

With regard to this question, let us suppose for a moment that we entertain the idea that when the clitic moves, in addition to interpreting the lower copy we also have the possibility of interpreting the higher copy.¹⁴ Would this be of any interest for the analysis of the clitic doubling structures we have discussed so far? There is one place where this hypothesis could have interesting consequences, which is that related to a variation exhibited by DO and IO D-clitics. Suppose for a moment that DO D-clitics differ from IO D-clitics in the copy of the D-clitic that the \uparrow_n operator is adjoined to at LF. Why would this be interesting from the point of view of their properties? Is there anything we could explain if this was correct?

Let us entertain this possibility in some detail. If, as shown in the structure in (88a), the \uparrow_n operator adjoins to the higher copy of the D-clitic that moves to the head H¹⁵ (rather than to the lower copy of the D-clitic inside the VP), then the doubled DP inside the specifier of Big-DP would be forced to move to the specifier of the head

¹⁴ In this chapter I have defended the view, also advocated for in many works in the literature, that HM does not have a semantic impact. As we have seen, if we adopt this view, we can provide a consistent account of all the relevant doubling structures under consideration. From that point of view, the analysis I have provided here seems to provide independent support to that theoretical position. But the debate on HM is not closed, however.

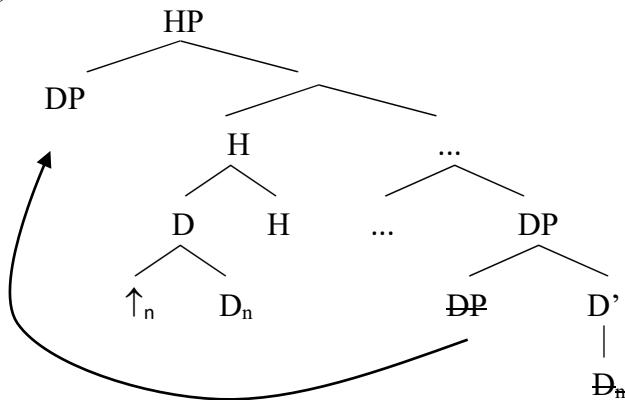
¹⁵ Since the nature of the head H is not relevant to understand the line of reasoning underlying the DPI hypothesis in (88a), I leave open the question of whether H corresponds to the head v (as I have been assuming in previous Chapters) or to another functional head within the clausal spine (e.g., AgrO).

H.¹⁶ This is so because the \uparrow_n operator takes the D-clitic as its argument and returns an identity function ($\lambda x.x$) which must be saturated by the doubled DP (see section 4.3. above). Thus, the only way in which the doubled DP in (88a) will be able to saturate this identity function is by means of A-moving to the specifier of the head H that the D-clitic is adjoined to.

(88) *The Derived Position Interpretation Hypothesis for DO D-clitics*

The \uparrow_n operator adjoins to the moved copy of DO D-clitics, so that it is the higher (rather than the lower) copy of the DO D-clitic adjoined to H in (88a) the one which handed over to the semantic component.

(a)



Furthermore, if in (88a) movement of the doubled DP to [spec,HP] is taken to be *object shift*, which in Spanish is commonly considered to be forced by independent factors concerning the specific/definite interpretation of the doubled DP¹⁷ (see e.g., Uriagereka 1995; Gallego 2010; Zdrojewski & Sánchez 2013, 2014; Mayer & Sánchez 2016, 2019 a.o.), then this would allow us to explain why the DO D-clitics

¹⁶ Needless to say, in order for the DPI hypothesis in (88) to be correct, we need to assume that Head-Movement is not a phonological operation (against Chomsky 1995 et seq.), but a syntactic movement operation that takes place before the derivation is handed over to the semantic component. Another alternative analysis still compatible with the DPI hypothesis in (88) will be to assume that in (88a) the D-clitic does not move from its argument position to the head H, but is directly merged with the head H (cf. Jaeggli 1982, Baker & Kramer 2018).

¹⁷ Notice also that, under the DPI hypothesis in (88), object shift of DO pronouns (to Spec,HP) should be obligatory in all Spanish varieties, while object shift of DO R-expressions (to Spec,HP) would be optional in Rioplatense Spanish and impossible in more restricted clitic doubling varieties like European Spanish. These assumptions are fundamental to explain to why DO D-clitics are allowed to double R-expression in Rioplatense, but no in European Spanish.

lo(s)/la(s) cannot double QPs (wh-NPs and quantifiers). This is so because wh-phrases and quantifiers must move to their scope position at LF (which is typically considered to be an A'-position), but the [spec, HP] is not a syntactic position where QPs can receive their scope (i.e., we need to consider [spec, HP] to be A-position). If this is correct, [spec,HP] will not be available as a landing position for the moved wh-phrases/QPs. As a consequence of this, it will be impossible for the \uparrow_n operator to force the interpretation of the D-clitic to covary with the meaning of the wh-phrase/QP. That is, under the DPI Hypothesis in (88), the inability of DO D-clitics to double QPs would derive (i) from the assumption that the \uparrow_n operator must be adjoined to the higher copy of the DO D-clitic, and (ii) from the fact that QPs cannot move to the specifier position (an A-position) of the head H hosting the higher copy of the DO D-clitic.

Suppose on the contrary that, if as the FMI analysis in (86) contends, the copy of the IO D-clitics *le(s)* which is semantically interpreted is the one which remains inside the Big-DP (i.e., the lower copy of the IO D-clitic). Then the type of syntactic movement (whether A or A'-movement) that undergoes the doubled dative DP that occupies the specifier of the Big-DP will be irrelevant for the purposes of interpreting the \uparrow_n operator. This is so because this operator is adjoined to the lower copy of the IO D-clitic inside the Big-DP and consequently, the identity function that results from applying \uparrow_n to this copy of the IO D-clitic will end up being saturated by the doubled DP occupying the specifier of the Big-DP (or by the lower copy of this DP if it must undergo A/A'-movement).

Thus, the DPI Hypothesis in (88) has the potential to explain why DO D-clitics differ from IO D-clitic in not being able to double QPs, but there are still some important and interesting questions that this novel proposal would need to explain; among others, the following ones:

- (i) Why must the \uparrow_n operator be adjoined to the higher copy of the DO D-clitic that adjoins to v?

- (ii) Which principle determines that the \uparrow_n operator must be adjoined to a different copy of the D-clitic depending on whether the latter is a DO or a IO D-clitic?
- (iii) If the \uparrow_n operator determines which copy of the D-clitic will be semantically interpreted, which principle rules the position where this operator must be adjoined at LF?

All these are interesting questions that are worth exploring in the future. Whether there is also the possibility of interpreting the higher copy of the DO D-clitic when it moves to v/H is an open question that will require a future study, in order to evaluate whether this is possible or not.

However, coming back to the discussion in this Chapter, it is worth emphasizing that these open questions regarding the position where the \uparrow_n operator must be adjoined to at LF (although very interesting) are not relevant to the analysis I have defended of DO/IO D-clitics *lo(s)/la(s)/le(s)* as pronominal clitics. This is so because, as I have shown in this Chapter, irrespective of whether the operator \uparrow_n adjoins to the higher or to lower copy of the D-clitic, the latter always count as a pronoun for the purposes of Binding Theory and semantic interpretation at LF.

CHAPTER 5

Summary and future lines of research

Unless we have a clear understanding of the basic principles ruling the binding properties and the referential interpretations available for a clitic and a doubled DP in clitic doubling constructions, it is impossible to develop a coherent analysis of clitic doubling that accounts for the asymmetries found between clitic doubling and tightly related phenomena, such as subject/object agreement (Rizzi 1990, Woolford 1999, Baker & Kramer 2018 and much related work).

In order to fill this gap, in this thesis I have offered a comprehensive and novel analysis of the binding and referential interpretations available for the whole range of DO/IO clitics and argumental DPs they can double in Spanish —pronouns, anaphors, R-expressions, and quantificational expressions (wh-phrases and QPs)—. Without such an analysis, attempted here for the first time, we would not be able to uncover the logic behind certain restrictions found in clitic doubling in Spanish. Similarly, we would not be able to explain why clitic doubling is sometimes optional, sometimes obligatory, and sometimes totally impossible.

Under the line of reasoning developed in this work, the full range of clitic doubling constructions can be explained once we understand the binding requirements and referential properties that are independently available for the clitic and the doubled DP.

In order to do so, I have first proposed a novel classification of Spanish DO and IO clitics that differ from previous analyses in classifying Spanish clitics into two different syntactic classes: *object agreement morphemes* versus *pronominal clitics*. This classification has been crucial in order to account for the syntactic and semantic properties they display in the wide and complex variety of clitic doubling structures found in this language. To be more specific, I have defended the hypothesis that Spanish clitics split into two different subclasses: i.e., φ -clitics vs. D-clitics.

While the D-clitics in Table 5.1. are pronominal D-heads which start inside a Big-DP structure and later on raise to v as a result of Head-Movement, as shown in Figure 1a. (cf. Uriagereka 1988, 1995, Torrego 1996, Gallego 2010, Nevins 2011 a.o.), the φ -clitics in Table 5.2. are best analyzed as the morphological reflex of an Agree relation holding between v and a DP argument inside the VP, as roughly represented in Fig. 1b.

Table 4.1 **D(ETERMINER)-CLITICS**
[(3rd person) pronominal clitics]

		DAT/IO	ACC/DO
		msc	fem
SG	le	lo	la
	les	los	las

Table 4.2 **φ -CLITICS**
[(1st/2nd/3rd person) object agreement morphemes]

	SG	PL
1st	me	nos
2nd	te	os
3rd	se	

Figure 1a. **D-clitics lo(s)/la(s)/le(s)**

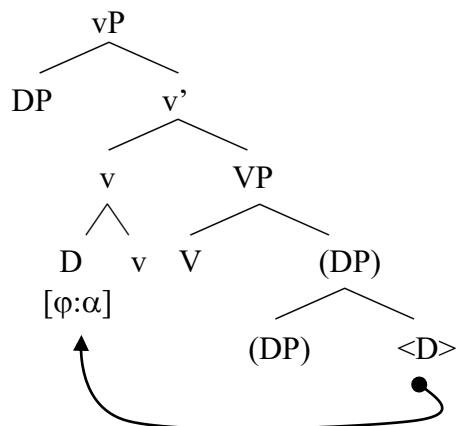
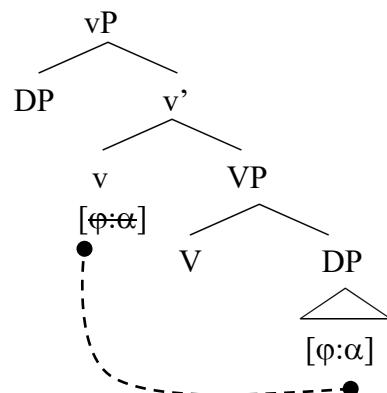


Figure 1b. **φ -clitics me/te/se//nos/os**



The classification I have developed has allowed me to offer a consistent and explanatory account of the syntactic and semantic characteristics exhibited by Spanish clitics in the whole variety of clitic structures where they are licensed in this language. These properties are succinctly summarized below.

Table 4.5. *Syntactic and semantic properties of D-clitics and φ-clitics (Spanish)*

	φ-CLITICS (TABLE 4.2)		D-CLITICS (TABLE 4.1)	
	DO	IO	DO	IO
Does α obey Principle B? (Chapter 1)	✗	✗	✓	✓
Can α double a pronominal DP that has a <i>non-prominent</i> antecedent? (Chapter 2)	✓	✓	✗	✗
Is α able to double reflexive DPs having a local antecedent? (Chapter 3)	✓	✓	✗	✗
Can α double R-expressions? (Chapter 4)	✓	✓	%✓	✓
Can α double wh-phrases/quantifiers? (Chapter 4)	✓	✓	✗	✓

The symbol % preceding ✓ indicates that this option is possible only in some Spanish dialects.

The line of reasoning that has led us to the conclusions and results summarized in Table 4.5 has been as follows.

- First, in **Chapter 1**, I have discussed the well-known (although largely neglected) fact that in Spanish D- and φ-clitics do not behave uniformly regarding Principle B. While the D-clitics in Table 4.1. obey Principle B, the φ-clitics in Table 4.2. are exempted from obeying this principle. This is illustrated below: while D-clitics cannot be bound in their Local Binding Domain (LBD) by an antecedent DP (2), φ-clitics are licensed irrespective of whether they are free (2a) or bound by an antecedent DP in their LBD (2b-d).

(1) *DO/IO D-clitics (Príncipe B effects)*

- a. Juan¹ lo*^{1/2} vio.
 J.(NOM) 3.smsc.g.DO saw.3sgSUBJ
 ‘Juan saw him.’
- b. Juan¹ le*^{1/2} compró un libro.
 J.(NOM) 3.sg.IO bought.3sgSBUJ a book(ACC)
 ‘Juan bought a book for him.’

(2) *φ-clitics are exempted from Principle B.*

- a. Juan¹ te²/nos²/os² vio en el espejo.
 J.(NOM) 2sg.DO/1pl.DO/2pl.DO saw.3sg.SUBJ in the mirror
 ‘Juan saw {you/us/you,pl} in the mirror.’
- b. Tú¹ te¹ viste en el espejo.
 You(NOM) 2sg.DO saw.2pl.SUBJ in the mirror
 ‘You saw yourself in the mirror.’
- c. Nosotros¹ nos¹ vimos en el espejo.
 We(NOM) 1pl.DO saw.1pl.SUBJ in the mirror
 ‘We saw ourselves in the mirror.’
- d. Vosotros¹ os¹ visteis en el espejo.
 You.pl(NOM) 2pl.DO saw.2pl.SUBJ in the mirror
 ‘You saw yourselves in the mirror.’

Following the *classical* analysis of Principle B (Chomsky 1981), both the 3sg DO clitic *lo* in (1a) and the 3sg IO clitic *le* in (1b) must be free in the LBD which contains the clitic and a DP c-commanding the clitic (in this case, the subject DP). Thus, neither *lo* in (7a) nor *le* in (7b) can bear the same index as the subject DP *Juan* that c-commands them in each of these sentences. As a consequence of this, *lo* in (7a) and *le* in (7b) must be obligatorily interpreted as disjoint in reference from their clause-mate subject DP.

By contrast, the Spanish φ -clitics in Table 4.2 are exempted from Principle B and may be licensed irrespective of whether they are free in their LBD, as in (2a), or bound in their LBD, as in (2b-d). In (2a), the φ -clitics and the subject DP *Juan* do not share the same φ -features and must be obligatorily interpreted as disjoint in reference. This is in opposition to what happens with the same φ -clitics in (3b-d), where they share the same φ -features as the DP subject and must obligatorily refer to the same individual as the subject refers to.

Although this asymmetry exhibited by φ - and D-clitics with regard to Principle B is well-known, it has been never discussed in the context of the *pronominal/agreement* debate concerning the status of DO/IO clitics in Spanish. However, as I have shown, such a contrast plays a fundamental role in the analysis of these two different groups of clitics and cannot be ignored. By addressing this question from this perspective, I depart from the usual approach to the study of clitics found in the literature, since this is an angle from which clitics have not been investigated before. This is so because the two competing alternative hypotheses that have been pursued to account for the syntax of Spanish clitics (the so-called *pronominal* hypothesis vs. the *agreement* hypothesis) cannot explain by themselves the binding properties of the whole class of Spanish DO/IO clitics.

- (i) *Pronominal hypothesis*: under this hypothesis clitics are considered to be object pronouns that for independent reasons need to cliticized to the verb (cf. Kayne 1969/1975, 1989, 1994; Rizzi 1986; Uriagereka 1988, 1995; Roca 1992; Torrego 1995, 1998; Cardinaletti 1998; Cardinaletti & Starke 1999; Roberts 2010; Nevins 2011; Ordóñez 2012, among others).

- (ii) *Agreement hypothesis*: following this view, clitics are agreement morphemes: i.e., they are nothing but the morpho-phonological exponent of the φ -features associated with a verb-type inflectional head as a result of agreement between this head and an argumental DP (cf. Strozer 1976; Aoun 1981; Jaeggli 1982, 1986; Borer 1986; Saltarelli 1987; Suñer 1988; Fernández Soriano 1989; Franco 1993, 2000; Sportiche 1993, 1996).

If (as contended by the *pronominal* hypothesis) Spanish clitics are *true* clitic pronouns, we will expect them to behave like their non-clitic pronominal counterparts with regard to the binding properties they exhibit. But this is not what we see in Spanish: while the D-clitics in Table 4.1. (like their non-clitic counterparts) are governed by Principle B, the φ -clitics in Table 4.2. are exempted from obeying this principle.

On the other hand, if (as the *agreement* hypothesis contends) Spanish clitics are best analyzed as object agreement morphemes, they will be invisible to Binding Theory. This is because verbal agreement morphemes would be nothing but an overt morpho-phonological reflex of an Agree relation holding between a verbal element and an argumental DP. However, this prediction is not fulfilled either: while Binding Theory does not determine the licensing conditions for the Spanish φ -clitics in Table 4.2 (which may be licensed irrespective of whether they are free or bound in their LBD), the same is not true in the case of D-clitics in Table 4.1: they behave like pronouns and as such obey Principle B.

This conclusion has led me to put forth a novel approach to the syntax of Spanish clitics, according to which the *pronominal* and the *agreement* hypotheses would be both (partially) correct, but the characterization of the type of clitics to which these hypotheses affect has been wrongly defined. This has led me to propose a third hypothesis, which I have referred to as the *mixed* or *heterogeneous* analysis of Spanish clitics.

- (3) ***Mixed analysis of Spanish clitics***: while φ -clitics (as the *agreement* hypothesis contends) are agreement morphemes lacking referential properties, D-clitics (as the *pronominal* hypothesis defends) are *true* argumental (DO/IO) pronouns which for independent reasons need to be cliticized to the verb.

- In **Chapter 2**, I have demonstrated that, under the *mixed* analysis advocated in this dissertation, we can account not only for the binding properties that φ- and D-clitics display in Spanish, but also for a series of novel findings and empirical generalizations concerning the interpretation of doubled pronominal DPs, which I have formulated as follows.

(4) *The (in)ability of clitics to restrict the referential interpretation of pronominal DPs.*

- (i) D-clitics and doubled pronominal DPs must have the same range of semantic interpretations. As a consequence of this, every restriction affecting the semantic interpretation of the D-clitic will automatically end up affecting the corresponding semantic interpretation of the pronominal DP doubled by the D-clitic.
- (ii) φ-clitics are verbal agreement morphemes lacking referential properties; consequently, they do not have any effect on the referential interpretation of the pronominal DP that they double.

This contrast between φ- and D-clitics comes as a result of a detailed investigation I have conducted of the syntactic and semantic properties that characterize the two different types of clitic doubling structures where the (non-subject, non-reflexive) pronouns in Table 4.3 (indicated with shaded cells) are licensed to appear: i) in φ-clitic doubling and in ii) D-clitic doubling constructions.

Table 4.3 (*NON-REFLEXIVE*) PRONOUNS IN SPANISH.

SUBJ								NON-SUBJ							
(NOM)								(ACC, DAT, OBL)							
SG				PL				SG				PL			
msc	fem	msc	fem	msc	fem	msc	Fem	msc	fem	msc	Fem	msc	fem	msc	Fem
1st	yo	yo	nosotros	nosotras	mí	mí	nosotros	nosotras							
2nd	tú	tú	vosotros	vosotras	ti	ti	vosotros	vosotras							
3rd	él	ella	ellos	ellas	él	ella	ellos	ellas							

While the pronominal DPs in Table 4.3 that are doubled by a ϕ -clitic display the same range of semantic interpretations that they exhibit in the absence of clitic doubling, this is not the case of **D**-clitics: they have i) their own referential features and ii) the ability to affect the referential interpretation of the doubled pronominal DP. To illustrate this, let us consider the paradigm in (5).

- (5)a. *Inability of **D**-doubled pronouns to take a non-prominent antecedent.*

*Solo JUAN¹ lo¹ votó (a él¹).
 only J. (NOM) 3.msc.sg.DO voted A him(ACC)
 ‘Only JUAN criticized him’
 Juan was the only person x such that x voted y=Juan. (✗coreference)
 Juan was the only person x such that x voted x (✗variable binding)

- b. *Ability of pronouns to take a non-prominent antecedent in the absence of clitic doubling.*

Solo JUAN¹ (*se/*lo) votó por él¹.
 only J.(NOM) 3.DO/3.msc.sgDO voted for him(OBL)
 Juan was the only person x such that x voted for y=Juan. (✓coreference)
 Juan was the only person x such that x voted for x. (✗variable binding)

c. Ability of φ -doubled pronouns to take a non-prominent antecedent.

Solo JUAN¹ se votó a él¹.

only J.(NOM) 3.sg/pl.DO voted A him(ACC)

Juan was the only person x such that x voted for y=Juan. (✓coreference)

Juan was the only person x such that x voted for x. (✗variable binding)

In (5a), a DO pronoun (the accusative pronominal DP *él*) is doubled by a D-clitic (the 3sg DO D-clitic *lo*) and cannot be interpreted as coreferential with the DP subject (the focalized DP *JUAN*). This contrasts with what happens with this very same pronoun in the rest of the syntactic environments where it is licensed: that is, (i) in the absence of clitic doubling and (ii) in φ -doubling structures. In (5b), the oblique pronoun *él* cannot be doubled by any clitic and can take the focalized DP subject as its syntactic binder. The same goes true for the accusative DP pronoun *él* in (5c), which is doubled by the φ -clitic *se* and corefers with the DP subject (the focalized DP *JUAN*), exactly the same of what happened with this pronoun in (5b), where it is not doubled by any clitic. In short, what the paradigm in (5) shows is that pronominal DPs can corefer in their LBD with a focalized DP only if they are not doubled by a D-clitic.

To account for this, I have investigated the referential properties exhibited by **D**-clitics in Spanish. I have shown that D-clitics are semantically defective pronouns and must take a *prominent/familiar* antecedent in the discourse (in the sense of C&S1999). Following this analysis, I have argued that when a DP pronoun is doubled by (and coindexed with) a D-clitic, the latter prevents the doubled DP pronoun from taking a focused DP (i.e., a non-prominent discourse antecedent) as its antecedent.

If this is correct, then the illegitimacy of the coreference reading in (5a) will follow from the fact that in this structure the doubled DP (the accusative 3sg pronoun *él*) and the D-clitic (the 3sg DO D-clitic *lo*) are coindexed and must therefore refer to the same discourse referent. However, since the 3sg DO D-clitic *lo* is a defective pronoun, it cannot corefer with a *non-prominent* discourse antecedent; consequently, it will not be able to corefer with a focalized DP (like the focalized subject *JUAN* in (5a)), because focalized elements cannot serve as *prominent/familiar* discourse antecedents for the D-clitic. As a consequence of this, in (5a) the pronominal DP cannot take the focalized DP as its

syntactic binder because the former is coindexed with the D-clitic and is therefore forced to have the same reference as the D-clitic.

This is in contrast to what happens with the oblique pronoun *él* in (5b); in this structure, the pronoun is not doubled by any clitic and can optionally take the focalized DP *JUAN* within its LBD as its syntactic binder. Crucially, this option is also available for the DO pronoun *él* in (5c), where this pronoun is doubled by a φ-clitic (the 3rd DO φ-clitic *se*) and can corefer with the DP subject (the focalized DP *JUAN*).

What this shows is that, unlike the D-clitic *lo* in (5a), the clitic DO clitic *se* in (5c) is not a defective pronoun, but an object agreement morpheme lacking referential properties: it is not able to restrict the range of referential interpretations that are independently available for the pronominal DP in the absence of clitic doubling (the same goes true for the rest of φ-clitics in Table 4.2; as extensively discussed in Chapter 2).

- In **Chapter 3**, I have discussed another important contrast between D- and φ-clitics that bears directly on the distinction between the *pronominal* and the *agreement* hypothesis. More specifically, I have shown that Spanish reflexive DPs in DO/IO position, which must be *semantically* bound in their LBD, can be doubled by φ-clitics, but not by D-clitics. Thus, those structures where a reflexive DP is doubled by a DO/IO D-clitic result in sharp ungrammaticality, as shown in (7a-b). This contrasts with the behavior of reflexive pronouns appearing in DO/IO position; as exemplifies in (6), these elements require the presence of a φ-clitic doubling them.

(6) *Ability of φ-clitics to double anaphors.*

- a. Yo *(me) vi a mí mismo por televisión.
I(NOM) 1.sg.DO saw A myself(ACC) for TV
'I watched myself on TV.'

- b. Nosotros *(nos) votamos a nosotros mismos.
We(NOM) 1.pl.DO voted A ourselves(ACC)
'We voted for ourselves.'

- c. Tú *(te) criticaste a ti mismo en ese artículo.
 You(NOM) 2.sg.DO criticized A yourself(ACC) in this paper
 ‘You criticized yourself in that paper.’
- d. Vosotros *(os) votasteis a vosotros mismos.
 You(NOM) 2.pl.DO voted A yourselves(ACC)
 ‘You voted for yourselves.’
- e. Juan y Pedro *(se) criticaron a sí mismos
 J. and P.(NOM) 3.sg/pl.DO criticized to themselves(ACC)
 en la radio.
 on the radio
 ‘Juan and Pedro criticized themselves on the radio.’
- f. Pedro *(se) votó a sí mismo.
 P.(NOM) 3.sg/pl.DO voted A himself(ACC)
 ‘Peter voted for himself.’

(7) *Inability of D-clitics to double anaphors.*

▪ ***DO clitics***

- a. *Juan lo vio a sí mismo.
 J.(NOM) 3.msc.sg.DO saw A himself(ACC)
 (lit.) ‘Juan saw himself’
- b. *María la criticó a sí misma.
 M.(NOM) 3.fem.sg.DO criticized A herself(ACC)
 (lit.) ‘María criticized herself.’
- c. *Ellos los golpearon a sí mismos.
 They(NOM) 3.msc.pl.DO kicked A themselves(ACC)
 (lit.) ‘They kicked themselves.’

▪ ***IO* D-clitics**

c. *Juan le contó la noticia a sí mismo.

J.(NOM) 3.sg.IO told the new(ACC) to himself(DAT)

(lit.) ‘Juan told the news to himself’

d. *Ellas les enviaron una carta a sí mismas.

They(NOM) 3.pl.IO sent a letter(ACC) to themselves(DAT)

(lit.) ‘They sent a letter to themselves.’

I have argued that this contrast between D- and φ-clitics follows from Binding Theory. In order to do so, I have adopted Büring’s 2005 version of Principle A and Principle B, summarized in (8), and have defended that this is the right version of the binding conditions and that it should be extended to the cases under discussion.

(8) a. Principle A (Büring 2005)

A anaphor must be semantically bound in their LBD

b. Principle B (Büring 2005)

A pronoun must be semantically free in their LBD.

To be more specific, I have argued that the restriction that D-clitics cannot double reflexive pronouns derives from the fact in Spanish the D-clitics in Table 4.1 and the reflexive pronouns in Table 4.4 exhibit opposite binding requirements.

Table 4.4. *Reflexive pronouns (Spanish)*

	singular		plural	
	masculine	feminine	masculine	feminine
1st	mí mismo	mí misma	nosotros mismos	nosotras mismas
2nd	ti mismo	ti misma	vosotros mismos	vosotras mismas
3rd	sí mismo	sí misma	sí mismos	sí mismas

While the reflexive pronouns in Table 4.4. must be semantically bound in their LBD, D-clitics need to be semantically free in their LBD. Hence, in configurations where a D-clitic doubles a reflexive pronoun, since the D-clitic and the doubled reflexive pronouns share the same LBD, the D-clitic ends up being semantically bound in the same LBD where the doubled reflexive pronoun needs to be semantically bound, causing a Principle B violation (cf. Rizzi 1990, Wolford 1999, Baker & Kramer 2018).

By contrast, φ-clitics are agreement morphemes and consequently, they do not have any binding requirement to meet. Thus, unlike D-clitics, φ-clitics do not count either as pronouns or as anaphors for the purposes of Binding Theory and therefore does not have any effect on the binding requirements of the DP that they double.

Further evidence in favor of this analysis comes from the fact that, under the right binding conditions, D-clitics are actually allowed to double reflexive pronouns. As shown in (8), this happens whenever the Spanish reflexive pronoun *sí mismo* takes an antecedent that binds *sí mismo* from outside the LBD where the D-clitic needs to be free, so that the latter is able to satisfy its binding requirements (Principle B).

(9) *Ability of D-clitic to double logophoric DPs*

- a. Zarco¹ ha reconocido [que este rendimiento le¹ sorprendió a sí mismo¹].
Z. has recognized that this outcome 3sg.IO surprised to himself
(lit.) ‘Zarco recognized the fact that this outcome surprised himself.’

- b. Zarco¹ solo habla en función [de lo que le¹ interesa a sí mismo¹].
Z. only talks in function of the that 3sg.IO interests to himself
(lit.) ‘Zarco only talks depending on what interests to himself.’

This conclusion has led me to examine in detail the licensing conditions under which the reflexive DP *sí mismo* is able to take a long-distance antecedent in Spanish. The main result of this study is that the antecedent of the *long-distance* *sí mismo* must be the logophoric center of the clause: i.e., the individual whose mental state or attitude the content of the proposition describes (cf. Sells 1987; Reinhart & Reuland 1991; Speas

2004; Pearson 2015; Reuland 2017; Sundaresan 2018; Charnavel 2019 and references cited therein).

Drawing on this novel observation, I have contended that the long-distance *sí mismo* is in fact a *logophoric* pronoun in disguise: i.e., a pronoun that must refer to the logophoric-center of the clause. Under this analysis, the properties characterizing the D-clitic and the doubled DP in D-doubling structures like (9a-b) can be easily explained.

First, in the case of the doubled DP *sí mismo* in (8), this element is not an anaphor, but a *logophoric* pronoun; therefore, it must take an antecedent from outside its LBD, in accordance with Principle B.

Second, the 3sg D-clitic *le* in (9) does not cause a Principle B violation because the antecedent of the *logophoric* pronoun *sí mismo* (sem-)binds the D-clitic and *sí mismo* from outside their respective LBDs. Hence, both the D-clitic and the doubled *logophoric* DP can meet their binding requirements in this structure (i.e., Principle B).

- Finally, in **Chapter 4**, I have addressed the important question of whether the analysis I have defended of the DO/IO D-clitics *lo(s)/la(s)/le(s)* as pronominal clitics is compatible with the well-known fact the IO D-clitics *le(s)* can double either referential or non-referential NPs like wh-phrases and quantifiers, while the DO D-clitics *lo(s)/la(s)* can only double referential NPs (pronouns and R-expressions).

A non-exhaustive list of the nominal arguments that the Spanish IO D-clitics *le(s)* are allowed to double includes¹: (i) full referential expressions (R-expressions, for short), like proper names and definite descriptions, and (ii) Quantificational Phrases (QPs) like wh-NPs and quantifiers.

¹ As we have seen throughout this thesis, in all Spanish dialects both IO and DO D-clitics can double pronominal DPs appearing in DO/IO position.

(10) Type of elements that can be optionally doubled by IO D-clitics *le(s)* in Spanish.

a. *IO D-Doubling of R-expressions [all dialects]*

(Le) han regalado eso al niño/a Pedro.
3.sg.IO have given this(ACC) to.the boy/to P.(DAT)

‘They have given this to the boy/Pedro.’

b. *IO D-Doubling of Wh-NPs [all dialects]*

¿A quiénes (les) han regalado eso?
A who.pl 3.pl.IO have given this(ACC)
‘Who did they give this?’

c. *IO D-Doubling of Quantifiers [all dialects]*

(Le) regalaron caramelos a cada niño/a todo dios.
3.sg.IO gave nothing(ACC) to each boy/to every boy(DAT)
‘They have given candies to each boy/to everybody.’

In contrast with IO D-clitics, the DO D-clitics *lo(s)/la(s)* are only able to double referential DPs (pronouns in European Spanish (Spain), and pronouns and R-expressions in Rioplatense Spanish (Argentina)). Continuing with the comparison between these two varieties of Spanish, although they differ in the doubling possibilities I have just mentioned, they behave however in a *homogeneous* way regarding the possibility to double quantificational NPs: neither Rioplatense nor European Spanish allow DO D-clitics *lo(s)/la(s)* to double QNPs/wh-phrases.

(11) *Type of elements that can be optionally doubled by IO D-clitics *le(s)* in Spanish.*

a. *DO D-doubling of Non-Clitic Pronouns*

Lo vieron a él
3msc.sg.DO saw A them
‘They saw them.’

(✓EurSp, ✓RioSp,

b. *DO D-doubling of R-expressions*

Lo	atacaron	al Papa/a la abogada	(*EurSp, ✓RioSp,)
3msc.sg.DO	attacked	A.the Pope/A.the lawyer	
‘They attacked the Pope/the lawyer.’			

c. *DO D-doubling of Quantifiers*

*Lo	saludé a cada estudiante	(*EurSp, *RioSp)
3msc.sg.DO	greeted A each student	
‘They greeted each student.’		

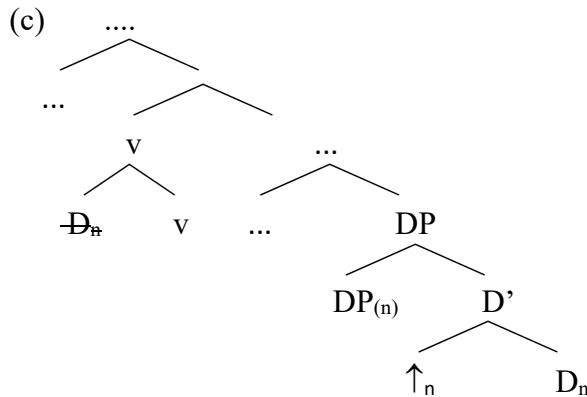
The fact that, unlike the DO D-clitics *lo(s)/la(s)*, the IO D-clitics *le(s)* do not impose any restriction on the referential status of the doubled NP has been traditionally taken as a strong empirical argument in favor of the analysis of these clitics as object agreement morphemes (Bleam 1999, O&R2013 and references cited therein), rather than as pronominal clitics, as I have proposed in this thesis.

However, I have shown that this difference in the doubling possibilities of DO and IO D-clitics does not argue in favor of the analysis of the IO D-clitics *le(s)* as object agreement morphemes. Specifically, I have demonstrated that the syntactic and the semantic properties characterizing all Spanish D-clitic doubling structures —including not only the DO D-clitics *lo(s)/la(s)*, as Bleam and O&R contend, but rather both the DO D-clitics *lo(s)/la(s)* and the IO *le(s)*—, can be explained under the analysis of D-clitics as clitic pronouns I have defended in this thesis.

In order to do so, I have offered a novel analysis of the semantics of D-clitic doubling structures which is able to account in a unified way for the semantic relation holding between the D-clitic and its associated DP (irrespective of whether the latter is a referential DP or a non-referential QP, as in the case of wh-phrases or quantifiers). More specifically, I have argued: (i) that only the copy of the D-clitic that appears inside the VP receives a semantic interpretation at the semantic component, and (ii) that the interpretation of the D-clitic depends on the \uparrow_n operator, which is adjoined to the D-clitic at LF and causes the latter to covary with the doubled DP. On the basis of these two assumptions, I have proposed the FMI analysis of D-clitics, which is summarized in (12).

(12) *The First Merge Interpretation analysis of D-clitics (Spanish):*

- (a) The copy of the D-clitic that moves to v as a result of HM is deleted at LF for the purposes of semantic interpretation (as indicated in (12c) with strikethroughs). As a consequence of this, only the lower copy of the D-clitic D_n that is sister to the \uparrow_n operator receives an interpretation in the mapping from LF to the semantic component, as represented in (12c).
- (b) The operator \uparrow_n that adjoins to the lower copy of the D-clitic causes the latter to covary with the doubled NP occupying the specifier of the Big-DP, as shown in (12c).



(d) $\llbracket [DP \ DP_n [D' \uparrow_n \ D_n]] \rrbracket^g = \lambda x. x (\llbracket DP_n \rrbracket) = \llbracket DP_n \rrbracket$

I have shown that, provided with the *FMI* analysis in (12), we can account for the doubling properties of D-clitics in a straightforward way. According to this analysis, the \uparrow_n operator that is adjoined to the D-clitic maps it into an identity function, which is in turn saturated by the doubled DP occupying the specifier of the Big-DP, as roughly represented in (12c). As a result of this, the D-clitic ends up covarying with the doubled DP (irrespective of whether the latter is a referential DP or a quantificational expression).

- In the previous paragraphs I have summarized the major finding and results of the research I have conducted on the properties of the pronominal and clitic system exhibited by Spanish. While developing this study, I have found many interesting questions and topics that I have been forced to leave aside but I would like to return to and investigate in the future, as there are directly linked to the discussion and analysis developed in this dissertation.

For this reason, in the remainder of this chapter I would like to point out some of the **future lines of research** that I would like to pursue.

- The first topic of research that I will like to investigate has to do with non-clitic doubling structures. More specifically, I will like to address the possibility of extending the analysis of φ- and D-clitics that I have proposed for Spanish to the analysis of non-clitic structures in languages where clitic doubling is either impossible, marginal or severely restricted.
- The second topic of research is also related to variation in non-clitic doubling structures, but in this case with a focus on the variation found among the different types of non-clitic doubling existing in Spanish and, in particular, on the following questions.

(A) **D- and φ-clitics in non-clitic doubling languages.**

It is well-known that Romance languages like Italian or French differ from Spanish in that in the former object clitics cannot co-occur with a DP surfacing in a DO/IO position, as the ungrammaticality of Italian sentence in (13a) demonstrates. In Italian, DO/IO DPs can co-occur with a clitic only if they are Topics surfacing in the left periphery of the sentence, as shown in (13b).

- (13) a. *Gianni non *l'ha mai visto lui. (Italian)
 G. not 3msc.sg.DO-has never seen him
 'Gianni have never seen lui.'

- b. Lui, Gianni non l'ha mai visto. (Italian)
 Him, G. not 3msc.sgDO has never seen
 (lit.) 'Him, Gianni have never seen.'

Although in Italian clitic doubling is attested with left-dislocated DP topics, we find in fact in this language the same restrictions on clitic doubling that I have reported and discussed for φ - and D-clitics in Spanish. For instance, the Italian 3sg masculine DO D-clitic *l(o)* is similar to its corresponding 3sg masculine DO D-clitic *lo* in Spanish i) in obeying Principle B and ii) in being unable to double reflexive DPs. In addition, 1st/2nd DO/IO clitics in Italian behave like their corresponding 1st/2nd person DO/IO φ -clitics in Spanish: i) they are exempted from obeying Principle B, and ii) can double reflexive DPs appearing in Topic positions (see Renzi, Salvi & Cardinaletti 1991, Cardinaletti 1998 and references cited therein).

- (14) a. Gianni no lo criticherà mai. (Italian)
 G. not 3msc.sgDO will.criticize never
 'Gianni will never criticize him.'
 *'Gianni will never criticize himself.'
- a. *Se stesso, Gianni non lo criticherà mai. (Italian)
 Him self, G. not 3sg.mscDO will.criticize never
 (lit.) 'Himself, Gianni will never criticize.'
- (15) a. Io non mi criticherò mai. (Italian)
 I.NOM not 1sg.DO will.criticize never
 'I will never criticize myself.'
- b. Me stesso, no mi criticherò mai. (Italian)
 My self, non 1sgDO will.criticize never
 (lit.) 'Myself, I will never criticize.'

In (14a) it is not possible for the 3sg DO D-clitic *lo* to be interpreted as coreferential with its clause-mate subject DP *Gianni*. Rather, in (14a) *Gianni*

and *lo* must be interpreted as disjoint in reference. This property of the Italian 3sg masculine DO clitic *lo* correlates with the fact that it cannot co-occur with a reflexive DP surfacing in the left periphery in the sentence, as shown in (14b).

Crucially, this is contrast to what happens with the 1sg DO clitic *mi* in the Italian paradigm in (15): (i) this clitic can be coreferential with its clause-mate DP subject, as in (15a), and (ii) can co-appear with a reflexive DP dislocated to the left periphery of the sentence, as shown in (15b).

What this shows is that, despite the fact that Italian differ from Spanish in that in the former clitic doubling is only possible with left-dislocated DP topics, in both Italian and Spanish the binding properties exhibited by the different types of clitics automatically determine the type of argumental DPs that each clitic type can double. If this is correct, we expect that the other tests I have developed in this thesis to tease apart D-clitic from φ -clitics in Spanish can be also extended to the analysis of their corresponding clitics in other Romances languages like Italian. This is undoubtedly a topic of research that is worthy of further exploration.

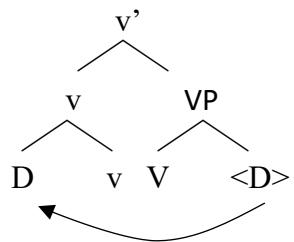
(B) Null objects in non-clitic doubling structures:

The second topic of research that I would like to investigate has to do with the syntactic representation underlying non-clitic doubling structures in Spanish. These are structures where D- and φ -clitics do not double a phonetically overt DP in DO/IO position positon (see examples (1)-(2) and the full discussion in Chapter 1).

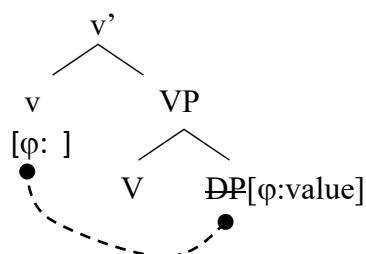
While, as roughly represented in (17), in Spanish D-clitics are argumental pronouns that are directly merged with V before undergoing HM to v, this option cannot be available for φ -clitics. This is so because φ -clitics are merely the morphological reflex of an Agree relation holding between v and a *true* argumental DP inside the VP. If so, when the φ -clitic is not doubling any overt DP in DO/IO positon, we need to assume that in these structures the φ -clitic enters into an Agree relation with a phonetically empty

DP, as represented in (18) (the phonetically empty DP is represented by means of strikethrough). This immediately raises the question as to what the syntactic nature is of the phonetically empty DP in the φ -clitic structure in (18), where the DP that Agrees with v is not phonetically realized.

(17) *D-clitics in the absence of doubling.*



(18) *φ -clitics in the absence of doubling.*



One possible analysis of these structures would be to assume that this silent element is *pro*, as in the classical pro-drop analysis developed in generative grammar (Chomsky 1981, Jaeggli 1982, Rizzi 1986 and much related work). If so, we would need to account for the licensing conditions of *pro* in this configuration.

However, there is an alternative analysis of pro-drop that has been developed in recent years, which argues against the existence of *pro* and derives pro-drop from DP ellipsis (Holmberg 2005, Sheehan 2006; Roberts 2010; Duguine 2013, 2014; Barbosa 2019, 2020 and references cited therein).

This is in fact the analysis that Duguine (2013) has proposed to account for pro-drop in Basque, and which instead of assuming two different types of pro-drop, for languages with rich agreement (like Spanish) and for

languages with no agreement (like Japanese), provides a unified account of the phenomenon.

Duguine focuses her study on Basque, a language which is particularly interesting because the finite verb exhibits agreement not only with subjects, but also with DOs and IOs; Basque licenses pro-drop of these three types of arguments, as one would expect if rich agreement plays a role in the licensing of pro-drop. However, what is particularly interesting of this language is that it also licenses pro-drop of these three arguments in non-finite configurations where the verb exhibits no overt agreement with them at all. Duguine shows that the analysis of pro-drop based on the existence of a silent category *pro* is insufficient to account for the whole range of pro-drop constructions in Basque and pursues an unified analysis where pro-drop results from DP-ellipsis: (i) in languages which license pro-drop in the presence of rich agreement, like Spanish, (ii) in languages which license pro-drop in the absence of any type of agreement, like Japanese or Korean, and (iii) in languages like Basque, which license pro-drop both in configurations involving rich agreement as well as in configurations involving no agreement at all.

Assuming that Duguine's reanalysis of the pro-drop parameter as involving DP ellipsis is correct, I would like to test her proposal further and extend it to structures licensing null objects in φ -doubling structures like (18) above.

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