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# Romance Linguistics

## Theoretical Perspectives

EDITED BY

Armin Schwegler

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# ROMANCE LINGUISTICS: THEORETICAL PERSPECTIVES

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Armin Schwegler, Bernard Tranel and Myriam Uribe-Etxebarria (eds)

*Romance Linguistics: Theoretical Perspectives*  
*Selected papers from the 27th Linguistic Symposium on Romance Languages*

# ROMANCE LINGUISTICS

## THEORETICAL PERSPECTIVES

SELECTED PAPERS FROM THE 27TH LINGUISTIC SYMPOSIUM  
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## PREFACE

This volume contains selected papers from the 27th Linguistic Symposium on Romance Languages (LSRL 27), which was held at the University of California, Irvine, on February 20-22, 1997.

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We extend our thanks to the authors of the 150 abstracts that were submitted for the conference, to the 80 reviewers from all over the world who contributed their time and expertise to help us narrow down the field to the 38 papers (and 4 alternates) that were selected for the symposium, and to the participants themselves, including our four keynote speakers, Carmen Silva-Corvalán, Juan Uriagereka, Luigi Burzio, and Viviane Déprez (the latter two did not submit a manuscript for these proceedings).

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The editors

Armin Schwegler  
Bernard Tranel  
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# ON NULL OBJECTS IN OLD FRENCH\*

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## 0. *Introduction*

Recent studies on referential null objects have in part focused on the nature of the empty category in question. Huang's (1984) Generalized Control Rule allows only for variables in object position in the absence of object agreement or object clitics. Studies which support this view include Raposo (1986), Campos (1986), and Suñer & Yépez (1988). Other studies, however, including Cole (1987), Farrell (1990), and Arimura (1995), argue for the existence of *pro* in object position for certain languages.

Although it is widely accepted that of the Romance languages, only Portuguese has referential null objects, this paper provides evidence that Old French also evinced referential null objects. This paper is organized as follows: Section 1 presents a general overview of the distribution of null objects in Old French. Section 2 briefly reviews previous analyses of referential null objects, and Section 3 examines the nature of the null object in Old French. Finally, Section 4 offers an analysis of null objects in Old French, following the recent Minimalist analyses of referential null objects proposed by Bianchi & Figueiredo Silva (1994) and Salomé & Maruenda (1995).

## 1. *Null objects in Old French*

This section presents an overview of the various null object constructions found in Old French.<sup>1</sup>

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\* I wish to thank Heles Contreras and Julia Herschensohn for their comments on a draft of this paper. Any errors that remain are of course my own responsibility.

<sup>1</sup> Not included in our discussion, due to space limitations, are anaphoric null objects, which Old French also possessed.

### 1.1 *Null objects in left-dislocation structures*

One environment in which null objects are possible in Old French is in left-dislocation structures, as in (1)-(2).

- (1) *Vostre terre qui defandra?*  
 your-f-sg-obl land-f-sg-obl who [e] will-defend-3sg  
 ‘Your land, who will defend (it)?’  
 (Lerch 1925: 368,  
*Chanson de Lyon* 1617)
- (2) *Cest nostre rei por coi pro lessas cunfundre?*  
 this-m-sg-obl our-m-sg-obl king-m-sg-obl why pro  
 let-sg [e] PRO flounder (Roberts 1993:107,  
*Roland* 1.2583)  
 ‘Why did you let this king of ours flounder?’

Following Roberts (1993), we assume that such emphatic or contrastive structures illustrated in (1)-(2) are instances of left-dislocation and not topicalization or complex inversion, because they involve a Wh-constituent in [Spec, CP].

### 1.2 *Null objects in coordination structures*

In Old French, null objects were also common in coordination structures, as illustrated in (3)-(4).

- (3) *Il retrait s’ espee et met ou fuerre.*  
 he pulls back-3sg. his-f-sg-obl sword-f-sg-obl and pro  
 puts-3sg [e] on-the-m-sg-obl fire-m-sg-obl  
 ‘He pulls back his sword and puts (it) in the fire.’  
 (Jensen 1990:146, *Queste* 111.6)
- (4) *La fille au seignor le sert et porte grant enor.*  
 the-f-sg-nom girl-f-sg-n to-the-m-sg-obl lord-m-sg-obl him  
 ‘The lord’s daughter serves him  
 and brings him great honor.’  
 (Jensen 1990:146, *Yvain* 5406)

In (3), the accusative pronoun *la* ‘it’ has been omitted in the second part of the coordination structure, whereas in (4), it is the dative pronoun *li* ‘to him’



To summarize, we have shown that referential null objects were possible in Old French in the following contexts: in left-dislocation structures, in coordination structures, and in conjunction with an overt dative pronoun. Where relevant, there is overt past participle agreement between the null object and the past participle. We next turn to the nature of these empty categories.

## 2. *On the nature of null objects*

Previous analyses of null object constructions include Huang (1984), whose Generalized Control Rule (GCR) only allows for variables in object position in the absence of object agreement or object clitics. Thus, in a language like Chinese, which lacks overt object agreement, null pronominals are necessarily ruled out by the GCR.

Raposo (1986) argues that in European Portuguese, null objects are variables, in that they obey subjacency effects, show violations of The Doubly Filled COMP Filter, and appear in parasitic gap constructions. Similarly, Suñer & Yépez (1988), in a discussion of the *écrasement* phenomenon in Quiteño Spanish, argue that the null object in this dialect is a variable, which may be bound by an overt or zero topic.

However, other studies (e.g., Cole 1987, Galves 1989, Farrell 1990, Sigurðsson 1993, Arimura 1995) argue for the existence of *pro* in object position for certain languages. In a study of Imbabura Quechua, Korean, and Thai, Cole (1987) argues that *pro* does occur in object position, as null object constructions in these languages do not show strong crossover effects or subjacency effects.

Similarly, Farrell (1990) claims that in Brazilian Portuguese at least, null objects are pronominal in nature. Based on a wide range of syntactic facts, including the lack of strong crossover effects, the lack of subjacency effects, and the possibility of backward anaphora, he concludes that null objects in Brazilian Portuguese are not variables, but are instances of *pro*.

Bianchi & Figueiredo Silva (1994) in essence agree with both Raposo (1986) and Farrell (1990), arguing that Brazilian Portuguese in fact possesses two types of null objects: the animate objects, they argue, obey Principle C and are hence variables, whereas the inanimate objects, which may be bound, are pronominal.

In the next section, we return to the status of null objects in Old French.

### 3. *On the nature of null objects in Old French*

The question first arises as to whether null objects in Old French are syntactically, as opposed to lexically, present. Arguments which support the notion that null objects in Old French are indeed syntactically present include the fact that the empty category can bind PRO (Rizzi 1986), and that there is past participle agreement with the null object.

That the empty category in question in Old French can bind PRO is shown by examples like (2) above, where the empty category binds the PRO subject of *cunfundre*. Moreover, the fact that the past participle in Old French agrees in gender and number with the null object, as in (7) above, is evidence that the null object must be syntactically present.

In addition, the observation that the verbs can assign different Cases, as evidenced by examples like (4) above, is an important one, as it means that these sentences are instances of VP coordination (or arguably IP or CP, given that Old French was a pro-drop language) rather than V coordination (cf. Åfarli & Creider 1987 for Norwegian).<sup>2</sup>

The question remains as to the nature of the empty category in Old French. We will present four arguments in support of the notion that this null object in Old French was in fact *pro* and not a null variable: (i) the empty category appears in left-dislocation structures where there is another Wh-element in COMP, (ii) the null object is found in certain adjunct clauses, (iii) the reference of the null object is invariably taken from a preceding NP in conjoined sentences, and (iv), where relevant, the null object triggers past participle agreement.

Let us begin our discussion by examining the null object in left dislocation structures such as (1)-(2). Roberts (1993:108) notes that it is generally considered impossible for an element to undergo Wh-movement (such as topicalization) across an element in [Spec, CP], hence the ungrammaticality of the English example in (8).

(8) \**John, who saw t.*

Assuming that (1) and (2) are instances of left-dislocation, then the null object represents the pronominal “reprise” typically found in such structures. We return to this in Section 4 below.

Ideally, one would like to be able to ascertain the existence of strong crossover effects and/or subjacency effects with respect to null objects in Old French. However, given the nature of the data available, that is not an easy

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<sup>2</sup> Note that Kayne (1994) rules out all possibilities of V coordination.

task, and clearly more data needs to be collected. Nonetheless, the examples in (9)-(10) are pertinent to our discussion.

- (9) *La pristrent terre u Deus*  
 there took-3pl pro land-f-sg-obl where God-m-sg-n [e]  
 'They landed where God  
*lur volst duner.* (Ménard 1988:67,  
 to them wanted-3sg to give *St. Alexis*, MS A 163)  
 wanted them to.'
- (10) *On le remenroit en le vile por*  
 one her would-lead-3sg in the-f-sg-obl city-f-sg-obl for  
 'They would lead her to the city to  
*ardoir* (Jensen 1990:156,  
 [e] PRO to burn *Aucassin* 16.28)  
 burn her.'

Assuming Kayne's (1994) analysis of adjunct clauses, in which the DP object in the main clause asymmetrically c-commands the adjunct clause, the null object in the adjunct clause in (9) is bound by *terre*, which suggests that it is in fact a pronoun and not a variable. Similarly, the null object in (10) is bound by *le* 'her' (in the Picard dialect) in the main clause.

We have seen that null objects often occur in Old French in coordination structures. As noted by Áfarli & Creider (1987:344) for Norwegian, for the null object in question to be a variable, one would have to assume the existence of an empty operator adjoined to VP in such structures, in which case a parasitic gap should be licensed. Although I have found no relevant Old French data, it seems clear that if the empty category in examples like (3)-(4) above were bound by a null topic, then its reference should be able to be independent of the direct object noun phrase in the first sentence, which is clearly not the case. In a variable analysis, we would have to assume that the preceding NP in object position is in fact the topic, which is clearly untenable for these examples. In Old French, as in other V2 languages, a topicalized object is fronted to [Spec, CP] (see Roberts 1993, Huang 1984, and Sigurðsson 1993 for discussion). Crucially, in examples like (3)-(5), no object fronting has occurred.<sup>3</sup>

Moreover, as we have seen from (7) above, where relevant, there is past participle agreement between the null object and the past participle in Old French. According to Herschensohn (1996), who follows the theory of Case

<sup>3</sup> This is not to say that topicalization of the direct object was impossible (see [6]); simply it was not obligatory.

assignment in Chomsky (1993) and Kayne (1994), past participle agreement in French is a function of the raising of the clitic direct object, which, in her framework, originates in [Spec, VP2] and moves to [Spec, AgrOP], where its Case is checked and where the head agrees in gender and number with the DP<sub>ob</sub>. Assuming that *pro*, like pronominals generally, has the  $\phi$  features of gender and number (Chomsky 1995:37), past participle agreement with the null object in (7) follows directly.<sup>4</sup>

The fact that the null objects in Old French appear to take their reference from a preceding DP is further evidence that they are not variables, since variable null objects can also be bound by a null topic, as argued, for example, by Suñer & Yépez (1988) for Quiteño Spanish.

Assuming, then, that null objects in Old French were *pro*, the question of their licensing arises. We turn to this issue in the next section.

#### 4. A Minimalist analysis of object *pro* in Old French

Working within the Minimalist Program, Bianchi & Figueiredo Silva (1994) and Salomé & Maruenda (1995) propose that the referential null object *pro* is licensed by agreement with “strong” nominal features, i.e., strong AgrO. Specifically, Bianchi & Figueiredo Silva argue that AgrO is a complex node which contains the features Person, Number, and Gender. For a language to allow referential null objects (which are [+referential] [+argumental] in this analysis), agreement must contain both the specification of Number and Person. AgrO in Italian lacks the latter, in their view, and thus strong agreement will only license arbitrary null objects, whereas AgrO in Brazilian Portuguese is specified for both Number and Person and hence licenses referential null objects as well.

Bianchi & Figueiredo Silva note that Brazilian Portuguese lacks morphological evidence for the specification of Person in AgrO, but unlike Italian, it does present syntactic evidence for it, namely the placement of pronoun clitics. Consider (11) (Bianchi & Figueiredo Silva 1994:182).

- (11) *O José tinha realmente me decepcionado.*  
 the José had-3sg really me deceived  
 ‘José had really deceived me.’

If one assumes, following Bianchi & Figueiredo Silva, that clitics must universally adjoin to a head containing the feature [+person], then, the cliticization to past participles in compound tenses follows directly.

<sup>4</sup> Note further that past participle agreement with a postnominal DP is found in Old French, as shown in (13); see Arteaga (1996, forthcoming) for discussion.

It has been independently argued that AgrO in Old French has strong nominal features. In a study of Old French word order, Arteaga (forthcoming) concludes that the direct object in Old French could front overtly to the [Spec, AgrOP] before Spell-Out, which accounts in part for the possibility of past participle agreement with a postverbal NP in Old French, the possibility of scrambling the direct object over an adverb, as well as general XP fronting of the DP to [Spec, CP]. Following the account of movement in Chomsky (1993), in which all movement is motivated by the necessity to check off strong features, Arteaga (forthcoming) proposes that D features of AgrO were (optionally) strong in Old French.

While, as we have seen, AgrO in Old French arguably had strong nominal features, the question of the licensing of object *pro* remains. Recall that for Bianchi & Figueiredo Silva (1994), agreement must contain both the specification of Number and Person to license object *pro*. They argue that clitic placement in Brazilian Portuguese provides support for this strong Person feature.

The placement of Old French clitics has been the topic of much recent research (see Martineau 1989, among others). Most research has focused on the evolution of French from a language with optional clitic climbing (like Spanish and Italian) to one without clitic climbing. However, unlike Brazilian Portuguese, the cliticization to past participles in compound tenses is not found in the history of French. In this way, (12) below contrasts with (11) above.

- (12) *Et voit la nef autretele come*  
 and sees-3sg the-f-sg-obl ship-f-sg-obl similar-f-sg-obl than  
 ‘And he saw the ship similar to how  
*il l’ avoit ore veüe.*  
 he-m-sg-nom it-f-sg-obl had-3sg already seen-f-sg  
 he had seen it before.’

(Moignet 1988:206, *Queste* 126, 27)

In other words, in terms of Bianchi & Figueiredo Silva’s diagnostic for the feature “strong [+person]” in AgrO, namely clitic placement before past participles, Old French does not pattern like Brazilian Portuguese. It is interesting to note, however, that where the object DP is a full noun phrase, it generally does precede the past participle in Old French (see Jensen 1990, Moignet 1988, Ménard 1988, among others), as illustrated by (13).

- (13) *Vos li avez tuz ses*  
 You from-him-m-sg-obl have-2pl all-m-pl-obl his-m-pl-obl  
 ‘You’ve taken all his

<i>castels</i>	<i>toluz.</i>	(Ménard 1988:178,
castles-m-pl-obl	removed-m-pl-obl	<i>Roland</i> 236)
castles away from him.'		

Thus, while the example in (13), like those cited by Arteaga (forthcoming), supports the notion that the nominal features of AgrO are strong in Old French, it is less clear from the Old French data that the relevant parameter for licensing null object *pro* is the specification of the feature Person. We leave this as a question for further research.

Additional support for our analysis of null objects in Old French comes from Cecchetto (1997), who proposes that all left-dislocation structures contain a null object, which he claims is an A' bound *pro*. In his view, the pronominal "reprise" is generally obligatory, as in the Italian example in (14), because it is this clitic pronoun which licenses the empty category.

- (14) *Il vino novello, \*(lo) bevo volentieri.*  
 the wine new \*(it) drink-1sg pro gladly  
 'The new wine, I drink it with pleasure.'

Therefore, Cecchetto's analysis predicts that in a language like Old French, with strong nominal features of AgrO, this "reprise" would not be found, which is borne out by examples (1)-(2).

## 5. Conclusion

This paper has presented evidence that Old French, like Portuguese, evinced referential null objects. We have considered a wide range of constructions in Old French in which null objects are found, including left dislocation structures, coordination structures, and *écrasement* structures. We have argued that the null objects in the structures considered here are syntactically present, based on the fact they can bind PRO and that where relevant, there is past participle agreement with the null object. Moreover, we have argued that these null objects are instances of *pro*, and not variables, as they can apparently be bound outside of their governing category. From the data we have seen, it appears that null objects in Old French cannot be bound by a null topic.

We have argued that the Old French data support the notion that null object *pro* is licensed by strong nominal features of AgrO (as proposed by Bianchi & Figueiredo Silva 1994 and Salomé & Maruenda 1995), but not necessarily by the feature "strong [+person]". More research is needed, however, to account for the fact that null objects in Old French, like those in Norwegian, Old Icelandic and Old English, appear to need an overt antecedent in the discourse.

## REFERENCES

- Åfarli, Tor & Chet Creider. 1987. "Nonsubject pro-drop in Norwegian". *Linguistic Inquiry* 18.339-345.
- Arimura, Kaneaki. 1995. "Object empty categories and coordinate structure in earlier English". *Konan University Bulletin, Literature Section, Special Issue: English Language, English and American Literatures* 92.1-34.
- Arteaga, Deborah. 1996. "On V2 word order in Old French and feature strength". Ms., University of Nevada.
- \_\_\_\_\_. Forthcoming. "On optionality in the Minimalist Program and Old French word order". In *Theoretical Research on Romance Languages*, ed. by José Lema & Esthela Treviño, 1-12. Amsterdam: John Benjamins.
- Bianchi, Valentina & Maria Cristina Figueiredo Silva. 1994. "On some properties of AgrO in Italian and Brazilian Portuguese". In *Issues and Theory in Romance Linguistics*, ed. by Michael Mazzola, 181-198. Washington, D.C.: Georgetown University Press.
- Campos, Hector. 1986. "Indefinite object drop". *Linguistic Inquiry* 17.354-359.
- Cecchetto, Carlo. 1997. "The distribution of clitics in dislocation structures". Paper presented at the 27th Annual Linguistic Symposium on Romance Languages, University of California, Irvine.
- Chomsky, Noam. 1993. "A Minimalist Program for linguistic theory". In *The View from Building 20*, ed. by Kenneth Hale & Samuel J. Keyser, 1-25. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Cole, Peter. 1987. "Null objects in Universal Grammar". *Linguistic Inquiry* 18.597-612.
- Farrell, Patrick. 1990. "Null objects in Brazilian Portuguese". *Natural Language and Linguistic Theory* 8.325-346.
- Galves, Christine. 1989. "L'objet nul et la structure de la proposition". *Revue des Langues Romanes* 93.305-336.
- Herschensohn, Julia. 1996. *Case Suspension and Binary Complement Structure*. Amsterdam: John Benjamins.
- Huang, James C. T. 1984. "On the distribution and reference of empty pronouns". *Linguistic Inquiry* 15.531-574.
- Jensen, Frede. 1990. *Old French and Comparative Gallo-Romance Syntax*. Tübingen: Max Niemeyer.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Lerch, Eugen. 1925. *Historische französische Syntax* (3 vols.). Leipzig: Reissland.
- Martineau, France. 1989. *La montée du clitique en moyen français: une étude de la syntaxe des constructions infinitives*. Ph.D. dissertation, University of Ottawa.
- Ménard, Pierre. 1988. *Syntaxe de l'ancien français*. Bordeaux: Éditions Bière.
- Moignet, Gérard. 1988. *Grammaire de l'ancien français*. Paris: Klincksieck.

- Raposo, Eduardo. 1986. "On the null object in European Portuguese". In *Studies in Romance Linguistics*, ed. by Osvaldo Jaeggli & Carmen Silva-Corvalán, 372-390. Dordrecht: Foris.
- Rizzi, Luigi. 1986. "Null objects and the theory of *pro*". *Linguistic Inquiry* 17.501-557.
- Roberts, Ian. 1993. *Verbs and Diachronic Syntax: A Comparative History of English and French*. Norwell: Kluwer Academic Press.
- Salomé Margaret & Sonia Maruenda. 1995. "Arbitrary null objects and imperfectivity". *Formal Linguistics Society of Mid-America* 6.47-54.
- Sigurðsson, Halldór Ármann. 1993. "Argument-drop in Old Icelandic". *Lingua* 89.247-280.
- Suñer, Margarita & María Yépez. 1988. "Null definite objects in Quiteño". *Linguistic Inquiry* 19.511-519.



# SPANISH CODAS AND OVERAPPLICATION\*

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## 0. Introduction

As in many languages, the range of possible coda consonants in Spanish is more restricted than the range of possible onset consonants. Onsets can be practically any single consonant and some obstruent + liquid combinations (Harris 1983:13-14, 20-22). Codas, on the other hand, are subject to a number of additional *coda conditions* (Steriade 1982, Itô 1986, Yip 1991). The restricting effects of these coda conditions are sometimes reflected in stem-final consonants even when they are syllabified as onsets to following suffix-initial vowels, depending on the type of suffix (bound-root or word) and on the effect of the particular coda condition involved.

Following Benua (1995, 1997), I analyze these facts as the effect of the ranking, in the sense of Optimality Theory (OT; Prince & Smolensky 1993), of input-output (IO-) Faithfulness, output-output (OO-) Identity, and coda-condition constraints. To respect a coda condition  $\mathbb{C}$ , a word is unfaithful to its input if  $\mathbb{C}$  outranks IO-Faithfulness. A suffixed word recapitulates this unfaithfulness through identity to an unfaithful base word if OO-Identity also outranks IO-Faithfulness, regardless of syllabification. Some stem-final onsets thus behave like codas under this ranking, and this opaque behavior is referred to as *overapplication* of the process triggered by the coda condition.

The coda conditions considered in this paper are the ones responsible for the well-known Spanish processes of Nasal Depalatalization and Aspiration. In Section 1, I show that Nasal Depalatalization overapplies before word suffixes but not bound-root suffixes, a distinction that follows naturally from Benua's

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theory. In Section 2, I show that Aspiration does not overapply, demonstrating the partial dependence of overapplication on the effect of the coda condition involved. Section 3 summarizes the paper with a discussion of an interesting prediction regarding the overapplication of partially-related neutralization and allophonic processes and concludes with a brief discussion of some related processes in Spanish that pose apparent problems for the theory as it stands.

## 1. *Nasal Depalatalization*

### 1.1 *Normal application*

As noted originally by Alonso (1945), [ɲ] is absent in Spanish codas, and there is some (admittedly scant) morphophonemic alternation evidence that it neutralizes with [n] in this position (Harris 1983:52-55; cf. Hualde 1989).<sup>1</sup>

- (1) Nasal Depalatalization: /ɲ/ → [n] in codas
- a. [ɲ] in onsets  
*desdeñes*     [.des<sup>z</sup>.ðé.nes.]     ‘you (sg.) disdain (subj.)’
- b. [n] in codas  
*desdén*     [.des<sup>z</sup>.ðé.n.]     ‘disdain (noun)’

When a vowel-initial bound-root suffix (such as the second person singular subjunctive suffix *-es* in (1a)) is attached to a /ɲ/-final bound root, the [ɲ] survives intact because it can be syllabified as an onset and as such does not meet the structural description of Nasal Depalatalization.

### 1.2 *Overapplication*

Vowel-initial word suffixes, like plural *+es* in (2) below, do not save /ɲ/ from Nasal Depalatalization, which overapplies in this context. (For those unconvinced of the assumed /ɲ/ in this form, the fact remains that there are no [ɲ]-final stems in this context, and this fact is what must be explained.)

- (2) Nasal Depalatalization in onsets before word suffixes  
*desdenes*     [.des<sup>z</sup>.ðé.nes.]     ‘disdain (pl.)’     \* [.des<sup>z</sup>.ðé.nes.]

<sup>1</sup> Jim Harris (personal communication) now argues against Nasal Depalatalization on morphological grounds; see Pensado Ruíz (1997) for preliminary experimental evidence for this position. José Ignacio Hualde (personal communication) points to borrowings like *champá[n]* (< Fr. *champa*[ɲ]) as possible further evidence for the process.

In a prototypical rule-ordering analysis, the nonapplication of Nasal Depalatalization in (1a) and its overapplication in (2) is explained by ordering some suffixation among cyclic syllabification and other phonological rules.

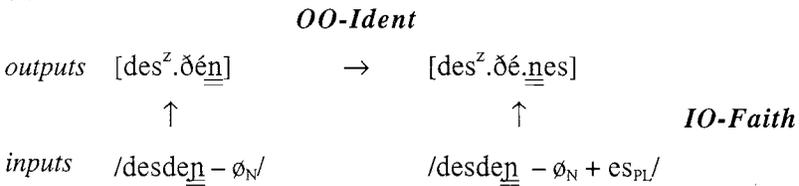
(3) Rule-ordering analysis		
Bound root suffixation:	/desde <u>n</u> – es <sub>v</sub> /	/desde <u>n</u> – ø <sub>N</sub> /
Syllabification:	.des.de. <u>nes</u> .	.des.de <u>n</u> .
Nasal Depalatalization:		.des.de <u>n</u> .
Word suffixation:		.des.de <u>n</u> . + es <sub>PL</sub>
Syllabification:	.des.de. <u>nes</u> .	.des.de. <u>nes</u> .
Other rules:	[.des <sup>z</sup> .ðé. <u>nes</u> .]	[.des <sup>z</sup> .ðé. <u>nes</u> .]

The problem with this sort of approach is that nothing prevents phonological rules from applying to bound roots prior to any bound root suffixation. The universal generalization missed is that bound roots are not cyclic domains (Brame 1974, Kiparsky 1982, Selkirk 1982, Inkelas 1989). This generalization follows as a consequence of the basic premise of Benua’s (1995, 1997) Transderivational Correspondence Theory, in which the applications of Nasal Depalatalization in (1) and (2) receive a more principled account.

1.3 *Transderivational Correspondence Theory (TCT)*

In TCT, inputs are related to their outputs by *input-output (IO-) Correspondence* (regulated by *IO-Faith(fulness)* constraints), and outputs are related to particular morphologically-related outputs by *output-output (OO-) Correspondence* (regulated by *OO-Ident(ity)* constraints). The model is shown schematically in (4).

(4) TCT model



Not just any two morphologically-related outputs are related by OO-Correspondence. Specifically, an affixed word X (+ Y) + Z is related only to the free-standing base of affixation X (+ Y). I will henceforth refer to X (+ Y) as the *base* (word) and X (+ Y) + Z as the *derived* word.

Cases of overapplication in TCT are instances of the constraint-ranking schema in (5) (Benua 1995, 1997).

## (5) Overapplication schema: {C, OO-Ident} » IO-Faith

When a phonological constraint C dominates a relevant IO-Faith constraint, a word is unfaithful to its input if necessary to satisfy C. Derived words mirror this unfaithfulness, through identity to their unfaithful base words, when OO-Ident also dominates IO-Faith. The analysis within TCT of (the overapplication of) Nasal Depalatalization fits the overapplication schema in (5), and explains without stipulation the fact that Nasal Depalatalization does not overapply to suffixed bound roots.

Nasal Depalatalization, a subcase of the general phenomenon of Nasal Neutralization in Spanish, involves a neutralization of (consonantal) place features, motivated by a coda condition against palatal [ɲ] (6a). This coda condition must outrank an IO-Faith constraint demanding place preservation in the input-output mapping (6b). The fact that the independently-occurring alveolar [n] is the result of this change is evidence for the lower-rank of the context-free constraint against [n] (6c).

## (6) Nasal Depalatalization constraints

- a. \*ɲ]<sub>σ</sub>                      No syllable-final palatal nasals.
- b. FAITH-PL                    The input and output have the same place features.
- c. \*n:                            No alveolar nasals.

When either type of nasal is in onset position, coda conditions are not relevant and FAITH-PL emerges victorious, allowing both to surface. However, if a palatal nasal ends up in coda position as in (1b), then the above ranking arguments come into play as shown in the tableau in (7).

(7) Nasal Depalatalization: \*ɲ]<sub>σ</sub> » FAITH-PL » \*n

<i>Input:</i> desde <u>ɲ</u> - ∅ <sub>N</sub>	*ɲ] <sub>σ</sub>	FAITH-PL	*n
<i>O</i> <sub>1</sub> : [.des <sup>z</sup> .ð <u>é</u> ɲ.]	*!		
<i>O</i> <sub>2</sub> : <sup>☞</sup> [.des <sup>z</sup> .ð <u>é</u> n.]		*	*

The input has a root-final palatal nasal and a null nominal bound-root suffix, forcing the nasal into the coda in the output candidates *O*<sub>1</sub> and *O*<sub>2</sub>. *O*<sub>1</sub> is the faithful candidate with a palatal nasal, and *O*<sub>2</sub> is the unfaithful candidate with an alveolar nasal. *O*<sub>1</sub> loses because it violates \*ɲ]<sub>σ</sub>, which dominates both of the constraints violated by *O*<sub>2</sub>, FAITH-PL and \*n.

Now take a word derived from the base in (1b)/(7), namely the plural form in (2). In this derived word, the stem-final nasal is in onset position, but it is not the input-faithful palatal [ɲ]. Instead, it is the base-identical alveolar [n]. This is because there is an OO-Correspondence relation between the base and the derived word, regulated by a set of OO-Ident constraints formally parallel to the IO-Faith constraints. Just as FAITH-PL disprefers input-output pairings with different place features, IDENT-PL wants derived words to have the same place features as their bases.<sup>2</sup> In Spanish, then, IDENT-PL must dominate FAITH-PL, as shown in the tableau in (8).

(8) Overapplication of Nasal Depalatalization: IDENT-PL » FAITH-PL

Input: desde <u>n</u> – $\emptyset_N$ + eS <sub>PL</sub>	*ɲ] <sub>σ</sub>	IDENT-PL	FAITH-PL	*n
O <sub>1</sub> : [.des <sup>z</sup> .ðé. <u>n</u> es.]		*!		
O <sub>2</sub> : $\text{☞}$ [.des <sup>z</sup> .ðé. <u>n</u> es.]			*	*

The input-faithful nasal in O<sub>1</sub>, though it escapes violation of the coda condition, still loses because it fatally violates higher-ranked IDENT-PL (it is not identical to the coda nasal in the base). This leaves the base-identical but necessarily input-unfaithful O<sub>2</sub> as the winner. Note that the full ranking in (8) complies with the overapplication schema in (5); this compliance is a necessary but not sufficient condition on overapplication, as we will see below.

There is no Nasal Depalatalization in suffixed bound roots because bound roots are, by definition, not independent words. Suffixed bound roots thus have nothing but their inputs to be (un)faithful to; there is no base to be (un)identical to, so IDENT-PL is vacuously satisfied in such words.

(9) Suffixed bound root

Input: desde <u>n</u> – eS <sub>V</sub>	*ɲ] <sub>σ</sub>	IDENT-PL	FAITH-PL	*n
O <sub>1</sub> : $\text{☞}$ [.des <sup>z</sup> .ðé. <u>n</u> es.]				
O <sub>2</sub> : [.des <sup>z</sup> .ðé. <u>n</u> es.]			*!	*

<sup>2</sup> For discussion of the *prima facie* serial priority of the base, see Benua (1997).

The result is that bound roots cannot be cyclic domains, precisely the universal generalization missed by the rule-ordering approach. This result is straightforwardly predicted by the basic premise of TCT: that free-standing base words and derived words are related by Correspondence.

## 2. *Aspiration*

### 2.1 *Complementary distribution*

In many dialects of Spanish, /s/ aspirates (becoming something like [h]) in coda position; compare the forms in (10). (The form in (10a) is not claimed to be morphologically related to the form in (10b); it is simply included to fully demonstrate the complementary distribution of [s] and [h].)

(10) *Aspiration*

a. [s] in onsets

<i>mesa</i>	[.mé. <u>sa</u> .]	‘table (fem.)’	*[.mé. <u>ha</u> .]
-------------	--------------------	----------------	---------------------

b. [h] in codas

<i>mes</i>	[.mé <u>h</u> .]	‘month’	*[.mé <u>s</u> .]
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Like Nasal Depalatalization, I assume that the mapping between [s] and [h] in the Aspiration process involves a violation of FAITH-PL (6b). Unlike Nasal Depalatalization, however, Aspiration is an allophonic process rather than a neutralization process. This means that the context-sensitive coda condition \*s]<sub>σ</sub> (11a) is ranked above the context-free constraint \*h (11b), and that both are ranked above FAITH-PL, repeated in (11c).

(11) *Aspiration constraints*

- |                     |  |
|---------------------|--|
| a. *s] <sub>σ</sub> | No syllable-final alveolar fricatives.             |
| b. *h               | No glottal fricatives.                             |
| c. FAITH-PL         | The input and output have the same place features. |

Now because Aspiration is an allophonic process, it cannot be determined whether [s] or [h] is underlying in any given case, nor need it be, since the ranking of the constraints in (11) determines which allophone occurs where. The two tableaux in (12) justify the ranking of \*h above FAITH-PL with the form in (10a). No matter which allophone is posited as underlying, the correct allophone [s] is selected in onset position.<sup>3</sup>

<sup>3</sup> Candidates with phones other than [s] and [h] are assumed to be ruled out by higher-ranked constraints.

(12) Aspiration I: \*h » FAITH-PL

<i>Input:</i> mé <u>s</u> – a <sub>FEM</sub>	*h	FAITH-PL
<i>O</i> <sub>1</sub> : [mé. <u>s</u> a.]		
<i>O</i> <sub>2</sub> : [mé. <u>h</u> a.]	*!	*

<i>Input:</i> mé <u>h</u> – a <sub>FEM</sub>	*h	FAITH-PL
<i>O</i> <sub>1</sub> : [mé. <u>s</u> a.]		*
<i>O</i> <sub>2</sub> : [mé. <u>h</u> a.]	*!	

The two tableaux in (13) in turn justify the ranking of \*s]<sub>σ</sub> above \*h and FAITH-PL with the form in (10b). Again, no matter which allophone is posited as underlying, the correct allophone [h] is selected in coda position (see note 3).

(13) Aspiration II: \*s]<sub>σ</sub> » \*h » FAITH-PL

<i>Input:</i> mé <u>s</u> – ∅ <sub>N</sub>	*s] <sub>σ</sub>	*h	FAITH-PL
<i>O</i> <sub>1</sub> : [mé. <u>s</u> .]	*!		
<i>O</i> <sub>2</sub> : [mé. <u>h</u> .]		*	*

<i>Input:</i> mé <u>h</u> – ∅ <sub>N</sub>	*s] <sub>σ</sub>	*h	FAITH-PL
<i>O</i> <sub>1</sub> : [mé. <u>s</u> .]	*!		*
<i>O</i> <sub>2</sub> : [mé. <u>h</u> .]		*	

## 2.2 Normal application

We know from Nasal Depalatalization that IDENT-PL dominates FAITH-PL, so we expect Aspiration to overapply in suffixed words because the coda condition \*s]<sub>σ</sub> also dominates FAITH-PL, conforming to the overapplication schema in (5). However, Aspiration does not overapply in suffixed words (Harris 1983:45-47; Hualde 1989, 1991), as shown in (14).

(14) [s] in onsets before word suffixes<sup>4</sup>

*meses*                    [.mé.seh.]                    ‘month (pl.)’                    \*[.mé.heh.]

It must be the case, then, that \*h is ranked above IDENT-PL, pre-empting the overapplication candidate as shown in the tableaux in (15).

(15) Normal application of Aspiration: \*s]<sub>σ</sub> » \*h » IDENT-PL » FAITH-PL

<i>Input:</i> me <u>s</u> – ∅ <sub>N</sub> + eS <sub>PL</sub>	*s] <sub>σ</sub>	*h	IDENT-PL	FAITH-PL
<i>O</i> <sub>1</sub> : [. <u>m</u> é. <u>s</u> eh.]			*	
<i>O</i> <sub>2</sub> : [. <u>m</u> é. <u>h</u> eh.]		*!		*

<i>Input:</i> me <u>h</u> – ∅ <sub>N</sub> + eS <sub>PL</sub>	*s] <sub>σ</sub>	*h	IDENT-PL	FAITH-PL
<i>O</i> <sub>1</sub> : [. <u>m</u> é. <u>s</u> eh.]			*	*
<i>O</i> <sub>2</sub> : [. <u>m</u> é. <u>h</u> eh.]		*!		

It is of course entirely possible (and perhaps likely) that Aspiration and Nasal Depalatalization simply involve different featural changes, obviating this subversion of the overapplication schema in (5). Due to the interesting nature of the analysis given above, however, I will stick to it and discuss an important implication of it in the following final section.

### 3. Summary and conclusion

A coda condition may indirectly affect an onset, or overapply, in a derived word when that onset is a coda in the derived word’s base. In this paper I have analyzed two coda-condition effects in Spanish, Nasal Depalatalization and Aspiration, within Benua’s (1995, 1997) TCT. The fact that neither process overapplies in suffixed bound roots was shown to follow from the basic premise of TCT, that only free-standing base and derived words stand in an OO-Correspondence relation.

To account for its overapplication in suffixed words, the analysis of Nasal Depalatalization, a neutralization process, conforms to the overapplication schema in (5): FAITH-PL, safely dominating the context-free constraint \*n that the overapplication candidate violates, is dominated by both the coda condition \*n]<sub>σ</sub> and by IDENT-PL.

<sup>4</sup> Aspiration of the suffix coda /s/ is entirely expected and thus ignored here.

Although Aspiration is also regulated by FAITH-PL and IDENT-PL, it is an allophonic process, meaning that the context-free constraint \*h is ranked higher than FAITH-PL. This fact was exploited to account for the normal application of this process in suffixed words, circumventing the overapplication schema by having \*h also dominate IDENT-PL.

These cases point to an interesting prediction of TCT with respect to neutralization processes and allophonic processes that are related by the same Correspondence violations. For a neutralization process to overapply, it is both necessary and sufficient for the overapplication schema in (5) to be observed. This is due to the prerequisite ranking that defines a neutralization process in OT: all the context-free constraints against the different phonemes involved in the neutralization must be ranked below IO-Faith for those phonemes to surface at all; the ranking of OO-Ident above IO-Faith inherits, by the transitivity of constraint ranking, the ranking of OO-Ident above the context-free constraints. Overapplication is thus free to happen.

In contrast, the context-free constraint against the derived allophone in an allophonic alternation must be ranked *above* IO-Faith, and so the ranking of OO-Ident above IO-Faith essentially tells us nothing about the ranking between OO-Ident and the context-free constraint. If OO-Ident dominates the context-free constraint, there is overapplication; if the opposite ranking holds, there can be no overapplication. This leads to the following result.<sup>5</sup>

(16) Neutralization Processes and Allophonic Processes in TCT

Given an allophonic process  $\mathbb{A}$  and a neutralization process  $\mathbb{N}$  that both crucially involve violation of the same IO-Faith constraint  $\mathbb{F}$ :

- a. If  $\mathbb{N}$  overapplies, then  $\mathbb{A}$  may or may not overapply.
- b. If  $\mathbb{N}$  does not overapply, then  $\mathbb{A}$  does not overapply.

Unlike various similar statements in the theory of Lexical Phonology (Kiparsky 1982), (16) has the status of a falsifiable prediction rather than that of a negotiable claim. If it can be shown that  $\mathbb{A}$  overapplies while  $\mathbb{N}$  does not, then either the processes have been incorrectly analyzed (e.g., they do not crucially violate the same  $\mathbb{F}$ ) or the theory is simply wrong. I take this falsifiability to be a major virtue in favor of the TCT approach to cyclicity, warranting further investigation into the correctness of predictions like (16).

Differences among Spanish dialects with respect to cyclic phenomena are well-documented and numerous, making a full investigation of them as a test-

<sup>5</sup> This result is similar to the subset criterion of McCarthy (1997a) in that it follows directly from constraint ranking, the core notion unique to OT.

ing ground for TCT an all the more inviting and worthwhile task to undertake in future work. Among these differences, I would like to mention two very pertinent ones that pose apparent problems for the TCT approach.

The first concerns the overapplication of Aspiration in prefixes in some dialects (Harris 1993). Since prefixes are not free-standing words, TCT has nothing to say about this case, and indeed Kenstowicz (1995) appeals to the notion of "Uniform Exponence" in addition to "Base Identity," the latter of which corresponds to OO-Identity in TCT, to account for just this case. The more complex case of Catalan prefixes, also analyzed by Harris (1993), is reanalyzed as an effect of "Sympathy" (McCarthy 1997b) by Merchant (1997), an account that can easily be extended to cover the Spanish case.

The second difference is the process of Nasal Velarization (Harris 1983:45-47; Hualde 1989, 1991). In some dialects, nasals are "velarized" in the coda (or rendered placeless; see Trigo 1988). Base-final nasals, however, are consistently *alveolar* before a vowel-initial word suffix, regardless of the input place specification. Though analyses can be made to work, neither TCT nor Sympathy seems able to do justice to the inescapable fact that there is neither normal application nor overapplication in this case. Cases like this one clearly deserve careful analytic examination in future research in this area.

## REFERENCES

- Alonso, Amado. 1945. "Una ley fonológica del español". *Hispanic Review* 13.91-101.
- Benua, Laura. 1995. "Identity effects in morphological truncation". *University of Massachusetts Occasional Papers* 18.77-136.
- \_\_\_\_\_. 1997. *Transderivational Identity: Phonological Relations Between Words*. Ph.D. dissertation, University of Massachusetts, Amherst.
- Brame, Michael. 1974. "The cycle in phonology: Stress in Palestinian, Maltese and Spanish". *Linguistic Inquiry* 5.39-60.
- Harris, James W. 1983. *Syllable Structure and Stress in Spanish: A Nonlinear Analysis*. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1993. "Integrity of prosodic constituents and the domain of syllabification rules in Spanish and Catalan". In *The View from Building 20*, ed. by Kenneth Hale & Samuel Jay Keyser, 177-194. Cambridge, Mass: MIT Press.
- Hualde, José Ignacio. 1989. "Silabeo y estructura morfé mica en español". *Hispania* 72.821-831.
- \_\_\_\_\_. 1991. "On Spanish syllabification". In *Current Studies in Spanish Linguistics*, ed. by Héctor Campos & Fernando Martínez-Gil, 475-493. Washington, D.C.: Georgetown University Press.

- Inkelas, Sharon. 1989. *Prosodic Constituency in the Lexicon*. Ph.D. dissertation, Stanford University.
- Itô, Junko. 1986. *Syllable Theory in Prosodic Phonology*. Ph.D. dissertation, University of Massachusetts, Amherst.
- Kenstowicz, Michael. 1995. "Base Identity and Uniform Exponence: Alternatives to cyclicity". In *Current Trends in Phonology: Models and Methods*, ed. by Jacques Durand and Bernard Laks, 363-393. Salford: European Studies Research Institute, University of Salford.
- Kiparsky, Paul. 1982. "Lexical Phonology and Morphology". In *Linguistics in the Morning Calm*, ed. by The Linguistic Society of Korea, 3-92. Seoul: Hanshin Publishing Co.
- McCarthy, John. 1997a. "Process-specific constraints in Optimality Theory". *Linguistic Inquiry* 28.231-251.
- \_\_\_\_\_. 1997b. "Sympathy and phonological opacity". Talk given at the Hopkins Optimality Theory Workshop/University of Maryland Mayfest.
- McCarthy, John & Alan Prince. 1995. "Faithfulness and reduplicative identity". *University of Massachusetts Occasional Papers* 18.249-384.
- Merchant, Jason. 1997. "Sympathetic devoicing and obstruency in Catalan". Ms., University of California, Santa Cruz.
- Pensado Ruíz, Carmen. 1997. "On the Spanish depalatalization of /ɲ/ and /ʎ/ in rhymes". In *Issues in the Phonology and Morphology of the Major Iberian Languages*, ed. by Fernando Martínez-Gil and Alfonso Morales-Front, 595-618. Washington, D.C.: Georgetown University Press.
- Prince, Alan & Paul Smolensky. 1993. "Optimality Theory: Constraint Interaction in Generative Grammar". Ms., Rutgers University and University of Colorado, Boulder.
- Selkirk, Elizabeth. 1982. *The Syntax of Words*. Cambridge, Mass.: MIT Press.
- Steriade, Donca. 1982. *Greek Prosodies and the Nature of Syllabification*. Ph.D. dissertation, MIT.
- Trigo, Rosario L. 1988. *On the Phonological Behavior and Derivation of Nasal Glides*. Ph.D. dissertation, MIT.
- Yip, Moira. 1991. "Coronals, consonant clusters, and the coda condition". In *The Special Status of Coronals: Internal and External Evidence*, ed. by Carole Paradis & Jean-François Prunet, 61-78. New York: Academic Press.



# VERB MOVEMENT AND ITS EFFECTS ON DETERMINERLESS PLURAL SUBJECTS

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## 0. *Introduction*

In this paper I explore the distribution and interpretation of determinerless (plural) subjects (DS). I will show that there is indeed a correlation between their syntactic position and their interpretation, as works like Diesing's (1992) suggest, but that a larger generalization is missed which arises from languages with the syntactic behavior of Spanish.

I will defend the hypothesis that the movement properties of the verb determine the surface pattern of distribution for DS, and that the resulting configuration determines their interpretation.<sup>1</sup> The crucial point will be the relative position of verb and DS.

In Section 1, I present the basic data and contrasts between English and Spanish. In Section 2, I introduce my theoretical assumptions and in Section 3, I give my analysis, based on the hypothesis of the "∃-with-e" (the "Existential with the Event"), and provide independent evidence for it.

## 1. *Plural DS: The basic facts*

The variation in meaning that DS show has been noticed for a long time by philosophers and linguists alike. I will briefly review here the two readings to be considered: generics and existentials.<sup>2</sup> Let us begin with an example.

(1) *Dogs have four legs.*

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<sup>1</sup> This is definitely nothing new. It is a simple instantiation of Frege's Principle of Compositionality, by which the meaning of the whole is determined by the meaning of the parts *and the way they are combined* (that is, the structural configuration). This structural configuration, I will claim, depends on the syntactic properties of a given language and can be different from language to language.

<sup>2</sup> There are also the cases of adverbial quantification. I will not talk about them here.

The sentence in (1) expresses a generality about dogs. It says that, generally speaking, they have four legs. This has been called the generic reading. The fact that there may be exceptions to the claim in (1) does not invalidate the generic statement. This is an important difference with universal statements like *every dog has four legs*, which requires, for it to be true, that each and every dog be four-legged: no exceptions are permitted. Generic readings can usually be identified with paraphrases such as “X has the characteristic property Y”, or “X, by virtue of being X, has property Y”.

Let us now consider another prototypical example.

(2) *Dogs were lying on my lawn this morning.*

In this case, ‘dogs’ does not refer to the generality of dogs. The sentence in (2) just says that there were some dogs on my lawn this morning. That is, it *asserts the existence of dogs* on my lawn this morning. Thus, this reading has been referred to as “existential”. I will be using expressions such as “there were X” or “some X” to paraphrase existential readings.

### 1.1 English

In English both the generic and the existential readings are possible with Stage Level (SL) predicates, be they unaccusative as in (3) or unergative as in (4).<sup>3</sup>

- (3) *Typhoons arise in the South Pacific.*  
 a. Typhoons have the property of arising in the South Pacific.[GEN]  
 b. The South Pacific has the property that there are typhoons arising there. [∃]
- (4) *Grizzlies live in the Smoky Mountains.*  
 a. Grizzlies have the property of living in the Smoky Mountains [GEN]  
 b. It is a characteristic property of the Smoky Mountains that there are grizzlies living there. [∃]

However, with Individual Level (IL) predicates, only the generic reading is available, not the existential.

- (5) *Spaniards know Spanish*  
 a. Spaniards have the characteristic property of knowing Spanish. [GEN]  
 b. # There are (some) Spaniards that know Spanish. #[∃]<sup>4</sup>

<sup>3</sup> For this section, I follow Carlson (1977) and Diesing (1992).

<sup>4</sup> The symbol # indicates that a given reading is not available.

1.2 *Spanish*

In Spanish, the situation is different. To begin with, DS cannot appear preverbally under any reading, independently of the type of predicate.<sup>5</sup>

- (6) \* *Tifones* *aparecen en el Pacífico Sur.* [SL, unaccusative]  
 typhoons appear-3pl in the Pacific South
- (7) \* *Mujeres* *corren en las maratones.* [SL, unergative]  
 women run-3pl in the marathons
- (8) \* *Mujeres* *estudian la carrera de medicina.* [SL, transitive]  
 women study-3pl the program of medicine
- (9) \* *Mujeres* *saben estas cosas.* [IL predicate]  
 women know-3pl these things

On the other hand, they can appear postverbally with any kind of predicate,<sup>6</sup> an option that is independently available for subjects in Spanish, but then DS only have the existential reading, not the generic. This property is also true of DS with IL predicates.

- (10) *En el Pacífico Sur aparecen tifones.*  
 in the Pacific South appear-3pl typhoons
  - a. # Typhoons have the property of arising in the South Pacific. #[GEN]
  - b. The South Pacific has the property that there are typhoons arising there. [E]
- (11) *En las maratones corren mujeres.*  
 in the marathons run-3pl women
  - a. # Women have the property of running in marathons. #[GEN]
  - b. Marathons are such that there are women running there. [E]
- (12) *La carrera de medicina la estudian mujeres desde hace treinta años.*  
 the program of medicine it-cl study-3pl women since ago thirty years
  - a. # Women have the property of having been studying medicine for thirty years. #[GEN]

<sup>5</sup> Well-known exceptions are focused DS, DS with some modifier and DS in conjunction. See Benedicto (forthcoming) for an analysis of these facts.

<sup>6</sup> Hopefully, the examples below make this point clear. Contreras (1986) claims that they do not appear with unergatives (but see Casielles 1996), and for Torrego (1989) they are not acceptable either with transitives.

- b. Medicine has the property that there have been women studying it for thirty years.  $[\exists]$
- (13) *Estas cosas las han sabido mujeres desde siempre.*  
 these things them-cl have-3pl known women since always
- a. # Women have the property of knowing these things.  $\#[\text{GEN}]$   
 b. These things are such that there have been women knowing them forever.  $[\exists]$

Notice that although the sentences in (10)-(13) are all generic, the interpretation of the DS itself is existential. For instance, what (12) or (13) says is not that the generality of women study medicine or know those things; or that just by virtue of being a woman, one studies medicine or knows those things (the generic reading). Rather, the existence of women among those who study medicine or those who know those things is asserted. That is the existential reading.

### 1.3 *The problem*

The contrast in the behavior of DS in Spanish and English is summarized in Table (14).

(14)	SPANISH		ENGLISH	
	Preverbal	Postverbal	Preverbal	Postverbal
SL Predicate	*	$\exists, \#Gen$	$\exists, Gen$	* <sup>7</sup>
IL Predicate	*	$\exists, \#Gen$	$\#\exists, Gen$	*

The main contrasts reside not only in the syntactic position that DS occupy in each language, but also in the interpretive pattern that is associated to them: in Spanish, DS consistently have an existential interpretation (never generic), while in English the optionality that appears with SL predicates disappears in IL predicates in just the reverse from Spanish.

According to Diesing (1992:10), the Mapping Hypothesis (“material from the VP is mapped into the Nuclear Scope; material from the IP is mapped into the Restrictive Clause”), coupled with the projection of arguments associated with SL and IL predicates, predicts that the DS of an IL predicate should never have existential reading. This is so because the subject of an IL predicate is not generated within the VP (a PRO is, instead); thus, the subject (in [Spec, IP]) can never reconstruct to a VP-internal position, and it can never be mapped to

<sup>7</sup> Except for the cases of *there*-insertion with unaccusatives and locative inversion.

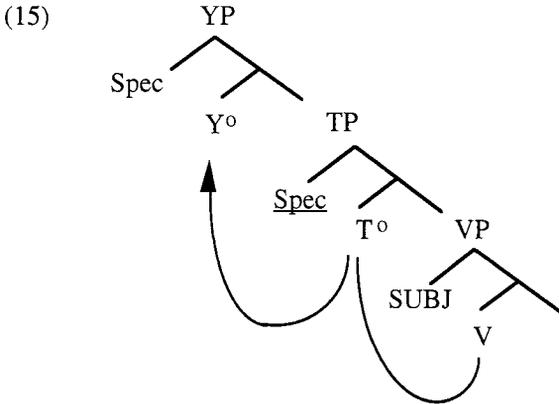
the Nuclear Scope (which is what derives the existential reading). Given this line of argumentation, the interpretation of DS with IL predicates is totally unexpected.

In short, what should be explained for Spanish is (i) why DS are always existential (especially, how this reading becomes available with IL predicates); (ii) why DS never have generic readings (according to Diesing, DS in [Spec, IP] should yield a generic reading) and (iii) why they are always postverbal.

**2. Theoretical background and assumptions**

*2.1 Clausal architecture: V-movement and postverbal subjects*

According to theoretical proposals such as Pollock’s (1989) regarding clausal architecture and the properties of verb movement in different languages, Spanish is a language that moves its verb to the highest functional projection.<sup>8</sup> Thus, a representation like (15) obtains.



The verb raises through T° up to the highest functional projection which I will call YP for now. [Spec, TP] is the locus for Nominative Case, so the subject will eventually move there for Case reasons. This approach allows us to account for postverbal subjects in V-movement languages in a natural way. But this also implies that preverbal subjects (in [Spec, YP] in [15]) are not argumental: if the subject satisfies all its requirement in [Spec, TP] (Case and, with it, Agreement; see Chomsky 1995), there is no reason for further movement. If the position that preverbal subjects occupy is not argumental, then we expect it to be filled by other constituents. The examples in (16) seem to confirm this.

<sup>8</sup> Arguments in favor of this involve the positioning of manner adverbs between the verb and the object, and the behavior of floated quantifiers.

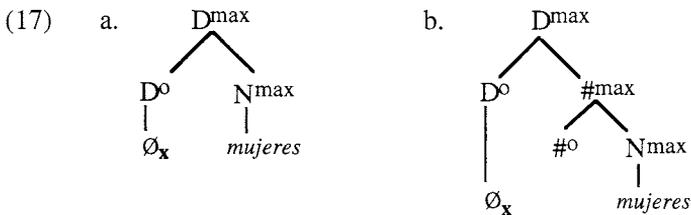
- (16) a. *Los sábados compra Marta el pan.*  
 the Saturdays buy-3sg Marta the bread  
 ‘Marta buys the bread on Saturdays.’
- b. *Los libros los compra Marta.*  
 the books them-cl buy-3sg Marta  
 ‘Marta buys the books.’
- c. *En ese restaurante cena Dalí.*  
 in that restaurant has-dinner-3sg Dalí  
 ‘Dalí has dinner in that restaurant.’

In the above examples, [Spec, YP] is occupied by a temporal expression (16a), an object (16b), and a PP (16c). Notice that in (16b), a clitic surfaces, which points to the possibility of CLLD (Clitic Left Dislocation). This leads to the conclusion that preverbal subjects are instances of CLLD. Although this is by no means a standard assumption, I will claim that [Spec, YP] is not filled by movement but directly by Merge.

## 2.2 DS's internal structure

I assume Wilkinson's (1986, 1991) proposals, also followed by Diesing (1992), that determinerless nominals (i.e., “bare plurals”) introduce a free variable and have no quantificational force of their own. Thus, the linguistic expression *mujeres* ‘women’ is translated as “women’ (x)” in the semantics. Such a variable will have to be bound by an operator in the sentence.

As for DS's syntactic structure, I follow Longobardi's (1994) proposal that they are DPs headed by an empty  $D^0$ . Putting together Wilkinson's and Longobardi's proposals, I suggest that Longobardi's empty  $D^0$  is in fact Wilkinson's variable. In other words, the empty  $D^0$  is interpreted as a variable (much in the same way as the bound variable reading of *pro* arises). In short, the structure that I assume is the one in (17a), without going into the question of possible intermediate projections (as in (17b), which, though possible, have no direct bearing on the present discussion.



Do we have any independent evidence that DS do indeed project up to the DP? Theories that postulate a functional projection of D tie this projection to the referential properties of the nominal expression. That is, any relation of referential dependency (anaphors, reciprocals, Control, etc.) takes place through this projection. In other words, if DS can be shown to undergo referential dependencies, then we have strong evidence for the presence of this projection. The examples in (18) confirm the prediction.

- (18) a. *Durante aquellos enfrentamientos, lucharon camaradas;*  
 during those confrontations fight-Past3pl comrades  
 ‘During those confrontations, comrades fought  
*entre sí;*  
 among themselves  
 among themselves.’
- b. *En aquellas atracciones, saltaban niños; unos encima*  
 in those stands jump-Past3pl children ones over  
 ‘In those stands, children were jumping on top  
*de los otros;*  
 of the others  
 of each other.’
- c. *Por fin, invitaron a mujeres; a PRO; hablar en*  
 finally invited-3pl prep women to speak in  
 ‘Finally, women were invited to speak in  
*la sesión inaugural.*  
 the session opening  
 the opening session.’
- d. *Entonces llegaron mujeres; con sus; hijos y*  
 then arrive-3pl. women with her children and  
 ‘Then there arrived women with their children and  
*maridos.*  
 husbands  
 husbands.’

Note finally that DS cannot be quantified NPs as Contreras (1986) suggests. Normally, quantified expressions interact among themselves with respect to their relative scope. However, Carlson (1977) observed that DS always take narrow scope and do not interact with other quantifiers/operators in the sentence. Thus, DS do not show the behavior of quantified expressions. The Spanish examples in (19) illustrate the contrast.

- (19) a. *Aquel día, no llamaron estudiantes.*  
 that day not called-3pl students  
 ‘That day, there were students who didn’t call.’ i. \* *estudiantes*>Neg  
 ‘That day, no student called (those who called were not students).’ ii.  $\checkmark$  Neg>*estudiantes*
- b. *Aquel día, no llamó un estudiante.*  
 that day not called-3sg a student  
 ‘That day, one student didn’t call.’ i.  $\checkmark$  *un estudiante*>Neg  
 ‘That day, it was not a student who called (but a clerk).’ ii.  $\checkmark$  Neg>*un estudiante*

### 2.3 Sentential operators: generic and existential

Following Heim (1982) and Diesing (1992), I assume that an existential operator is responsible for the existential readings of non-quantified elements.

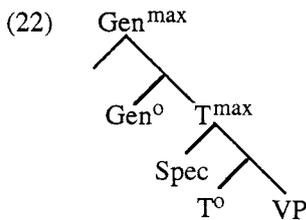
#### (20) Existential Closure (Heim 1982)

Adjoin a quantifier  $\exists$  to the nuclear scope of every quantifier/operator.

I also assume (with Wilkinson 1991 and references therein) the presence of a generic operator, “Gen”, in generic expressions.

- (21)  $Gen_X$  [Restrictor ... X... ] [Nuclear Scope ...X... ] (adapted from Wilkinson 1991)

Given the clausal structure of (15) and Wilkinson’s Gen operator, I propose that Gen is syntactically a functional head,  $Gen^0$ , an instantiation of the head  $Y^0$  in (15)<sup>9</sup>, projecting a maximal projection  $Gen^{max}$ .



<sup>9</sup> For reasons of space, I cannot go into the nature of YP when the clause is not generic. See Benedicto (forthcoming) for details on this matter.

Finally, I assume, following Higginbotham (1988), that all predicates have an event argument.

### 3. The “*Existential-with-the-Event*” hypothesis ( $\exists$ -with-e)

My proposal consists of associating Heim’s existential operator with the verb in the sentence.<sup>10</sup> Indirectly, this quantifier will follow the syntactic steps of the verb it is associated with. In this way, depending on the syntactic properties of the verb, the existential operator may end up in one structural configuration or another, and this structural configuration is the one determining its construal possibilities. More specifically, my proposal is as in (23).

(23)  $\exists$ -with-e (the “*Existential with the Event*”)

- Existential Closure is introduced with the event argument of the predicate.
- The scope of  $\exists$  is its c-command domain.

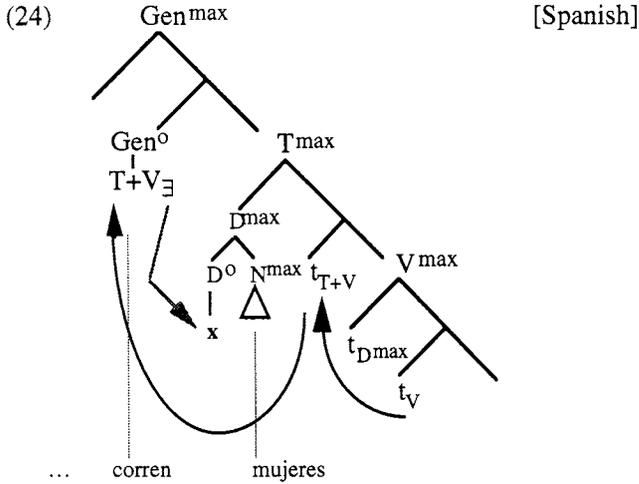
I now turn to the consequences of this hypothesis for the set of data presented in Section 1.

#### 3.1 *Verb movement and its interaction with Gen and $\exists$*

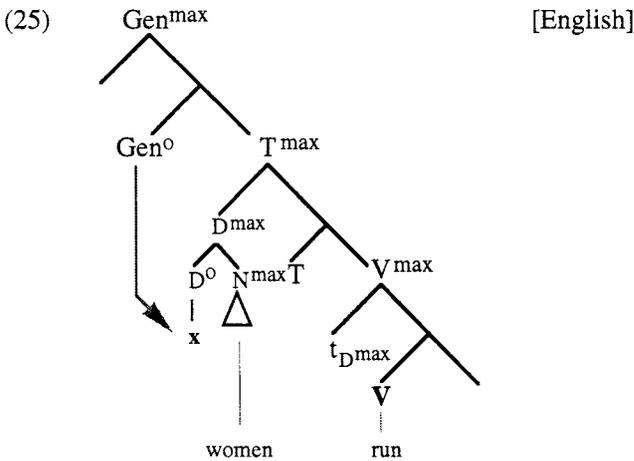
Let us consider first the case of Spanish. The verb raises through  $T^0$  to the highest functional projection. If the sentence is generic, this highest functional projection will host the generic operator  $\text{Gen}^0$ . The subject will eventually raise to [Spec, TP] for Case reasons (whether this happens before or after Spell Out is not crucial for this analysis). The final configuration is given in (24) (p. 34). Notice that in such a structural configuration, the DS (with a free variable in  $D^0$ ) is in the scope of  $\exists$ , having raised with the verb. This configuration thus allows  $\exists$  to bind  $x$  in  $D^0$ , and consequently the existential reading arises. Note that, by crossing over the subject, the  $\exists$  operator intervenes between the variable in  $D^0$  and the  $\text{Gen}^0$  operator, thus preventing  $\text{Gen}^0$  from binding the variable  $x$  (which would have resulted in the generic reading). In this way the hypothesis in (23) accounts for both the existential readings in Spanish DS for all kinds of predicates (since all of them raise syntactically in the same way), and their lack of generic readings.

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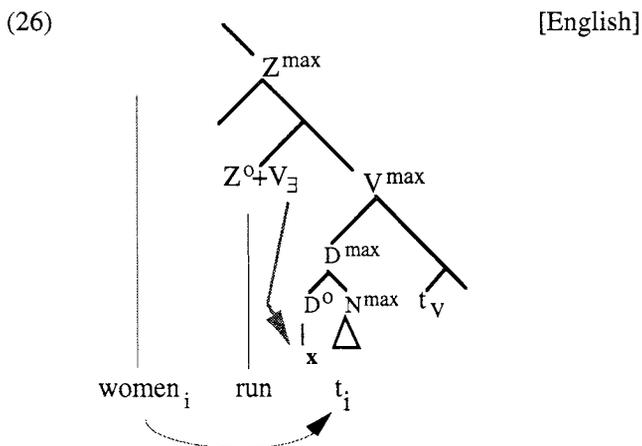
<sup>10</sup> I will limit myself to verbal predicates in this paper. See Benedicto (forthcoming) for an evaluation of how other types of predicates (e.g., adjectives) work in this respect.



Let us now consider the case of English. In this language, the verb does not raise. The subject does raise for Case reasons. The resulting configuration is given in (25). Notice that in such a structural configuration the variable in  $D^0$  is directly under the scope of  $Gen^0$  and no other operator intervenes between them. Thus,  $Gen^0$  can bind  $x$  and the generic reading arises. This option was not available for Spanish because  $\exists$  (carried by the verb) intervened between  $Gen^0$  and  $x$ .

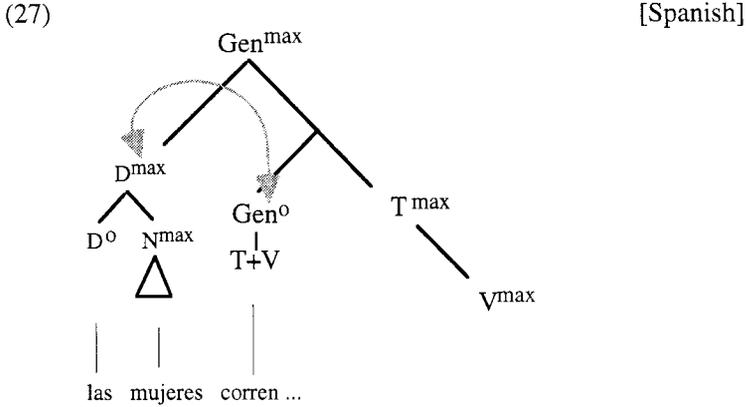


However, this result does not account directly for the existential readings that do arise in English, since neither the subject nor its trace is in the scope of  $\exists$ . I will here resort to accounts such as Runner (1995) (following Johnson 1991), where V in English is claimed to undergo short verb movement. This movement is to a functional projection above VP and below TP (I will not go into its nature here). If we accept the presence of such a projection and assume short V-movement, the resultant structure is (26).



In configuration (26), short V-movement has taken  $\exists$  to a position where it c-commands the trace of the subject; if this reconstructs, then the variable in  $D^0$  will be in the scope of  $\exists$  and the existential reading for the DS will arise. If we follow Diesing (1992) in assigning a different structure to SL predicates and IL predicates, it also follows that only subjects of SL predicates will show existential readings in English. As Diesing points out, DS of IL predicates cannot reconstruct, and thus  $\exists$  will never bind the variable in  $D^0$ .

I now briefly turn to generics in Spanish. We saw earlier (see example [24]) that the systematic intervention of  $\exists$  between  $Gen^0$  and the variable in  $D^0$  prevented generic readings for DS in Spanish. To obtain generic readings for noun phrases, Spanish resorts to another mechanism in the language, namely Spec-Head Agreement. I propose that the constituent that is generated in [Spec GenP] is the one that, by Spec-Head Agreement, gets to be interpreted as generic. In such configurations (see ([27])), the relation between  $Gen^0$  and  $D^0$  is not one of (operator/variable) binding, and thus cannot be achieved with an empty  $D^0$ ; the Spec-Head Agreement mechanism for generics requires  $D^0$  to be overt and so we find definite articles.



This view of genericity predicts that any constituent in the Spec of  $Gen^0$  will be interpreted as generic. Looking back at our discussion of this position and the examples in (16), we observe that the interpretation of the constituents claimed to be in [Spec, GenP] is precisely a generic interpretation. That is, (16a) means that it is a characteristic property of Saturdays that Martha buys the bread; (16b) means that (the) books have the characteristic property of being bought by Martha; and (16c) means that this restaurant has the characteristic property that Dalí has dinner in it. In other words, regardless of their internal structure (PP, DP, ...) or (in a loose sense) their “thematic” role, the constituents in [Spec, GenP] are all interpreted as generic, as predicted.

### 3.2 Confirmation: The case of Hebrew.

In this section I present independent evidence in favor of the *E-with-e* Hypothesis, based on data from Hebrew. Hebrew has been argued by Borer (1995) to be a language with optional verb movement. The verb can move to either one of two functional projections. In (28), for instance, the adverb *be-mehirut* ‘quickly’ marks the left boundary of VP, the subject has been moved out of the VP, and the verb has raised over the subject to the highest functional projection, through the intermediate functional head (in whose Spec the subject is sitting). The verb may appear in either one of the two functional heads.

- (28) [r' *etmol axal* [F' *Dan*<sub>2</sub> t<sub>v</sub> [<sub>VP</sub> *be-mehirut* [<sub>VP</sub> t<sub>v</sub> 'et ha-tapuxim.]]]  
 yesterday ate Dan            quickly            ACC the-apples  
 ‘Yesterday, Dan quickly ate the apples.’

Let us see how the position of the verb interacts with the interpretation of the DS in Hebrew. In (29), the verb has raised over the subject which remains in the Spec of the lower functional projection.

- (29) *Ba-'aviv nodedot ciporim be-mehirut cafona.*<sup>11</sup>  
 in-the-spring travel birds quickly North  
 'In the spring, (some) birds travel North quickly.'

Under the  $\exists$ -with-*e* approach, the  $\exists$  operator associated with the verb c-commands the DS *ciporim* and thus can bind the variable in  $D^0$ . The  $\exists$ -with-*e* Hypothesis in (23) predicts that this configuration will result in the existential reading of the DS, as it actually does. On the other hand, as in the Spanish case, the  $\exists$  operator intervenes between Gen (in the higher head) and the variable in  $D^0$ , thus preventing the binding of the variable by Gen and the generic interpretation.

- (30)
- 
- [<sub>GenP</sub> ba-'aviv **Gen<sup>0</sup>** nodedot] [<sub>TP</sub> [<sub>DP<sup>x</sup></sub> [<sub>NP</sub> ciporim]] t<sub>v</sub> birds  
 in Spring travel  
 [<sub>VP</sub> be-mehirut [<sub>VP</sub> t<sub>DP</sub> t<sub>v</sub> cafona]]]  
 quickly North

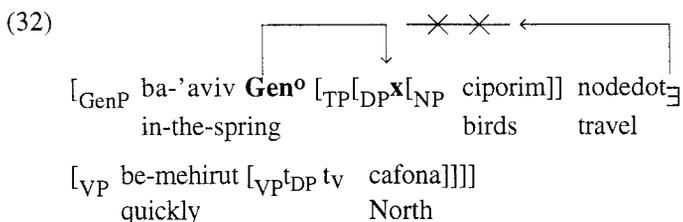
Let us now consider the case in (31) where the verb remains in the lower functional projection, not crossing over the subject, which thus remains pre-verbal.

- (31) *ba-'aviv ciporim nodedot be-mehirut cafona.*<sup>12</sup>  
 in-the-spring birds travel quickly North  
 'Birds travel North quickly in the Spring.'

In this case, no operator intervenes between the Gen operator and the variable in  $D^0$ ; binding can therefore take place and the generic reading for *ciporim* arises, as predicted by the  $\exists$ -with-*e* Hypothesis of (23).

<sup>11</sup> Borer, personal communication.

<sup>12</sup> Borer, personal communication.



In sum, the behavior of DS in Hebrew confirms the  $\exists$ -with-*e* Hypothesis presented in (23).<sup>13</sup>

#### 4. Summary and conclusions

I have presented an analysis based on the  $\exists$ -with-*e* Hypothesis in (23), which accounts for the facts and contrasts in English and Spanish summarized in (14). More concretely, it accounts for the specific features in the behavior of Determinerless Subjects in Spanish which are listed in (33).

- (33) • the unavailability of a generic interpretation for DS;  
 • why DS are always (and only) postverbal;  
 • the lack of restrictions with respect to the type of predicate (SL or IL)

The hypothesis in (23) also allows us to explain the contrast noted by Solà (1992) for Catalan (and extended here to Spanish) about the interpretation of indefinite subjects: in preverbal position they must be interpreted as [+spec], while in postverbal position they may be interpreted as [-spec].

- (34) a. *El sábado aterrizó un avión.*  
 the Saturday landed a plane  
 'A plane[-spec] landed on Saturday.'  
 b. *El sábado un avión aterrizó.*  
 the Saturday a plane landed  
 'A plane[+spec] landed on Saturday.'

If the [-spec] interpretation is the one determined by the existential operator (following Heim 1982, in that the indefinite *un* is a variable), it is a straightforward consequence of the  $\exists$ -with-*e* Hypothesis that the postverbal indefinite is interpreted as [-spec], since it is in the scope of  $\exists$  and thus  $\exists$  can bind the

<sup>13</sup> See Benedicto (forthcoming) for a discussion of the issues raised by these languages. Another interesting testing ground for this hypothesis is the behavior of V2 and VSO languages. However, that falls outside the scope of this paper

variable of *un*. In contrast, the indefinite in preverbal position, which has been base-generated there, cannot reconstruct to a position in the scope of  $\exists$  and thus, the [-spec] reading (through binding by  $\exists$ ) cannot arise.

In this paper I have presented evidence that purely syntactic properties (here, the movement properties of the verb) may affect the interpretation of the sentence. They do so in as much as they determine the final structural configuration of the clause, which is the input to the interpretational component. For instance, it is a particular structural configuration which may or may not allow a particular binding relationship to be established, and thus, a particular interpretation to arise. Along these lines, the conditions on the LF interface are not imposed by interpretational requirements but are simply well-formedness conditions (e.g., a variable must be properly bound by an operator). Ultimately, this instantiates Frege's Compositionality Principle, namely that the meaning of the whole is the *result* of the meaning of the parts *and the way they are combined*.

## REFERENCES

- Benedicto, Elena. Forthcoming. *The Syntax and Interpretation of Non-canonical Argument Positions*. Ph.D. Dissertation, University of Massachusetts, Amherst.
- Borer, Hagit. 1995. "The ups and downs of V-movement in Hebrew". *Natural Language and Linguistic Theory* 13.527-606.
- Carlson, Gregory. 1977. *Reference to Kinds in English*. Ph.D. Dissertation, University of Massachusetts, Amherst.
- Carlson, Gregory & Francis Jeffry Pelletier. 1995. *The Generic Book*. Chicago: The University of Chicago Press.
- Casielles, Eugenia. 1996. "On the misbehavior of bare nouns in Spanish". In *Aspects of Romance Linguistics*, ed. by Claudia Parodi, Carlos Quicoli, Mario Salterelli & María Luisa Zubizarreta, 135-148. Washington, D.C.: Georgetown University Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Contreras, Heles. 1986. "Spanish bare NPs and the ECP". In *Generative Studies in Spanish Syntax*, ed. by Ivonne Bordelois, Heles Contreras & Karen Zagona, 25-49. Dordrecht:Foris.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, Mass.: MIT Press.
- Heim, Irene. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. Dissertation, University of Massachusetts, Amherst.
- Higginbotham, James. 1988. "Elucidations of meaning". *Lexicon Project Working Papers 19*. Cambridge, Mass.: MIT Center for Cognitive Science.

- Johnson, Kyle. 1991. "Object positions". *Natural Language and Linguistic Theory* 9.577-636.
- Longobardi, Giuseppe. 1994. "Reference and proper names". *Linguistic Inquiry* 25.609-665.
- Pollock, Jean-Yves. 1989. "Verb movement, Universal Grammar and the structure of IP". *Linguistic Inquiry* 20.365-424.
- Runner, Jeff. 1995. *Noun Phrase Licensing and Interpretation*. Ph.D. Dissertation, University of Massachusetts, Amherst.
- Solà, Jaume. 1992. *Agreement and Subjects*. Ph.D. Dissertation, Universitat Autònoma de Barcelona.
- Torrego, Esther. 1989. "Unergative-unaccusative alternations in Spanish". In *MIT Working Papers in Linguistics* 10.253-269. Cambridge, Mass.: MIT.
- Wilkinson, Karina. 1986. "Genericity and indefinite NPs". Ms., University of Massachusetts, Amherst.
- \_\_\_\_\_. 1991. *Studies in the Semantics of Generic Noun Phrases*. Ph.D. Dissertation, University of Massachusetts, Amherst.

# EXPLETIVE AUXILIARIES\*

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## 0. Introduction

The present perfect (PrP) in English differs from the PrP in languages like Italian (and French, German, Dutch, etc.) in a number of properties. A well-known difference is that, as illustrated in (1), only in languages like Italian can the PrP be modified by temporal specifications that denote definite intervals in the past, such as *yesterday*, *last week*, or *in 1944*.

- (1) a. (\**Last week*) *Cadu has made Caipirinha*<sup>1</sup>  
b. *La settimana scorsa Cadu ha fatto Caipirinha*

Relatedly, only in languages like Italian can the PrP be used in narrative contexts and refer to a sequence of events in the past.

A full account of this difference must answer two questions: (a) Why is the English PrP subject to the *Past Adverb Constraint*? And (b) in what way precisely is the PrP in languages like Italian different so that it is compatible with past-time adverbs. The first issue has received considerable attention in the literature, and a number of interesting but not entirely satisfying solutions have been proposed. As we will see, when we take into account languages like

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<sup>1</sup> A strong alcoholic drink.

Spanish and Danish, this problem is in fact much more intricate than the simple contrast between English and Italian suggests.

Within the Reichenbachian framework, there are two principal ways to address the second problem. According to Reichenbach's (1947) formula E\_R,S, the English PrP is distinguished from the past tense in the location of R (Reference Time) and from the present tense in the location of E (Event Time).

- (2) a. E\_R,S present perfect (S = Speech Time)  
 b. E,R\_S past tense  
 c. E,R,S present tense

The PrP expresses a non-past relation (“,”) between S and R and a past relation (“\_”) between R and E. We represent these relations structurally as in (3).

- (3) a. [...[TP S [-P]<sub>T</sub> R [T/ASPP [+P]<sub>T/ASP</sub> E ...VP ]] (2a)  
 b. [...[TP S [-/+P]<sub>T</sub> R,E ...VP ]] (2b, 2c)

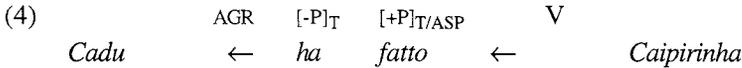
T relates R with S and T/ASP relates E with R. Following Stowell (1993), we assume that Reichenbach's time points are represented in the syntax. For the sake of simplicity, we ignore the structural representation of the non-past relation between E and R in the case of the present and the past.

One way to address the contrast in (1) is to treat the Italian PrP as a past tense, i.e., E,R\_S. Under this view, (1b) is grammatical because the past-time adverb can modify R. Alternatively, one can keep the meanings the same, i.e., E\_R,S for both English and Italian PrP, and account for the contrast in (1) in some other way (an analysis along these lines has been proposed by Giorgi & Pianesi 1991, 1996, among others). According to a common assumption, which can be traced back to Reichenbach (1947), the possibility of Event Time modification varies across languages: past-time adverbs can modify E with Italian PrP but not with English PrP. In other words, the difference between the two approaches is whether the contrast in (1) regards R or E.

Since the PrP is made out of the same morphological units in English and Italian (i.e., an auxiliary in the present tense and a participle), the second approach, which keeps the meanings the same, appears far more attractive from the morphosemantic point of view. However, as we will argue, this approach misrepresents the *Reference Time Properties* of the PrP. The obvious challenge for the other approach, which differentiates the meanings, concerns the link between form and meaning: why is there a difference in meaning if there is no apparent difference in form?

### 1. *Form and meaning*

In our view, English and Italian differ in the temporal properties of the auxiliary. The auxiliary can have semantic content corresponding to its present tense form in both languages: as diagrammed in (4), it checks the [-P] feature in T.

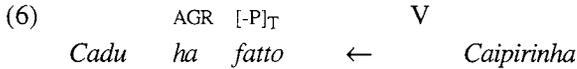


The auxiliary also realizes subject-agreement and the participle is licensed by a [+P] in the lower projection T/ASP.

In Italian the auxiliary may also lack semantic content. We say that the auxiliary can be *expletive* from the standpoint of temporal denotation (5).

(5) The PrP auxiliary can be expletive in Italian but not in English

When the auxiliary is expletive, T can host [+P]. As indicated in (6), the participle checks this feature in T and the only function of the auxiliary is to host the subject-agreement morpheme.



In other words, there is no difference between English and Italian with respect to the participle. In both languages the participle expresses a past relation. It can check the [+P] feature either in T/ASP, as in (4), or in T, as in (6). In the first case [+P] relates R and E, and we obtain E\_R,S; in the second case it relates R and E, and we obtain E,R\_S. This ambiguity shows up in Italian where the auxiliary can be expletive. The English PrP, on the other hand, only has the representation in (4) as the auxiliary must check [-P] in this language. In Sections 2-5, we will support the semantic implications of this analysis and examine a number of properties that are linked to the Reference Time of a sentence. In Section 6, we will briefly address the variation proposed in (5) and relate it to morphological differences across these languages.

### 2. *Current relevance*

A number of different interpretations have been distinguished for the English PrP. First, it can have the *resultative* interpretation and express the present effects or results of a past action. (7), for instance, implies that Bill is now in America, or is on his way there, this being the present result of his past action of going to (setting out for) America (Comrie 1976:56ff).

- (7) *Bill has gone to America.*

However, this sentence is ambiguous: it can also have an *existential* interpretation, which indicates that a given situation held at least once in the past, without focussing on the present result of the action. This is especially the case when it is modified by certain adverbs, such as *twice* and *before* (8).

- (8) a. *John has gone to America several times/twice/before ...*  
 b. *Have you ever gone to America?*

With telic predicates the resultative interpretation is generally the prevalent reading when no such adverb is present.

Thirdly, the PrP is often compatible with the *continuative interpretation*, where the event prevailed throughout some interval stretching from the past into the present. For instance, the sentences in (9) can mean that John still lives in London and that he is still sick, respectively.

- (9) a. *John has lived in London for three years .*  
 b. *John has been sick since Christmas.*

It is important to notice that the adverbials in (9) are necessary for the continuative interpretation to arise. Without them, only the existential interpretation arises. Thus *John has lived in London* means that John's living in London took place at some time in the past, but that he no longer lives there. In other words, the continuative interpretation requires a temporal specification: the starting point (*since Christmas*), duration (*for three years*) or endpoint of the event (*so far, up to now*) has to be specified. As we will see below the universal quantifier *always* can have the same effect.

The Italian PrP is used in exactly the same contexts with precisely the same meanings. For instance, *Gino è andato in America* 'Gino has gone to America' is used to convey the resultative meaning that Gino is in or on his way to America. *Sei mai andato in America?* 'Have (you) ever gone to America?' is a perfect translation of (8b). One must be cautious when considering sentences corresponding to (9) which do not have the continuative interpretation in Italian. This fact has led many researchers to the conclusion that the Italian PrP radically differs from the English PrP. Smith, for instance, explains the absence of the continuative interpretation of the French PrP, which behaves similarly, by claiming that it "has a consistently perfective viewpoint, so that the final point of the situation talked about must precede Reference Time" (1991:274). However, it seems that such a conclusion would be too strong. As pointed out by Bertinetto (1986:418f) and others, the continuative interpretation is possible when the PrP is modified by, e.g., *finora* 'until now', or by

the adverbial quantifier *sempre* 'always'. The sentences in (10), discussed in Brugger (1996), express that Gino believed in the past and continues to believe the truth of the complement clause.

- (10) a. *Finora Gino ha creduto che Pina sia malata.*  
'Until now Gino has believed that Pina is sick.'
- b. *Gino ha sempre creduto che Pina sia malata.*  
'Gino has always believed that Pina is sick.'

(10b) reminds us of McCawley's (1971) assumption that the continuative PrP always involves (covert) universal quantification. Notice also that the quantifier makes the Italian PrP compatible with *since*: *Da natale Gino è \*(sempre) stato malato* 'Since Christmas Gino has always been sick' has the continuative interpretation of its English translation. This sentence falsifies the widespread opinion that *since*-clauses require the present tense in Italian in order to convey the continuative meaning. All these data indicate that the Italian PrP does not differ that drastically from the English PrP as has been assumed by Smith. The continuative interpretation requires a temporal specification of a certain kind in both languages — the only difference is that in Italian this set is more restricted than in English.

What all three interpretations have in common is that R is co-temporaneous with S. The events are evaluated with respect to S or with respect to an interval that leads up to S. Unlike the past tense, they are compatible with *now*, as in *now John has gone to America* and, correspondingly in Italian, *adesso Gino è andato in America*. As shown by the ungrammaticality of *\*now John went to America* this adverb requires R to be co-temporaneous with S. (We cannot address here the issue of how the underlying form E\_R,S gives rise to the three different PrP interpretations; for discussion of this issue see Brugger [forthcoming], who identifies a number of differences in the Event Time properties between the PrP types and argues that E does not precede R in the same way in all interpretations).

The Italian PrP has a usage that is not available for the English PrP. *Gino è arrivato*, for instance, *can* have the resultative interpretation of its translation *Gino has arrived*, but, unlike the English sentence, it does not necessarily imply that John is here now. The question that arises is whether this difference is sufficient evidence for our claim that the Italian PrP is ambiguous between two distinct underlying representations. Alternative analyses are imaginable and have been proposed. For instance, one could argue that R of the Italian PrP is always co-temporaneous with S, and relate the difference between English and Italian to some difference in E. Thus, the Event Time of the Italian

PrP sentences could be characterized as “more definite” in that it can be located on a specific point on the time axis. Under this view, *Gino è arrivato* could be considered as the definite counterpart of the existential PrP *Gino has arrived here many times* which refers to indefinite events in the past. The evidence we will discuss in the following sections shows that such an approach is not appropriate.

### 3. *The 24-hour rule*

The Spanish PrP has an intermediate status between English and Italian. Unlike the English PrP, it can be modified by past-time adverbs (11a), but in a more restricted way than Italian PrP, since (11b) is ungrammatical.

- (11) a. *Esta mañana a las seis Juan ha abierto la ventana.*  
 ‘At six o’clock this morning Juan [has] opened the window’.
- b. \* *Ayer Juan ha abierto la ventana.*  
 ‘Yesterday Juan [has] opened the window.’

The adverb *this morning* alone is compatible with the past tense and the PrP in English. The reason is that it can denote an interval that includes Speech Time or one that is entirely in the past. Only in the first case can it combine with the PrP: *This morning John has opened the window (many times)* can be uttered during that morning, but not, for instance, in the evening of that same day. In contrast, in Spanish this sentence *can* be uttered under either circumstance. In addition, the time can also be specified, for instance, by *a las seis* ‘at six’, as in (11a), which would be impossible in English. However, the occurrence of past-time adverbs is restricted in that they must denote intervals that lie within today (i.e., the day of the utterance of the sentence). When the interval precedes today (e.g., *ayer* ‘yesterday’, *hace tres semanas* ‘three weeks ago’, or *en 1947* ‘in 1947’), they cannot combine with the Spanish PrP. This restriction, which also holds in Catalan and 17th-century French, has been subsumed under the notion of the *24-hour Rule*.

It is important to note that the 24-hour Rule restricts the overt time modification but not necessarily the location of the Event Time. (12), for instance, does not necessarily imply that John opened the window today — the opening may have occurred at any time in the past (Comrie 1985).

- (12) *Juan ha abierto la ventana.*  
 ‘Juan has opened the window.’

The relevance of the 24-hour Rule can still be observed indirectly. If Juan opened the window at a time before today, the window must still be open.

Conversely, if the window is closed now, the sentence implies that Juan opened the window today. In other words, we observe that when the PrP has the resultative interpretation of the English PrP in *John has opened the window* the location of the Event Time is unrestricted in Spanish. On the other hand, when the result does not hold at S — in which case one would use the past tense in English — the Event Time is subject to the 24-hour Rule. These observations follow if we formulate the 24-hour Rule as a constraint on R (13).

- (13) The Reference Time of a Spanish PrP-sentence is an interval that is included in today.

Similar constraints can be found in languages where different tense forms are used depending on whether the event occurred today, or yesterday, or two days ago. We further assume that the Spanish PrP is like the Italian PrP in that it expresses one [+P] relation between either R and E or S and R. In the terms introduced in Section 1, the past tense-like construal (14b) presupposes that the auxiliary can be expletive in Spanish.

- (14) a. ... S [-P]<sub>T</sub> R<sub>CTODAY</sub> [+P]<sub>T/ASP</sub> E  
 b. ... S [+P]<sub>T</sub> R<sub>CTODAY</sub>, E

Because of (13), the past tense construal is possible only when E is within today. That is, if E is prior to today and [+P] relates S and R then — because of R,E — R would also be prior to today and violate (13). This predicts that the Spanish PrP can be used as a past tense for talking about past events of today. The only possibility for E being prior to today is (14a), which satisfies (13) trivially and gives rise to the interpretations of the English PrP. The intriguing property of the Spanish data is that we can tease apart the two constructions of the PrP in a much clearer way than is possible in Italian.

#### 4. Requirement of an existing topic

It has been observed for English that the PrP cannot be used in (15) once Einstein is no longer alive (McCawley 1971).

- (15) *Einstein taught/\*has taught at Princeton.*

This is only the case when *Einstein* is the topic, as after a question like *What can you tell me about Einstein?* When *Einstein* contributes new information, e.g., after *who has taught at Princeton?*, the PrP can be used — provided that Princeton, which now functions as the topic, is still existent.

We will not formally characterize here this requirement for the topic to be alive or existent. We only want to emphasize that it is obviously related to the Reference Time rather than to the Event Time. While past tense sentences have no constraint on whether the topic is still alive now or not, present tense sentences do: compare, e.g., *Einstein was blond* with \**Einstein is blond*. Notice that there are some exceptions. In certain cases, the topic of a present tense sentence may be dead: *John is dead*, *John has many heirs*. But, crucially, the same holds for the corresponding PrP sentences: *John has died*, *John has left many heirs*.

This requirement can also be observed in Spanish. (16a) is as awkward as (15). There is an important difference, however. In Spanish, its awkwardness is not merely a consequence of the fact that Einstein is dead now, but rather of the fact that he died before today. Imagine (16b) being uttered in the evening after Juan's death.

- (16) a. \* *Einstein ha enseñado en Princeton.*  
Einstein has taught in Princeton
- b. *Esta mañana a las seis Juan se ha levantado, ha comido na manzana, ha leído el periódico (y se ha muerto).*  
Lit. 'This morning at 6 o'clock Juan has gotten up, has eaten an apple, has read the newspaper (and has died).'

(16b) is perfectly acceptable, even though Juan is already dead when the sentence is uttered. This is not unexpected within our assumptions. The underlying representation of the PrPs is the past tense construal (14b) which sets R prior to S and, consequently, has no constraint regarding dead or non-existent topics. In contrast, since the Event Time is prior to today in (16a), the only possible representation is (14a), which requires the topic to be alive.

It is a mystery how these examples could be accommodated within the alternative approach that analyzes the PrP uniformly as E\_R,S. The next section provides further evidence against such a view.

### 5. *Event Time modification*

The assumption that R and S are co-temporaneous accounts for the Past Adverb Constraint only partially: it excludes past-time adverbs that modify R. This constraint does not ban them from modifying E which is in the past. Hence, an additional rule is required to bar \**John has arrived yesterday*. However, in whatever form this rule will be formulated, it must allow for cross-linguistic variation since data from Danish and Spanish shows that E of PrP sentences can be modified by past-time adverbs.

The Danish PrP is like the English PrP: it can have the resultative, existential or continuative interpretation and lacks the past tense interpretation of Italian PrP. In other words, the PrP-auxiliary cannot be expletive in this language. But, in contrast to the English PrP, it is compatible with past-time denoting adverbs and with *when*. (17) is from Davidsen-Nielsen (1990:124), (18) from Allan, Holmes & Lundskær-Nielsen (1995).

- (17) *Vil de der har glemt at stille deres ure i gar aftes gøre det nu.*  
 'Would those of you who have forgotten to set their watches last night do so now.'
- (18) *Hvornaar er du ankommet?*  
 Lit. 'When have you arrived?'

Interestingly, the position of the past-time adverbs is restricted: it cannot stay in sentence initial position.

- (19) a. \* *For to dage siden jeg er ankommet.*  
 Lit. 'Two days ago I have arrived.'
- b. ? *Jeg er ankommet for to dage siden.*  
 Lit. 'I have arrived two days ago.'

Notice that many speakers would answer (18) with a past tense sentence; however, when they use the PrP, (19b) is clearly preferred over (19a). The presence of the past-time adverbs does not interfere with the interpretation. The sentences still have the meaning of the English PrP. (18) and (19b), for instance, are of the resultative type and are appropriate only if the person denoted by the subject-pronoun is here now.

As we know independently from the past perfect, time adverbs in initial position modify E but not R. For instance, *At three John had (already) arrived* means that the time of John's arrival (E), was before three o'clock (R). It does not mean that John's arrival was at three o'clock, a reading which requires sentence-final time specification: *John had arrived at three*. In this light the contrast in (19) is not at all surprising: in (19b), the past-time adverb modifies E, which is unproblematic since E is prior to S. In (19a), being sentence initial, it cannot modify E; it cannot modify R either, as R is co-temporaneous with S.

The conception of the Past Adverb Constraint (PAC) that is commonly assumed fails to reflect the complexity of the phenomenon. The simple distinction that the English PrP disallows modification by past-time adverbs, whereas the Italian PrP allows it, misses the fact that there is an intermediate case exemplified by Danish. Hence, the PAC must be split up into two independent constraints. One that restricts the modification of R and one that restricts the modification of E.

(20) PAC	Italian/Spanish	Danish	English
R-modification	+	-	-
E-modification	+	+	-

The Italian and Spanish PrP allow past-time adverbs to modify R or E. (1b) and (11) illustrated R-modification. The Spanish example in (21) illustrates E-modification.

- (21) *Juan ha abierto la ventana ayer/hace dos días.*  
 Juan has opened the window yesterday / two days ago

Just as in the Danish examples previously discussed, the adverb cannot stay in sentence-initial position (cf. 11b) and, secondly, the interpretation is that of the English PrP, and not that of a past tense: (21) implies that the window is still open now. Both facts indicate that the adverb modifies E and that R is co-temporaneous with S. This is exactly what we expect, as the 24-hour Rule would prohibit modification of R by these adverbs.

It is evident that these variations cannot be reduced to E alone. Since one would have to do exactly this within an approach that treats the PrP uniformly as E\_R,S, we have to dismiss such an approach.

## 6. Agreement

In the preceding sections we isolated a number of properties that are related to the location of R with respect to S. When R and S are co-temporaneous, a PrP sentence gives rise to Current Relevance: its topic must be existent at S, and R can be modified by *now*, but not by past-time adverbs. In contrast, when R is prior to S, Current Relevance is not implied: the topic need not be existent at S, and R can be modified by past-time adverbs, but not by *now*. We also saw that the Spanish 24-hour Rule is a restriction on R.

### (22) Reference Time properties

- Current Relevance vs. past tense interpretation
- Requirement of Existent Topic
- R-modification: *now* vs. past-time adverbs
- 24-hour rule

Through these criteria, we established that R can be prior to S in Italian and Spanish, while in English and Danish it is always co-temporaneous with S. That is, the auxiliary must express [-P] in English and Danish and can express [-P] in Italian and Spanish.

- (23) The PrP-auxiliary can be expletive in Italian and Spanish but not in English and Danish.

The question that has to be addressed is why this should be so. As is well known, these languages differ in the richness of the verb-morphology. While finite verbs, including the PrP-auxiliary, distinguish person and number in Italian and Spanish, Danish verbs have no person or number distinction. For instance, the PrP-auxiliaries *have* 'have' and *være* 'be' have the invariant form *har* and *er*, respectively, for all persons and numbers. Verbal agreement is also very poor in English. Except for *be*, which does not function as a PrP-auxiliary in English, all verbs distinguish at most two forms in the present tense. If, as has been proposed (Kayne 1989), the *-s* of the 3rd person singular marks number, we can reduce the variation in (23) to (24).

- (24) The PrP-auxiliary distinguishes person or has semantic content.

## REFERENCES

- Allan, Robin, Philip Holmes & Tom Lundskær-Nielsen. 1995. *Danish. A Comprehensive Grammar*. London: Routledge.
- Bertinetto, Pier Marco. 1986. *Tempo, Aspetto e Azione nel Verbo Italiano*. Florence: Accademia della Crusca.
- Brugger, Gerhard. 1996. "The representations of present perfect types". Ms., University of California, Los Angeles.
- \_\_\_\_\_. Forthcoming. "Event time properties". *Penn Working Papers in Linguistics* 4.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- \_\_\_\_\_. 1985. *Tense*. Cambridge: Cambridge University Press.
- Davidsen-Nielsen, Niels. 1990. *Tense and Mood in English: A Comparison with Danish*. Berlin: Mouton de Gruyter.
- Giorgi, Alessandra & Fabio Pianesi. 1991. "Towards a syntax of temporal representation". *Probus* 3.187-213.
- \_\_\_\_\_. 1996. "Tense and aspect: from semantics to morphosyntax". Ms., University of Bergamo.
- Kayne, Richard. 1989. "Notes on English agreement". *Central Institute of English Foreign Languages Bulletin* (Hyderabad, India) 1.41-67.
- McCawley, James D. 1971. "Tense and time reference in English". In *Studies in Linguistic Semantics*, ed. by Charles J. Fillmore & D. Terence Langendoen, 96-113. New York: Holt, Rinehart & Winston.
- Reichenbach, Hans. 1947. *Elements of Symbolic Logic*. New York: MacMillan.
- Smith, Carlotta S. 1991. *The Parameter of Aspect*. Dordrecht: Kluwer Academic Press.
- Stowell, Timothy. 1993. "Syntax of tense". Ms., University of California, Los Angeles.



# ON THE STRUCTURE OF DECLARATIVE CLAUSES\*

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## 0. *The Fregean view of declaratives and speaker-oriented adverbs*

In an analysis which goes back to Frege (1918), matrix declarative clauses are shown to incorporate three distinct levels of semantic analysis: at the bottom, we have the notion of *thought*. Thoughts are, according to Frege, senses of sentences, the abstract proposition that they express. Thoughts can neither be denied nor assented to: they are the object of inquiry, the matter concerning which the issue of truth or falsity arises. Acknowledgment of the truth of a proposition or thought yields a *judgment*, an evaluation of the proposition in terms of truth or falsity in a correspondence theory of truth. Judgments, in turn, are asserted or manifested through the declarative act of the speaker. In Frege's view, the issuing of a declarative sentence implies the speaker's engagement in three different acts ("Thoughts", p. 7):

- (i) the grasp of a thought
- (ii) the acknowledgment of the truth of a thought, the act of judgment
- (iii) the manifestation of this judgment, or the act of assertion

This Fregean picture provides a basis for the classification of a set of adverbs, illustrated in (1), which Jackendoff (1972:56-58) called "speaker oriented":

- (1) *Frankly / fortunately / probably, he is tired.*

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Jackendoff observed that the distributional facts that support the existence of this class correlate with a semantic property: these adverbs express the attitude of the speaker towards the sentence they modify. As was noted by Bellert (1977) however, Jackendoff's notion of "attitude" would have to be construed broadly enough to encompass very different things, from the speaker's evaluation of the truth of the sentence (as with *necessarily*, *probably*, *obviously*, or *possibly*), to his attitude towards the act of assertion itself, given things like *frankly*, *confidentially* or *sincerely*. By extending the domain of environments where speaker-oriented adverbs are in complementary distribution, Bellert is able to elaborate a more refined taxonomy of Jackendoff's class, one that correlates semantically with a Fregean view of statements as claims to truth.

Bellert distinguishes the following three classes:

- (a) MODAL ADVERBS (*probably*, *possibly*, *certainly*, *surely*, *evidently*): adverbs in this class are predicates whose argument is the truth of the proposition expressed by the respective sentence. As shown in (2), every sentence containing a modal adverb can be paraphrased by a more explicit statement expressing a complex proposition, in which the adverb is clearly a predicate of truth:

(2) *It is possibly / probably / obviously true that S.*

Modal sentential adverbs are not possible with questions, as shown in (3).

(3) *\*Has John probably / evidently / certainly arrived?*

Modal adverbs are predicates of truth: they qualify the truth of the proposition expressed. But it is precisely the truth of the sentence which is inquired about in yes/no questions. The ungrammaticality of (3) then follows as a semantic clash: we can not ask questions and evaluate the truth at the same time.

- (b) EVALUATIVE ADVERBS (*luckily*, *fortunately*, *happily*, *surprisingly*): evaluative adverbs are factive predicates, the argument of which is the fact or state of affairs denoted by the sentence in which they occur. The truth conditions of the sentence without the adverb are the necessary truth conditions of the entire sentence. Thus, the truth of (4a) entails the truth of (4b).

- (4) a. *Fortunately, John came.*  
b. *John came.*

The same is not the case with modal adverbs, so the truth of (5a) does not entail the truth of (5b).

- (5) a. *Probably, John has arrived.*  
 b. *John has arrived.*

The contrast in (5) is expected if modal adverbs predicate about the truth of the sentence, and therefore modify the force of the assertion. That evaluative adverbs do not induce the same effect shows that they are not predicates of truth. (4) suggests that they predicate about the judgment, in the Fregean sense: what (4a) would say then is that the truth of John's past coming is fortunate.

Schreiber (1971) observes that although the relative order of modal adverbs in a sentence is free (6), the relative order of evaluatives and modals is not: evaluatives must precede modals (7).

- (6) a. *Possibly, he has probably arrived.*  
 b. *Probably, he has possibly arrived.*
- (7) a. *Fortunately, he has probably arrived.*  
 b. \* *Probably, he has fortunately arrived.*

Schreiber's intuition regarding these scope effects is that the class of adverbs which must precede members of another class predicate about more complex arguments. This intuition is straightforwardly accommodated under the claim that evaluatives predicate about judgments, whereas modals predicate about truth.

Evaluative adverbs are also impossible with questions, as shown in (8).

- (8) *Did John \*fortunately arrive?*

This follows from the same sort of semantic clash that prevents modal adverbs with questions. Questions inquire about the truth of the sentence and evaluative adverbs predicate about judgments, or evaluated propositions. So the presence of an evaluative adverb implies the truth conditional evaluation of the sentence.

(c) PRAGMATIC ADVERBS (*frankly, sincerely, briefly, roughly*):

For Bellert, pragmatic adverbs are two-place predicates: one of their arguments is the speaker; the other one is either the proposition (*frankly, sincerely*) or the form of the sentence (*briefly, roughly*). This characterization is analogous to that of explicit performatives in the performative hypothesis of the 1970's (Ross 1970, Sadock 1974). Under

that analysis, a declarative sentence such as (9a) was claimed to have a Deep Structure with an explicit performative, such as (9b).

- (9) a. *I am tired.*  
 b. *I assert that I am tired.*

The performative prefix in (9b), like Bellert's definition of pragmatic adverbs, is a two-place relation between the speaker and the propositional content of his utterance. The lexical content of this two-place relation denotes a specific type of illocutionary act. Under the performative hypothesis, adverbs of the pragmatic class were taken to modify the explicit performative as manner adverbs (Schreiber 1972). Observe for instance that, as shown in (10), these adverbs can combine with any kind of speech act, and that when they do, it is the illocutionary force of the utterance which is affected.

- (10) *Sincerely, who bought this?*

In uttering (10), the speaker describes his request as sincere, but says nothing about the propositional content of the speech act.

A threefold classification of speaker-oriented adverbs between those which modify truth, those which modify the judgment, and those which modify the speech act, receives additional support from a fact noted by Schreiber (1971). Consider the following question/answer pairs, as in (11).

- (11) *Did Frank attend the meeting?*  
 \* *Frankly / ?? fortunately / probably*

Yes/no questions inquire about the truth of the proposition they convey. The object of assertion in the answer must therefore be a truth-denoting expression. We saw that adverbs such as *frankly*, *fortunately*, as opposed to modals such as *probably*, do not predicate about truth. By themselves, they do not constitute a good answer to a yes/no question. They are good if we add an explicit assertion or negation on the truth, as in (12).

- (12) *Did Frank attend the meeting?*  
*Frankly / fortunately, yes / no*

There is a fourth class of speaker-oriented adverbs that neither Bellert nor Jackendoff take into account. This is the class of adverbs that can occur preceding a complementizer in an emphatic construction, as shown in (13).

- (13) *Of course he attended the meeting!*

The unique character of *of course* in English may suggest a language-particular quirk, but the same happens in Spanish with a wider range of adverbs, as illustrated in (14).

- (14) *¡Por supuesto / naturalmente / desde luego que ha venido!*  
 ‘Of course he came!’

Adverbs from any of the other classes are excluded from this environment, in both English and Spanish, as shown in (15).

- (15) a. \**Frankly / obviously he came!*  
 b. \**¡Francamente / obviamente que vino!*

Now consider the behavior of *of course*-type adverbs under yes/no questions. At first sight, they behave as modal adverbs, as shown in (16).

- (16) *Did Frank attend the meeting? — Of course.*

There is however a significant difference between modals and *of course*-type adverbs. The contrast in (17) shows that whereas modals can be followed by an expression denoting truth-value (like *yes* or *no*), *of course*-type adverbs cannot:

- (17) *Did Frank attend the meeting?*  
 a. *Probably yes / no*  
 b. \* *Of course yes / no*

Again, there is nothing particular to English, as (18) shows the same for Spanish.

- (18) *¿Vino Frank a la reunión?*  
 came Frank to the meeting  
 a. *Probablemente (sí / no)* ‘Probably (yes / no)’  
 b. \* *Desde luego / naturalmente sí / no* ‘Of course / naturally / yes / no’

The interpretation of the facts, in a Fregean view of declaratives, is the following: we saw that yes/no questions inquire about the truth, and that they require a truth-denoting expression in their answer. Modals are predicates of truth and can be followed by an explicit truth-denoting expression. *Of course*-type adverbs cannot. The natural conclusion therefore is that *of course*-type adverbs are themselves truth-predicates.

If the above characterization of speaker-oriented adverbs is correct, then the question immediately arises as to the proper syntactic representation of declarative sentences. In what is now the standard view, these adverbials are modifiers of a single syntactic object, call it S (Sentence). Syntactically, they are

thus assimilated to other sentential adverbs (Thomason & Stalnaker 1973). If this is the correct view, then we have found a case where the mapping between syntactic and semantic representations is not predictable. Computations that pertain to a semantic module operate on uniform syntactic structures to derive the range of interpretations assigned to speaker-oriented adverbs. The alternative view, which I will defend in the remainder of the paper, is that syntactic representations contribute the relevant objects for adverbial modification. In other words, the relevant argument-predicate relations are already established at LF.

### 1. *Speaker-oriented adverbs and Spanish la verdad constructions*

As is well known, speaker-oriented adverbs show a more restricted distribution than other sentential adverbs. They occur typically in matrix clauses (1) and, in Spanish, in dependents of verbs of saying and believing, but not in subjunctive dependents of volitional verbs and verbs of command:

- (19)
- |    |                       |            |                      |                 |                  |
|----|-----------------------|------------|----------------------|-----------------|------------------|
| a. | <i>Juan dice/cree</i> | <i>que</i> | <i>francamente,</i>  | <i>esto es</i>  | <i>un rollo.</i> |
|    | Juan says/believes    | that       | frankly              | this is         | a bore           |
| b. | <i>Juan quiere</i>    | <i>que</i> | <i>*francamente,</i> | <i>esto sea</i> | <i>un rollo.</i> |
|    | Juan wants            | that       | frankly,             | this be-subj    | a bore           |

Bellert notes the additional fact, illustrated in (20), that some speaker-oriented adverbs (modals, speech act modifiers, and we should add, *of course*-type adverbs) do not have a negative counterpart.

- (20) a. *\*Insincerely, he left.*  
 b. *\*Improbably, he left.*  
 c. *\*Innaturalmente, se fue.*           ‘Unnaturally, he left.’

There is an interesting colloquial construction in Spanish that has exactly those same properties: first, it can be roughly paraphrased by a speaker-oriented adverb such as *frankly*; second, it cannot occur in dependents of volitional verbs or verbs of command; and finally, it does not retain its adverbial meaning under negation. The construction in question is shown in (21).

- (21) *La verdad es que estoy cansado.*  
 the truth is that I am tired  
 ‘The truth of the matter is that I am tired.’

(21) is actually ambiguous between two readings: on one reading, the sentence means that there is a single truth, namely that I am tired. In that reading, the sentence constitutes an answer to the question *what's the truth?* On the other

reading — the one I am interested in — the speaker expresses an attitude toward his being tired and the sentence constitutes an appropriate answer to a question like *how are you?* In this sense, the sentence can be paraphrased as *frankly, I am tired*. This reading is highlighted by the parenthetical use of *la verdad* in (22), which only has that interpretation.

- (22) *Estoy cansado, la verdad.*  
 I am tired, the truth  
 ‘Frankly, I am tired.’

I will call this reading *attitudinal*. The attitudinal reading is preserved in dependents of verbs of saying and epistemic verbs (23), but not in dependents of volitional verbs and verbs of command (24).

- (23) *Pedro dice que la verdad es que está cansado.*  
 Pedro says that the truth is that is tired
- (24) *Quiero que la verdad sea que esté cansado.*  
 I want that the truth be-subj. that I be-subj. tired  
 ‘I want the truth to be that I am tired.’

(23) can be used as an answer to *how is he (doing)?* The dependent clause can be paraphrased as *frankly, he is tired*. (24), on the other hand, can only be interpreted as an answer to something like *what do you want the truth to be?* The attitudinal reading also disappears with matrix negation, as shown by (25).

- (25) *La verdad no es que estoy cansado.*  
 the truth not is that I am tired  
 ‘The truth is not that I am tired (it is something else).’

Based on this set of similarities, I conclude that *la verdad* constructions and sentences containing speaker-oriented adverbs share the same underlying structure.<sup>1</sup>

## 2. The structure of *la verdad* constructions

The underlying structure of these *la verdad* constructions, I will argue, must be as shown in (26):

- (26) [<sub>CP</sub> C<sup>0</sup> [<sub>TP</sub> es [<sub>CP</sub> que [<sub>SC</sub> IP *la verdad* ]]]]

<sup>1</sup> Speaker-oriented adverbs and *la verdad* constructions behave in a parallel fashion also with regard to extraction. They only allow extraction of so-called *referential* elements (in the sense of Rizzi 1990). This restriction raises a number of issues which are addressed in Echepare (in preparation).

(26) is a raising structure built on a predication relation between the finite embedded clause and the speaker-oriented adverb *la verdad* (in a structure very similar to the one proposed by Uriagereka 1995, this volume). *La verdad* raises by *Spell Out* to the [Spec, TP], yielding the observed surface order. (26) contains a Small Clause whose subject is the embedded IP and whose predicate is the speaker-oriented *la verdad*. The predicate of the small clause in (26) is an attribute of truth. This predication relation yields a *judgment* in the Fregean sense, a given evaluation of a proposition (denoted by IP) from the point of view of the utterer of (26).

Evidence supporting the idea that *la verdad* is a predicate in these cases comes from a general restriction on DPs in predicative positions: Higgins (1979) showed that there are two different copular constructions which he called *predicational* and *specificational*. In predicative constructions, a property is predicated of the subject of the copular construction; in the specificational constructions, an identity statement is made. Copular constructions with a DP in predicative position take on a specificational reading when they are modified in the prenominal position. Consider the contrast between (27a) and (27b).

- (27) a. *Juan es el médico.*  
 Juan is the doctor
- b. *Juan es el brillante médico.*  
 Juan is the brilliant doctor

Whereas (a) can be understood as ascribing a property to the subject of the copular construction, (b) is necessarily an identity statement, making clear who is who. Only in (27a) is the DP predicational, which accounts for why it can be the predicate of a pseudocleft, as shown in (28).

- (28) a. *Lo que Juan es es el médico.*  
 what that Juan is is the doctor
- b. \* *Lo que Juan es es el brillante médico.*  
 what that Juan is is the brilliant doctor

This makes a prediction concerning our cases with *la verdad*: if *la verdad* is predicational in the sense of Higgins, we expect that it cannot be modified in the attitudinal reading, and it cannot, as (29) shows.

- (29) *La sorprendente/única verdad es que estoy cansado.*  
 the surprising/only truth is that I am tired  
 ‘The surprising truth is that I am tired (and not that...).’

The only available reading for (29) is the equative one: this is the surprising or only truth, namely that I am tired. We saw that the attitudinal reading of *la verdad* is the only possible one in its use as a parenthetical. We therefore expect that in these cases modification of *la verdad* should yield plain ungrammaticality. And it does, as (30) exemplifies.

- (30) *Estoy cansado, \*la sorprendente verdad.*  
 I am tired the surprising truth

The structure in (26) accounts for two striking properties of these constructions. The first is the fact that the attitudinal reading disappears if we target the string *que IP* for raising, as illustrated in (31).

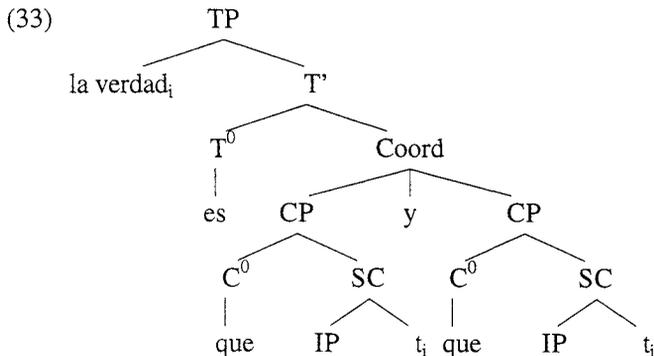
- (31) *Que estoy cansado es la verdad.*  
 that I am tired is the truth  
 'That I am tired is the truth (?? of the matter).'

The explanation here is that this string does not correspond to any constituent in (26).

The second property concerns the fact that these constructions cannot be conjoined at the CP level without losing the attitudinal reading, as shown in (32).

- (32) *La verdad es que nadie quiere ir y que se van a mosquear.*  
 'The truth is that nobody wants to go and that they will get angry  
 (that and nothing else is the truth).'

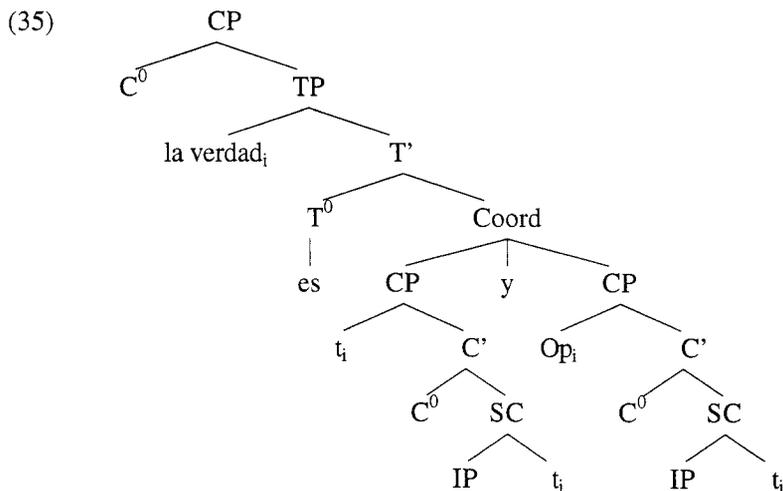
In this case, with *la verdad* raised to [Spec, TP], conjunction at the CP level yields (33):



But then we are forced to treat raising of *la verdad* as a case of *Across The Board* extraction (ATB). Extraction of *la verdad* in these cases is thus analogous to extraction of *what* in (34).

- (34) a. *What<sub>i</sub> did John sell e<sub>i</sub> and Peter bought e<sub>i</sub>?*  
 b. \* *What<sub>i</sub> did John sell a bicycle and Peter bought e<sub>i</sub>?*

I will assume, following Munn (1993) and Kayne (1994), that ATB extractions are instances of parasitic gap constructions. But parasitic gaps are not licensed by movement to an A-position. Under the assumption that [Spec, TP] is an A-position in Spanish, the impossibility of conjunction at the CP level follows naturally: *la verdad* raises to an A-position ([Spec, TP]) and cannot license a parasitic gap in the second term of the conjunction, assuming Munn's treatment of ATB extraction cases. In a null-operator analysis of parasitic gaps (as in Chomsky 1986), the relevant configuration would be as in (35).<sup>2</sup> Identical indexing indicates *Chain Composition*.



<sup>2</sup> This is not the actual structure proposed in Munn (1993). Munn argued that the structure of conjuncts is asymmetric, with the second conjunct (including the coordinating head) adjoined to the first conjunct. Kayne (1994:57-69) suggests a different alternative, where the coordinator is a head whose specifier is the first conjunct, along the lines of Munn's original proposal (1987). An asymmetric structure may be crucial for a parasitic gap analysis of ATB extractions. For the sake of simplicity I stick to the more traditional symmetric view.

The ungrammaticality of (35), where (35) corresponds to the attitudinal reading, should be treated on a par with other impossible parasitic gap configurations such as (36).

(36) \**The paper<sub>i</sub> was filed t<sub>i</sub> after I saw e<sub>i</sub> was read e<sub>i</sub>.*

This analysis makes the prediction that conjunction at the Small Clause level should be possible: conjunction at the SC level leaves the first Spec of Comp free to move to, and this is an A'-position. The prediction is borne out, as an attitudinal reading is possible in (37) the complementizerless version of (32).

(37) *La verdad es que nadie quiere ir y se*  
 the truth is that nobody wants to go and refl  
 'To tell you the truth, nobody wants to go and they  
*van a mosquear.*  
 will get angry  
 will get angry.'

Interestingly also, conjunction at the CP level is possible when these constructions have an interrogative or exclamatory force (38). In these cases the copula is dropped:<sup>3</sup>

- (38) a. *¿Verdad que salió y que luego volvió?*  
 truth that he left and that then he came back  
 'Isn't it the case that he left and then he came back?'
- b. *¡La verdad que los Gómez son encantadores y*  
 the truth that the Gomez are nice and  
 'The Gomez really are nice and  
*que se desviven!*  
 that they take care of us  
 take care of us!'

<sup>3</sup> An extremely interesting correlation arises from a parasitic gap analysis of these ATB extractions: movement of *la verdad* to the higher Comp would have to proceed through the Spec of the copula, an A'-position. This configuration, however, can not license parasitic gaps, as shown by (i), where passivization precedes wh-movement.

(i) \**Which paper was filed after you read e?*

Precisely where a parasitic gap analysis would collapse, because of the presence of an intervening A'-position licensed by the copula, the copula disappears.

As shown in (39), *la verdad* patterns here together with that subset of speaker-oriented adverbs which precede the complementizer in cases of emphasis or exclamation, and that we took to be truth predicates.

- (39) *¡Desde luego que salió y que luego volvió!*  
 of course that he left and that then he came back  
 'Of course he left and then he came back!'

These cases suggest the involvement of a further Comp projection above the TP, as proposed in (26). Under the assumption that *la verdad* raises to the Spec of that Comp, the possibility of conjunction follows again naturally.

The parallel behavior of *la verdad* and the subset of speaker-oriented adverbs that was shown to denote truth supports the idea that the same structure underlies both. In both (38) and (39), a truth predicate (*la verdad* or *desde luego*) raises to the Spec of the highest Comp.

### 3. *The domain of assertion*

If (26) is the right structure for attitudinal *la verdad*, a natural question to ask is which kind of clausal projection is such that a truth predicate should be forced to raise to it. If we take the copula to be related to a lexical element, we want to know what relevant lexical feature is involved that selects for a CP. There is some reason to think that the clause the attitudinal expression raises to is actually the projection of a feature of assertion.

Consider the contrast in (40).

- (40) a. *¡Cómo no ha venido todavía!*  
 how come not has come yet  
 'How come he hasn't arrived yet!'
- b. *¡Cómo que no ha venido todavía!*  
 how come that not has arrived yet  
 'What do you mean he hasn't arrived yet!'

Both are emphatic constructions that involve the Spanish counterpart of English *how come*, so they are not true questions. We can consider *cómo* as an attitudinal expression, one that denotes surprise on the part of the speaker. There is a subtle but nevertheless substantial difference between (40a) and (40b) above. (a) can be uttered out of the blue, (b) cannot. Imagine the following situation: you had an appointment with someone. You arrive ten minutes late and look around to find the person in question. As you are surprised not to find him (or her) there, you utter (a). But you cannot utter (b) under these conditions. In order to utter (b), where the speaker-oriented adverb precedes

the complementizer, you need a linguistic antecedent. Someone must tell you: "the person you are trying to find has not arrived yet". Then you can utter (b). From the fact that the utterance in (40b) is felicitous only with an explicit antecedent assertion, I conclude that in (40b) the attitudinal expression has raised to a syntactic position related to assertion. As we see in (40a), raising is obligatory for such a reading. The facts can be naturally accommodated if we take the domain of the copula to be the extended projection (in the sense of Grimshaw 1991) of a feature of assertion. Accordingly, I change (26) into the more complex (41), where  $X^0$  is whatever head sustains the assertion feature.

(41) [<sub>CP</sub> C<sup>0</sup> [<sub>TP</sub> es [<sub>XP</sub> X<sup>0</sup> [<sub>CP</sub> que [<sub>SC</sub> IP *la verdad* ]]]]]]

The structure in (41) provides a syntactic basis for the syntactic and semantic properties of speaker-oriented adverbs. Some speaker-oriented adverbs (speech act modifiers) modify the assertion, and are thus related to  $X^0$ , perhaps as manner adverbs, as proposed by Schreiber (1972) in the context of the *performative hypothesis* (Ross 1970). Another subtype of speaker-oriented adverb (evaluatives) is related to the Fregean judgment. In our terms, this means that they are related to the Small Clause. Modals are modifiers of truth. This means that they are related to the predicate of the Small Clause. Finally, *of course*-type adverbs, that we have shown behave as *la verdad* predicates, would occupy the place of the predicate.

## REFERENCES

- Bellert, Irena. 1977. "On semantic and distributional properties of sentential adverbs". *Linguistic Inquiry* 8.337-351.
- Chomsky, Noam. 1986. *Barriers*. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Echepare, Ricardo. In preparation. *The Syntax of Illocutionary Force*. Ph. D. dissertation, University of Maryland.
- Frege, Gottlob. 1977 (1918). "Thoughts". In *Logical Investigations*, ed. by Peter Geach, 1-30. New Haven: Yale University Press.
- Grimshaw, Jane. 1991. "Extended projection". Ms., Brandeis University.
- Higgins, Francis Roger. 1979. *The Pseudo-cleft Construction in English*. New York: Garland Publishing.
- Jackendoff, Ray. 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, Mass.: MIT Press.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Michell, Gillian. 1977. "On the analysis of sentence adverbs: Evidence from explicit performative sentences". In *Studies in Language Variation*, ed. by

- Ralph W. Fasold & Roger W. Shuy, 184-197. Washington, D.C.: Georgetown University Press.
- Munn, Alan. 1993. *Topics in the Syntax and Semantics of Coordinate Structures*. Ph.D. dissertation, University of Maryland.
- Ross, John R. 1970. "On declarative sentences". In *Readings in English Transformational Grammar*. ed. by Roderick A. Jacobs & Peter S. Rosenbaum, 222-272. Washington, D.C.: Georgetown University Press.
- Sadock, Jerrold M. 1974. *Toward a Linguistic Theory of Speech Acts*. New York: Academic Press.
- Schreiber, Peter A. 1971. "Some constraints on the formation of English sentence adverbs". *Linguistic Inquiry* 2.83-101.
- \_\_\_\_\_. 1972. "Style disjuncts and the performative hypothesis". *Linguistic Inquiry* 3.321-347.
- Thomason, Richmond H. & Robert C. Stalnaker. 1973. "A semantic theory of adverbs". *Linguistic Inquiry* 4.195-220.
- Uriagereka, Juan. 1995. "Parataxis". Paper given at Georgetown University.
- \_\_\_\_\_. This volume. "From being to having: Questions about ontology from a Kayne/Szabolcsi syntax".

# *N/A OF A N DP'S* PREDICATE RAISING AND SUBJECT LICENSING\*

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## **0. Introduction**

In this paper, I investigate a number of properties of *N/A of a N DP's* in Spanish, and show that these properties follow from general conditions on two syntactic processes: predicate raising and subject licensing. *N/A of a N DP's*,<sup>1</sup> such as (1), show interesting syntactic properties derived from the fact that two nominals, i.e., *bestia* 'beast' and *doctor* 'doctor', must be licensed in the same DP.

- (1) *La bestia del doctor*  
the beast of-the doctor  
'That beast of a doctor'

I assume, following Suñer (1990), Kayne (1994), and Den Dikken (1995), among others, that there is a subject-predicate relation holding between *el doctor* and *bestia* in (1), and that the derivation yielding (1) starts out with a small clause configuration hosting the subject and the predicate, and involves raising of the predicate, i.e., *bestia*, past its subject, i.e., *el doctor*. In Section 4, I will relate the two patterns of agreement found in *N/A of a N DP's* in Spanish to the two different types of predicational configurations also found in copular sentences. The similarity of agreement facts surfacing both in *N/A of a N DP's* and copular contexts provides evidence for the unified treatment of the two constructions presented in Section 3. This analysis claims that there is

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<sup>1</sup> I modify Napoli's (1989) term, i.e., *N of a N*, to refer to the sort of DP's illustrated in (1), since evaluative adjectives are also possible in Spanish.

movement of the predicate past the subject, and furthermore, that the predicate moves to a position akin to [Spec, CP]. That is, I will argue, following Kayne (1994), that *de* 'of' is a sort of complementizer. The evidence provided in favor of this view in Section 3.1 comes from the interaction between *N/A of a N DP*'s and relative clauses. Sections 1 and 5 will deal with the definiteness agreement effects found in *N/A of a N* contexts (Napoli 1989, Suñer 1990). The grammaticality of (1), with two definite determiners, contrasts with the ungrammatical example in (2), where the constituent following the preposition *de* 'of' is an indefinite bare noun.

- (2) \* *La*            *bestia*            *de*    *doctor*  
       the            beast            of     doctor

In Section 5, I argue that a [def-] feature in the topmost determiner (i.e., the first determiner in [1]) must attract a [+def] feature (Chomsky 1995). The bare singular *doctor* in (2) cannot provide this [+def] feature, and (2) is ungrammatical. Moreover, I will argue in Section 6 that well-formed *N/A of a N DP*'s always require covert movement of the second constituent in Romance, as opposed to Germanic, where it can be licensed *in situ* (i.e., without covert movement). In the same section, I also claim that this difference should be attributed to the fact that the second constituents in *N/A of a N DP*'s behave as subjects of ECM contexts, which can be licensed *in situ* in Germanic, but only under additional A'-movement in Romance.

### 1. *N/A of a N contexts in Spanish*

Spanish (as well as Portuguese and Catalan) shows a richer variety of *N/A of a N* contexts than other languages such as Italian, French, or English. In particular, the Ibero-Romance dialects allow definite determiners to head *N/A of a N DP*'s. Thus, DP's such as the one in (1) are possible in Spanish, Catalan, and Portuguese, but unacceptable in French, Italian, and the Germanic languages. The possibility of having *N/A of a N DP*'s headed by definite determiners, as well as by demonstratives and indefinites,<sup>2</sup> brings out an interesting constraint on the possible definiteness values of the two nominal constituents involved, as described in the following two sections.

<sup>2</sup> Demonstratives and indefinite determiners can head *N/A of a N DP*'s in French, Italian, and Germanic (Napoli 1989, Den Dikken 1995).

### 1.1 *The Definite/Indefinite Contrast*

Indefinite *N/A of a N DP*'s can only contain an indefinite bare noun as their second constituent (henceforth, I will refer to them as *Indef-Indef* contexts), as shown in the examples in (3).

- (3) a. *Un imbécil de doctor*  
           an idiot of doctor  
           ‘An idiot of a doctor’
- b. \* *Un imbécil del/mi doctor*  
       an idiot of-the/my doctor

On the other hand, *N/A of a N DP*'s headed by a definite determiner must contain a definite second constituent, as shown by the examples in (4).

- (4) a. *E imbécil del/de mi doctor*  
           the idiot of-the/of my doctor  
           ‘That idiot of a doctor / That idiot of my doctor’
- b. \* *El imbécil de doctor*  
       the idiot of doctor

Henceforth, I will refer to these cases as *Def-Def* contexts. The generalization is then that whenever the whole *N/A of a N DP* is headed by a definite determiner, the second constituent must be definite; similarly when the whole DP is headed by an indefinite determiner, the second nominal has to be an indefinite bare noun.<sup>3</sup> This generalization breaks down, to a certain extent, when we consider *N/A of a N DP*'s headed by a demonstrative.

### 1.2 *Demonstratives*

*N/A of a N DP*'s headed by a demonstrative may contain either an indefinite bare noun (5a), or a proper name (5b).

- (5) a. *Ese imbécil de doctor*  
           that idiot of doctor  
           ‘That idiot of a doctor’

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<sup>3</sup> In the general case, Romance languages differ from Germanic in that the constituent appearing after the preposition must be a bare noun in Romance, whereas in Germanic — at least in English, Dutch and German (Den Dikken 1995) — the second constituent must be headed by an indefinite determiner. Italian constitutes an exception to the above cross-linguistic generalization, since DP's headed by indefinite determiners are acceptable (Paola Crisma, personal communication). In this paper, I will not deal with this type of cross-linguistic variation (see, however, Section 6 for some discussion).

- b. *Ese imbécil de Pedro*  
 that idiot of Pedro  
 'That idiot of Pedro'
- c. *Ese imbécil del doctor*  
 that idiot of-the doctor  
 'That idiot of a doctor'

With respect to (5c), which contains a second constituent headed by a definite determiner, there is a dialectal split. For certain speakers, (5c) is marginal, whereas for others, including myself, the DP is fully grammatical.<sup>4</sup>

## 2. Agreement patterns in N/A of a N DP's

The determiner heading an *N/A of a N DP* may agree either with the first noun of the construction (6a-b), or with the second one (6c-d).

- (6) a. *El rata de tu hermano*  
 the-masc. rat-fem. of your brother-masc.  
 'Your stingy brother'
- b. *El rata de tu hermano*  
 \_\_\_\_\_ GENDER AGR (=> *rata* 'stingy')
- c. *La rata de tu hermano*  
 the-fem. rat-fem. of your brother-masc.  
 'Your evil brother'
- d. *La rata de tu hermano*  
 \_\_\_\_\_ GENDER AGR (=> *rata* 'evil')

As shown by the English translations, the meaning of the first nominal may vary depending on the agreement pattern. In cases with *long-distance* agreement, such as (6a-b), where the first determiner agrees with the second con-

<sup>4</sup> A similar case of dialectal variation has been observed by Napoli (1989) in a related English construction. The relevant examples are the following:

- (i) a. *A/That busybody neighbor*  
 b. *That madman George*  
 c. *That fool the doctor*

In the DP's in (i), there is no preposition *of* between the two nominals. (ia) and (ib) are parallel to (5a) and (5b), i.e., with an indefinite bare noun and a proper name as a second constituent, respectively. In (ic), we observe the same dialectal variation as the one observed with respect to (5c): (ic) is ungrammatical in American English, but acceptable in British English. The issue of why English and Spanish behave in a similar way just in these cases will be discussed in Section 6.

stituent, the first noun has a derived interpretation closer to that of an adjective, in a sense that will be made clearer in Section 4.1. In addition, the examples in (7) show that the two agreement patterns in (6) do not arise from the existence of two nouns *rata*, one masculine and one feminine, meaning 'stingy' and 'evil' respectively.

- (7) a. *La rata de tu hermana*  
 the-fem. rat-fem. of your sister-fem.  
 'Your stingy/evil sister'
- b. \* *El rata de tu hermana*  
 the-masc. rat-masc. of your sister-fem.

If there was a masculine noun *rata* 'evil' in the lexicon, a DP such as the one in (7b), where the determiner agrees with the first noun, should be possible, contrary to fact. In addition, the fact that (7a) is ambiguous shows that the alternation in the meaning of *rata* 'stingy/evil' is not due to the existence of two homophonous lexical entries *rata* with different gender specification. Note that the first determiner in (7a) has the same gender under both interpretations. Under the interpretation 'stingy', it agrees with *hermana* 'sister', whereas, under the interpretation 'evil', it agrees with *rata* 'rat'. Therefore, (6a) and (6c) involve two different agreement patterns: in (6a) the first determiner agrees in gender with the second constituent, whereas in (6b) the first determiner agrees in gender with the first nominal. In Sections 3 and 4, I will provide a theoretical account of the occurrence of these two agreement patterns.

### 3. The structure of *N/A of a N DP's*

In this paper, I will adopt for *N/A of a N DP's* the structure in (8a), which is essentially the one proposed in Kayne (1994).

- (8) a.  $[_{DP} \textit{el}_{D_0} [_{CP} [_{QP/NP} \textit{imbécil}]_i \textit{de}_{Co} [_{IP} [\textit{el doctor}]_j \dots [_{SC} t_j t_i ]]]]$
- b.  $[_{DP} \textit{the}_{D_0} [_{CP} [_{NP} \textit{doctor}]_i \textit{that}_{Co} [_{IP} [I]_j \dots [_{VP} t_j \textit{saw} t_i ]]]]$

As shown by the similarity between the configurations in (8a) and (8b), Kayne's approach assimilates the analysis of *N/A of a N DP's* to that of relative clauses under a head-raising analysis (Vergnaud 1974, Kayne 1994). Abstracting away from the differences in the type of complementizer, i.e., *de/of* vs. *que/that*, as well as the fact that the IP involved in the case of *N/A of a N DP* is a tenseless one, there are good reasons, as we will see in Sections 3.1 and 4, for assuming in (8a) a raising movement of the predicate to [Spec,

CP].<sup>5</sup> As I will show in Section 3.1, a predicate raising analysis of *N/A of a N DP*'s, combined with a head-raising analysis of relative clauses, straightforwardly accounts for some interesting properties of the *N/A of a N DP*'s modified by a relative clause. Furthermore, as I will show in Section 4, the agreement facts in *N/A of a N DP*'s reviewed in Section 2 are also found in copular contexts, which supports a unified analysis of the two contexts. This analysis will be further developed in Sections 5 and 6.

### 3.1 *N/A of a N DP's and relative clauses*

The definiteness agreement requirement observed in Section 1.1 (see [4]) does not hold when the *N/A of a N* sequence is modified by a relative clause, as shown by the contrast in (9).

- (9) a. \* *El imbécil de doctor* (= [4b])  
           the idiot       of doctor
- b. *El imbécil de doctor que tienes en casa*  
           the idiot   of doctor   that have-you at home  
           'That idiot of a doctor that you have home'

Whereas the definite *N/A of a N DP* in (9a) does not accept an indefinite second constituent, it is possible to have an indefinite bare noun as second constituent if the *N/A of a N* sequence is modified by a relative clause (9b). A head-raising analysis of relative clauses provides a straightforward account for the above state of affairs. If we assume that *imbécil de doctor* raises to [Spec, CP] from its argument position, as in the configuration in (10), the possibility of having an indefinite bare noun following the preposition is not surprising anymore; in fact, it is the expected result.

- (10) [<sub>DP</sub> *el* <sub>Do</sub> [<sub>CP</sub> [<sub>QP/NP</sub> *imbécil de doctor*]<sub>i</sub> *que* <sub>Co</sub> [<sub>IP</sub> *tienes t<sub>i</sub> en casa*]]]
- the                           idiot       of doctor       that           have-you at home

Since the first determiner, i.e., *el* in (10), does not form a constituent with the raised constituent, the latter is not a definite DP, but rather an indefinite QP; consequently, the requirement for a definite second constituent in definite *N/A of a N DP*'s, i.e., *Def-Def* contexts (see Section 1.1), does not apply to this case. However, there are cases in which the account just offered for the excep-

<sup>5</sup> Space considerations do not allow me to discuss the factor(s) triggering the movement of the predicate to [Spec, *de/of*]. I will just assume that the movement is triggered so that some *focus* feature can be syntactically checked (see Suárez 1990 for discussion).

tional nature of (9b) seems to run into problems. Consider, for instance, the DP in (11).

- (11) *El imbécil del doctor que tienes en casa*  
 the idiot of-the doctor that have-you at home
- (12)  $[_{DP} \textit{el}_{Do} [_{CP} [_{QP/NP} \textit{imbécil del doctor}]_i \textit{que}_{Co} [_{IP} \textit{tienes}$   
 the idiot of the doctor that have-you  
 $\textit{t}_i \textit{en casa}]]]$   
 at home
- (13)  $[_{DP} \textit{el}_{Do} [_{CP} [_{QP/NP} \textit{imbécil}]_i \textit{de}_{Co} [_{IP} [\textit{el doctor que tienes}$   
 the idiot of the doctor that have-you  
 $\textit{en casa}]_j \dots [_{SC} \textit{t}_j \textit{t}_i ]]]]$   
 at home

According to our observations in Section 1.1, *imbécil del doctor* cannot be an acceptable *N/A of a N* DP, since *Indef-Def* cases are excluded (see [3b]). Therefore, (11) cannot involve a configuration like that in (12). However, an alternative analysis, which crucially makes use of the similarity between *N/A of a N* DP's and relative clauses highlighted in (8), is available. I propose that (9b) differs from (11) in that in the former, the *N/A of a N* constituent is embedded into the relative clause (see [10]), whereas in the latter it is the relative clause which is embedded in a *N/A of a N* DP, as in (13). If (13) is indeed the derivation corresponding to (11), we predict that when a *Def-Def N/A of a N* DP is modified by a relative clause, the relative clause can only be construed with the lower determiner. If it were construed with the higher determiner, an unacceptable configuration, similar to (12), would obtain. The ungrammaticality of (14a) shows that the prediction is borne out.

- (14) a. \* *El imbécil de mi doctor que tienes en casa*  
 the idiot of my doctor that have-you at home
- b. \* *Mi doctor que tienes en casa*  
 my doctor that have-you at home

As shown by (14b), a DP containing a possessor cannot be modified by a relative clause. Then, in (14a), the relative clause cannot form a constituent with *mi doctor*. Thus, the only attachment node for the relative clause is the higher determiner, i.e., *el*. But this possibility, depicted in (12), has been excluded because it involves the raising of an ungrammatical *N/A of a N* constituent —

namely an *Indef-Def* one. Therefore, the relative clause in (14a) cannot be the complement of either the lower D (14b), or the higher one (12). Thus, an ungrammatical DP, such as the one in (14a), is the expected result.

#### 4. Agreement patterns in N/A of a N DP's and copular sentences

In Section 2, I described two different agreement patterns in *Def-Def N/A of a N DP*'s: a long-distance agreement type in which the first determiner agrees with the second constituent (15a), and a second type, in which the first determiner agrees with the first nominal (6a).

- (15) a. *El rata de tu hermano* (= [6a])  
 the-masc. rat-fem. of your brother-masc.  
 'Your stingy brother'
- b. *La rata de tu hermano* (= [6b])  
 the-fem. rat-fem. of your brother-masc.  
 'Your evil brother'

The same two types of agreement patterns are also found in copular sentences, as shown in (16).

- (16) a. *Tu hermano es un rata*  
 your brother-masc. is a-masc. rat-fem.  
 'Your brother is stingy'
- b. *Tu hermano es una rata*  
 your brother-masc. is a-fem. rat-fem.  
 'Your brother is evil'

In (16a), the indefinite determiner heading the predicative DP does not agree in gender with the head noun *rata*, but with the subject *tu hermano*. Moreover, the meaning of *rata* is the same as the one obtained in the long-distance agreement *N/A of a N DP* (15a). On the other hand, in (16b), the indefinite determiner agrees in gender with the head noun of the predicative DP; thus we obtain the same meaning as in the *N/A of a N* in which the first nominal agrees with the first determiner (15b). The parallel distribution of meaning and agreement patterns in copular sentences and *N/A of a N DP*'s provides evidence for a predicate raising analysis of the latter. In each type of *N/A of a N DP* illustrated in (15), we have a different type of nominal raising to [Spec, *de*]. In (15a), the non-agreeing type of nominal in (16a) raises to [Spec, *de*]. In (15b), it is the agreeing type of nominal in (16b) that raises to [Spec, *de*]. In the following sections, I provide an account of these agreement patterns.

4.1 *Identificational predicates and complex predicates of kind-membership*

Stowell (1991) accounts for the obligatory occurrence of the indefinite determiner in predicative constituents such as the one in (17), arguing that nouns such as *fool* cannot be directly predicated of individuals.

(17) *John is \*fool / a fool*

These nouns denote, instead, properties of kinds. In order to be predicated of individuals, they must combine with a determiner to form a complex predicate of kind-membership. I would like to claim that nouns such as the predicative DP *un rata* 'a-masc. rat-fem.' in (16a) are complex predicates of kind-membership, whereas the agreeing counterpart *una rata* 'a-fem. rat-fem.' in (16b) is an identificational predicate (Higgins 1973). This difference in the semantics of *un rata* 'a-masc. rat-fem.' and *una rata* 'a-fem. rat-fem.' is responsible for their different behavior in contexts such as the one in (18).

- (18) a. *Tu hermano es como una rata*  
 your brother is like a-fem. rat-fem.  
 lit. 'Your brother is like a rat'
- b. \* *Tu hermano es como un rata*  
 your brother is like a-masc. rat-fem.

When the comparative *como* 'like' is introduced, the identificational predicate *una rata* is still good, since the subject can be compared to *una rata* 'a rat'. On the other hand, (18b) is ungrammatical because such comparison is not possible when one of the terms of the comparison is a complex predicate of kind-membership.

4.2 *On the structure of complex predicates of kind-membership*

Following Chomsky (1995), I will assume that phi-features, such as gender, do not need to be checked before Spell-Out. Furthermore, I will assume that in DP, a categorial feature [N] raises to D to check a [nominal-] feature in this head (Longobardi 1994, Chomsky 1995). I would like to claim that gender agreement between a determiner and a noun involves movement of phi-features from N to D, and that this movement is always parasitic on some other obligatory movement, as for instance, N-to-D. Under these assumptions, identificational predicative DP's, such as *una rata* 'a-fem. rat-fem.' involve N-to-D, and the phi-features of the noun (gender, among them) move along with N as free riders. That is, in some sense, we can take gender agreement as an indication of the N-to-D movement. Elaborating on this line of thinking, I propose that complex predicates of kind-membership, such as *un rata* 'a-masc. rat-fem.',

with no gender agreement, do not involve N-to-D raising. Instead, these complex predicates contain a compound headed by *pro*, as shown in (19).<sup>6</sup>

- (19) a. *Un* [<sub>N</sub> [<sub>N</sub> *rata*] [*pro*]]  
 'a-masc. rat-fem.'
- b. *Tu hermano<sub>i</sub> es un* [<sub>N</sub> [<sub>N</sub> *rata*] [*pro*]<sub>i</sub> ]  
 'Your brother is a-masc. rat-fem.'

The postulation of the compound in (19a) provides an explanation for the agreement mismatch. The noun *rata* is not the head of the noun phrase contained in the DP in (19a); thus, the indefinite determiner does not agree with this noun. Instead, the empty category *pro*, coindexed with the c-commanding subject *tu hermano* (19b), is the head of the compound. This approach also allows us to understand why the possibility of agreement mismatch is lexically conditioned. For instance, two nouns very close in meaning, such as *perla* 'pearl' and *joya* 'jewel', do not show the same agreement possibilities in *N/A of a N DP*'s, as shown in (20).

- (20) a. *La/El* *perla* *de tu hermano*  
 the-fem./the-masc. pearl-fem. of your brother-masc.  
 'That jewel of your brother'
- b. *La/??El* *joya* *de tu hermano*  
 the-fem./the-masc. jewel-fem. of your brother-masc.  
 'That jewel of your brother'

The fact that *joya* 'jewel' does not allow long-distance agreement in *N/A of a N DP*'s can be attributed to the fact that there is no compound in the lexicon, similar to that in (19a), which can be formed with *joya*, whereas there is one with *perla*.<sup>7</sup>

<sup>6</sup> See Sleeman (1996) for further discussion on this subject.

<sup>7</sup> A counterpart to the compounds proposed here, containing an overt noun instead of *pro*, can be found in cases such (ia).

- (i) a. *Ana es una mujer ingeniero.*  
 Ana is a-fem. woman engineer-masc.
- b. *Ana es una ingeniero.*  
 Ana-fem. is a-fem. engineer-masc.

As shown by (ib), complex predicates of kind-membership, involving agreement mismatch, are also possible in these cases.

**5. An approach to definiteness agreement**

In the previous section, I claimed that the movement of the phi-features of N to D is parasitic on some other movement. *N/A of a N* DP's involving long-distance agreement, such as (4a) with the configuration in (21), seem to contradict this generalization.

(21)

$[_{DP} \textit{el}_{Do} [_{CP} [_{QP/NP} [_{N} [_{N} \textit{imbécil}] [_{N} \textit{pro}]]]_1 \textit{de}_{Co} [_{IP} [\textit{el doctor}]_j \dots [_{SC} \textit{t}_j \textit{t}_i]]]]]$

As argued in Section 2, the first determiner in (21) agrees with the second DP. In this case, it cannot be claimed that there is N-to-D raising of the lowest nominal, i.e., that *doctor* raises up to the higher D-head. I would like to claim, however, that in cases such as (21) the movement of phi-features is still parasitic on some other movement. I propose that the first determiner contains a [def-] feature that attracts a particular type of D, namely a [+def] one.<sup>8</sup> Thus, the phi-features triggering gender agreement on the higher determiner move along with the embedded D. In (20b), where the highest determiner agrees with the first nominal, [def-] attracts the embedded D, but the phi-features of the latter are not checked — a welcome result, since phi-features do not need to be checked, as claimed in Chomsky (1995). This approach to definiteness agreement effects in *N/A of a N* contexts gives us an interesting way to understand the facts discussed in relation to *N/A of a N* DP's headed by a demonstrative (Section 1.2).

**5.1 Licensing of Proper Names in *N/A of a N* Contexts**

In Section 1.2, I observed that there exists a dialect of Spanish which does not allow definite DP's as second constituents in a *N/A of a N* DP when the latter is headed by a demonstrative. It thus contrasts with other dialects which allow definite DP's in the same context (5c). Following the approach to definiteness agreement presented in the previous section, I would like to propose that in the dialects allowing definite DP's as second constituents, the demonstrative head is endowed with the relevant [def-] feature, and thus attracts a [+def] DP. In contrast, in the dialects disallowing definite DP's as second constituents, demonstratives do not contain such a feature and, thus, do not attract [+def] DP's. In the latter dialects, the contrast between proper names and definite DP's (noted in [5b-c]), and repeated under [22]), can be explained

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<sup>8</sup> See Androutsopoulou (1994) for a similar process in Greek DP's with multiple definite determiners.

if we assume, following Longobardi (1994), that proper names raise to  $D_0$  to check a [+R(eferential)] feature.

- (22) *Ese imbécil de Pedro / \*el doctor*  
 that idiot of Pedro / the doctor

Since this feature is not the same as the one triggering movement of definite DP's, we expect cases in which demonstratives do not have a [def-] feature, and thus do not attract a [+def] DP like *el doctor* in (22), while proper names will still check their [+R] feature attracted by D. The split found in the relevant dialects of Spanish (and English, see note 4) illustrates this situation.

### 6. Subject Licensing in *N/A of a N DP's*

In Section 5, I have developed a partial account of the definiteness effects in *N/A of a N DP's* described in Section 1.2. From our consideration of the *Def-Def* and *Dem-Def*<sup>9</sup> contexts in Spanish in Section 5, we can conclude that movement of the second constituent is always necessary for the *N/A of a N DP* to be licensed.<sup>10</sup> This generalization can be captured by assimilating the licensing conditions of the rightmost DP constituent in *N/A of a N* contexts to that of subjects in tenseless sentences. From an empirical point of view, subjects in both *N/A of a N DP's* and ECM contexts behave in a similar way: a well-known fact about subjects in ECM contexts in Romance is that they can only be licensed if they undergo A'-movement, as in the following example from Kayne (1984:107).

- (23) *Le garçon que je croyais être arrivé*  
 'The boy that I believed (to) have arrived'

On the other hand, the fact that English shows a paradigm close to the one in Spanish (i.e., involving covert movement, just in the case in which the preposition is missing see note 4), also indicates that the Case licensing conditions of the subject of the construction (see [8a]) should play a crucial role in accounting for crosslinguistic facts. In this vein, I would like to claim that one of the most striking differences between *N/A of a N DP's* in Germanic and Romance — namely, the fact that indefinite determiners are obligatory in the second constituent in the former group of languages, but are banned in *Indef-Indef* and

<sup>9</sup> "Dem-Def" refers to *N/A of a N DP's* headed by a demonstrative and featuring a definite DP as second constituent.

<sup>10</sup> Consider, for instance, the ungrammaticality of *\*Ese imbécil del doctor* (22). Under the present account we must explain why the definite DP cannot be licensed *in situ*.

*Dem-Indef* contexts in the latter group of languages —, is a by-product of the distinct Case-assigning/governing properties of *of/de* in Germanic and Romance. Kayne (1984:113) has argued that English prepositional complementizers govern the adjacent infinitival position [Spec, IP] in ECM contexts, whereas their French (and Romance) counterparts do not. I would like to propose that for the same reason, English *of* enables subjects of *N/A of a N* DP's to stay *in situ*, whereas Romance *de* does not have this property and, thus, A'-movement enables them to be licensed. Another possibility for subject licensing in Romance *N/A of a N* DP's, apart from A'-movement, is incorporation of the D-head of the subject into the prepositional head. This explains why only bare nouns appear as subjects of *Indef-Indef N/A of a N* DP's in examples such as (3). In this case, for the second constituent of a *N/A of a N* DP in Romance to be licensed, its indefinite determiner must incorporate into the preposition *de* to compensate for some lacking property of the latter — e.g., its inability to govern the [Spec, IP] position occupied by the second constituent of a *N/A of a N* DP (Kayne 1984).

### 7. Conclusion

In this paper, I have argued that *N/A of a N* DP's involve in essence a sentential structure complement of a D-head (Kayne 1994). I have exploited the configurational similarities between *N/A of a N* DP's and CP's with respect to the following issues:

- (a) the special properties of definite *N/A of a N* DP's modified by a relative clause, which are accounted for on the basis of a head-raising analysis of relative clauses and the structural similarity between *N/A of a N* DP's and relative clauses (Section 3),
- (b) the relationship between copular sentences and *N/A of a N* DP's, which indicates that the derivation of *N/A of a N* DP's involves raising of a predicative constituent to [Spec, *of*] (Section 4), and
- (c) the assimilation of the licensing conditions on the second constituents of *N/A of a N* DP's to those observed for embedded subjects in ECM contexts (Sections 5 and 6).

Moreover, I have discussed the syntactic structure of complex predicates of kind-membership (Section 4.1) as well as the syntax of definiteness in DP's (Section 5), which are crucial for a better understanding of the typology of *N/A of a N* DP's in Spanish.

## REFERENCES

- Androutsopoulou, Antonia. 1994. "The distribution of the definite determiner and the syntax of Greek DP's". *Chicago Linguistic Society* 30.16-29.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Den Dikken, Marcel. 1995. "Copulas". Ms., Vrije Universiteit Amsterdam/HIL.
- Higgins, Roger. 1973. *The Pseudo-cleft Construction in English*. Ph.D. dissertation, MIT.
- Kayne, Richard. 1984. *Connectedness and Binary Branching*. Dordrecht: Foris.
- \_\_\_\_\_. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Longobardi, Giuseppe. 1994. "Reference and proper names: A theory of N-movement in syntax and logical form". *Linguistic Inquiry* 25.609-665.
- Napoli, Donna Jo. 1989. *Predication Theory: A Case Study for Indexing Theory*. Cambridge: Cambridge University Press.
- Sleeman, Petra. 1996. *Licensing Empty Nouns in French*. Ph.D. dissertation, University of Amsterdam/HIL.
- Stowell, Timothy. 1991. "Determiners in NP and DP". In *Views on Phrase Structure*, ed. by Katherine Leffel and Denis Bouchard, 37-56. Dordrecht: Kluwer Academic Press.
- Suñer, Avel·lina. 1990. *La predicación secundaria en español*. Ph.D. dissertation, Universitat Autònoma de Barcelona.
- Vergnaud, Jean Roger. 1974. *French Relative Clauses*. Ph.D. dissertation, MIT.

**THETIC AND CATEGORICAL,  
ATTRIBUTIVE AND REFERENTIAL  
TOWARDS AN EXPLANATION OF  
DEFINITENESS EFFECTS\***

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**0. Introduction**

The Definiteness Restriction (DR), since it was first formulated in Milsark (1974), has received numerous more or less principled explanations. Most of them successfully cover one or another subset of the relevant data. Our aim in this paper is just to put into place another piece in the jigsaw puzzle that the theory of definiteness seems to be. More precisely, we argue that current analyses of the Definiteness Effect (DE) fall short of accounting for the grammaticality of a whole range of constructions in French, namely constructions where the definite DP in the coda of an existential or impersonal sentence is modified by a restrictive relative, a superlative, or some PPs. We show that defining the DR in terms of local constraints on the positive or negative definiteness/strength of the determiner is not a sufficient condition. The theory developed in this paper is based on the combination of two fundamental insights. The first is the idea, which can be traced back to the German philosopher Brentano (1973: 201-233) in the second half of the 19th century, that the distinction between what he calls the *thetic* and the *categorical* modes of judgment plays a fundamental role in the explanation of psychological phenomena. The relevance of this idea in linguistics has been demonstrated by Kuroda (1972), Ladusaw (1994), and Sasse (1987), among others. The second basic insight is Don-

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\* We would like to draw the reader's attention to the mostly programmatic character of this work. Space limitations prevent us from addressing in detail a number of important issues, mainly the formal side of the proposal. We hope that the time will come when we can return more extensively to these problems. Thanks to David Adger, Steve Harlow, Susan Pintzuk, and the audience at LSRL 27, for their comments and suggestions. The usual disclaimers apply.

nellan's (1966) distinction between attributive and referential uses of definite descriptions, further developed by Devitt (1981), Soames (1986), and others. We argue that definite DPs may only occur in sentences expressingthetic judgments if they receive an attributive interpretation, and this is precisely the function of the restrictive modifier. We first present the relevant data and briefly indicate the reasons why previous analyses seem to be inadequate. We then explore one possible syntactic avenue leading to an explanation of the facts, namely extraposition. Next we present the key notions ofthetic/ categorical and attributive/referential and we introduce a generalization concerning the felicity of definites in impersonal sentences in French. Finally, we outline a research program for the semantics of attributive definite descriptions using the notion of substitutional quantification.

### 1. *The data and previous analyses*

The distribution of DP-types in the coda of *there*-insertion contexts is generally assumed to be governed by the DR given below, adapted from Milsark (1974) and others:

- (1) *The Definiteness Restriction (DR)*:<sup>1</sup> Strong DPs are not allowed in the coda of *there*-insertion sentences.

The DR restriction is a valid generalization for French as the data in (2) demonstrate.<sup>2</sup>

- (2) a. *Il est venu un/\*le pompier.*  
       it is arrived a/the fireman  
       b. *Il a été tué un/\*le pompier.*  
       it has been killed a/the fireman

Exceptions to the DR have been known for a long time, most prominently, the list interpretation and locative inversion. Various explanations have been proposed for the locative inversion cases, the list interpretation remaining much more mysterious. Whatever the proper analysis of these cases may be, it is beyond, or beside, the scope of this paper, although we believe that our account of attributive definites naturally extends to the list cases. The class of constructions that we will examine here has not received proper attention in the literature so far, even though it is productive in modern French, as traditional

<sup>1</sup> For ease of exposition we will refer to *there*-insertion, existential, and impersonal constructions as "*there*-insertion sentences". No confusion should arise from this terminological conflation.

<sup>2</sup> Notice that French does not make the *it*—*there* distinction.

grammarians have noticed. These cases involve unaccusative and passive impersonal constructions where the associate of the expletive is modified by a restrictive relative or a superlative, as shown in (3)-(4).

- (3) Definite DPs modified by a restrictive relative clause:
- a. *Il est venu la femme que j'attendais.*  
it is arrived the woman that I was expecting
  - b. *Il a été vendu la maison que mon frère préférait.*  
it has been sold the house that my brother preferred
- (4) Definite DPs in superlative constructions:
- a. *Il est mort le plus petit pompier du monde.*  
it is died the shortest fireman in the world
  - b. *Il a été frappé l'enfant le plus chauve de l'univers.*  
it has been hit the baldest child in the universe

The case of PP modifiers is more subtle and will not concern us further in this paper. Although the DE is voided too in some of these cases, there seems to be a correlation between the selectional grid of the main predicate and the possibility of escaping the DR. That is, predicates selecting for locative PPs appearing as dative clitics on the verb are the only candidates.

- (5) a. *Il me revint le souvenir d'une belle soirée*  
it to-me came the memory of a beautiful night  
*d'été.*  
of summer
- b. ?? *Il est apparu la concierge de mon immeuble.*  
it is appeared the caretaker of my building

Various other factors may be playing a significant part in the above contrast but we will put aside a detailed discussion of these constructions.

Returning to our main point, Milsark's analysis conceives of the DR as a local requirement on indefiniteness as determined by the nature of D. Other analyses such as Belletti's (1988), in terms of partitive Case assignment, or Safir's (1987), in terms of constraints on unbalanced chains and bare predicates, would predict that the above sentences should be ruled out as ungrammatical. The same is true of an analysis along the lines of Barwise & Cooper's (1981) theory of generalized quantification. In their terms the ill-formedness of existential sentences with definite DPs is derived from the positive strength of

D which gives rise to logical triviality. Enç's (1991) renaming of the DE as the Specificity Effect also faces a problem: she argues that definite descriptions are indeed specific, hence, once more, the above constructions are predicted to be ungrammatical. On the face of these shortcomings one is forced to conclude that, despite their merits, the above analyses are too strong in the sense that they do not allow room for principled DR-violations. As a remedy, we propose to shift the focus of attention from the principles that prohibit the appearance of definites in the coda of *there*-insertion contexts to the conditions under which the latter are allowed in these contexts. But first we would like to examine a possible syntactic candidate for the explanation of these facts.

## 2. Explaining the violations of the DE

### 2.1 Extraposition

One is naturally tempted to provide an explanation for the central data of this paper in terms of extraposition/Heavy-NP-Shift. The DP cum relative clause/superlative would be an extraposed constituent, therefore not c-commanded by the expletive; the definiteness effect would thereby be voided. Attractive as it may be, this analysis has clear empirical evidence militating against it. Consider first extraction: although (6) would correctly be ruled out as an extraposition island violation, the status of (7) remains unexplained.

- (6) \* *Qui<sub>i</sub> est-il paru dans le journal d'hier la nouvelle que*  
 who did-it appear in yesterday's paper the news that  
*Jean a tué t<sub>i</sub>*  
 Jean has killed t<sub>i</sub>
- (7) (?) [*A quoi<sub>i</sub> lui vint-il la volonté de résister t<sub>i</sub>*  
 [to what<sub>i</sub> to him came it the will to resist t<sub>i</sub>  
*jusqu' au bout?*  
 until the end

(7) is generally judged grammatical. (?) indicates the very light deviance felt by some speakers. Although we cannot go into details here, we want to point out that this deviance (if indeed real) is by no means comparable to the strong ungrammaticality predicted by the extraposition analysis. We suggest that extraposition occurs in neither of these sentences, and that the difference in grammaticality can be explained as a well-known case of an extraction asymmetry out of relative/complement clauses, which in the case of (7) significantly improves its acceptability as a Complex-NP-Constraint violation. The lack of DE remains to be explained, of course.

The second argument against extraposition comes from pronominalization.

- (8) a. *Il te reste l'espoir que Jean finira son*  
 it to-you remains the hope that Jean will-finish his  
*papier à temps.*  
 paper on time
- b. *Il t' en reste l'espoir.*  
 it to-you en remains the hope

Pronominalization of the complement clause of the DP *l'espoir* strongly suggests that the DP is a complement, and not an extraposed constituent, since the pronoun appears as a clitic on the main verb.

A final argument against extraposition comes from definite DPs modified by appositive relatives. As shown by the contrast in (9)-(10), these are ungrammatical in the relevant constructions.

- (9) \* *Il est venu la princesse, qui boit de la bière.*  
 it/there is come the princess who drinks of the beer  
 'There came the princess, who drinks beer.'
- (10) *Il est venu la princesse qui boit de la bière.*  
 'There came the princess who drinks beer.'

One might object to the last argument that what in fact causes the application of Heavy-NP-Shift is not mere phonological heaviness, but rather informational status. More precisely, DPs representing new information are extraposed to the end of the sentence. In this view, (9) would be ruled out since, by Heim's (1982) Familiarity Condition, the DP *la princesse* has to pick out a *familiar* discourse referent. A familiar referent hardly qualifies as new information. By implication, the DP in question is not a suitable candidate to undergo Heavy-NP-Shift. Ungrammaticality then follows as a violation of the DR. The problem with this analysis is that it provides no principled reason for the familiarity condition not to apply in the case of (10) and thus prevent the DP from being extraposed. Additionally, as is well known (Milsark 1974), the heaviness requirement is only suspended in the case of indefinites. It seems then that in that case information status and heaviness yield contradictory predictions. In view of these arguments, we will not pursue the extraposition analysis or its critique any further in this paper.<sup>3</sup>

<sup>3</sup> To be sure, the discussion of extraposition provided so far is incomplete. A complete analysis that could very well lead to the recognition of the extraposition analysis as a viable

We are now ready to approach the question from the particular angle that we suggested in the introduction.

## 2.2 *Some background on theticity*

The notions of *thetic* as opposed to *categorical* are qualifiers of the notion of *judgment*. A thetic judgment is merely a presentation of an object or an eventuality; a categorical judgment presents (and presupposes) an individual and affirms or denies a property of that individual. The basis for a categorical judgment involves an object and a property (classical subject-predicate structures), while the basis for a thetic judgment is a description. As shown by Ladusaw (1994), the thetic and categorical partition of judgments, and correspondingly of the sentences that serve to express them, plays an important role in the analysis of *there*-sentences and in the derivation of Milsark's Generalization. A presentational *there*-sentence is the linguistic expression of a thetic judgment; that is, the post-verbal subject of a *there*-sentence is not presupposed, not a proper subject of predication, but is merely presented or introduced in the discourse. By contrast, individuals in a categorical judgment are paradigmatically presupposed entities and true subjects of the predicate in both the syntactic and the semantic sense of the term. What is presented in a thetic judgment may be an event as well, in which case the only *presupposition* conveyed is an indirect existential commitment to the participants of that event.

Turning to our examples (3)-(4), one may wonder whether these sentences qualify as thetic judgments; the only apparent obstacle to their characterization as such is the presence of the definite DP with the associated presupposition. On the other hand, it is clear that in an example like (3), the interpretation of the alleged presupposition is somehow peculiar; that is, the speaker when using the definite description *la femme que j'attendais* does not refer to a particular, definite individual, but rather she provides a description of the individual, and whichever actual individual fits the description will render the sentence true. In other terms, as required by a thetic judgment, there is only an indirect existential commitment towards the participant of the arrival event in (3). The type of definite description that we are advocating here corresponds to what has been called by Donnellan (1966) an attributive description.

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alternative, would have to involve a detailed discussion of focus constructions and other matters that would lead us too far astray from our main topic. Whatever the case turns out to be, it should be stressed that our general conclusions will not be affected in any significant way.

### 2.3 *Attributive vs. referential definite descriptions*

To briefly explain the attributive/referential distinction, let us borrow Donnellan's example given in (11).

(11) *Smith's murderer is insane.*

The speaker uttering (11) may not know that Jones is Smith's murderer but still say something true: namely, that Smith's murderer, whoever (s)he may be, is insane. The content of the description determines the type of referent that might satisfy the description; it does not say that *Jones* is insane, for this is unknown to the speaker. Call this use of the definite description the attributive use. The referential one would be when the speaker intends explicitly to refer to Jones by means of this definite description. This is precisely, we claim, the difference between acceptable and unacceptable definite DPs in the coda of a *there*-insertion sentence. However, considering this distinction as an explanatory device for the distribution of definite DPs in these contexts faces an immediate drawback, namely the fact that not only complex descriptions (DPs containing some sort of modifier such as a restrictive relative, superlative adjective, PP, etc.), but also simple descriptions such as *the table*, may receive an attributive interpretation. Overcoming this problem necessitates a refinement of the theory along the lines of Soames (1986) and Devitt (1981), who distinguish within the class of attributive definite descriptions the subclasses of complete and incomplete descriptions. Mainly of interest to us is the class of incomplete descriptions.

#### 2.3.1 *Incomplete attributive descriptions*

Consider the sentences in (12)-(14).

(12) *The table is rectangular.*

(13) *The philosopher is famous.*

(14) *The murderer is insane.*

Plainly, the definite descriptions in subject position admit of an attributive reading such as *the philosopher, whoever (s)he is, is famous*, despite the fact that they are not acceptable inthetic judgments in French, as shown in (15).

(15) \* *Il est arrivé le philosophe.*  
       it is arrived the philosopher

However, on closer inspection, one finds that these descriptions turn out to have unique referents when evaluated in a given context or in particular situations (parts of reality as opposed to reality as a whole). To achieve this result

and maintain the full generality of Donnellan's distinction as applicable across the whole range of definite descriptions, we will assume here, following Soames (1986) and Devitt (1981), that descriptions belonging into this subclass of attributive descriptions are incomplete in that they require further specification. Soames (1986) argues that there are two ways to formalise this requirement of further specification. Either one has to advocate parts of reality as primitives or rely on contextual supplementation. As Soames puts it:

For the traditional theorist [*as opposed to the situation semanticist* (TE & GT)] there is little alternative but to rely on contextual supplementation. If *C* is a context in which [The *F* is *G*] expresses a truth then the interpretation of <The *F*> in *C* must be a content that uniquely determines a referent when evaluated in the world in question. It is as if placing the description in the context transformed the operand from *F*, which is satisfied by many objects, to *F'*, which is satisfied by only one. (Soames1986:352)

Contextual supplementation may be in the form of the supply of further descriptive content to the description, so that the incomplete definite descriptions in (13)-(14) will be equivalent to (15)-(16).

- (16) *The philosopher who invented the syllogism is famous.*  
 (17) *The murderer of the CEO of IBM is insane.*

Alternatively, Soames suggests, a context might supplement a description by contributing an object to the description in the context. In this approach, the content of the incomplete description will be a "Singular Individual Concept' involving the victim as one of its constituents," therefore the content of the description in (14) will be equivalent to (18), with the victim as the referent of the indexical.

- (18) *The murderer of him or The murderer of that one.*

Which one of the two approaches one wishes to pursue is, we think, an empirical question insofar as we can show that the distinction has a linguistic relevance.

A different kind of problem is raised by incomplete descriptions of the type *the table* in (12): how can the context supplement such a description and still preserve the attributive reading? A word such as *table* does not have an open position to be contextually supplemented. We will assume here, with Devitt (1981), that in these cases contextual specification amounts to ostension, that is, an incomplete description such as *the table* is interpreted in context as

- (19) *THAT [the table]*

The table in question must be somehow prominent in context, maybe perceptually accessible or strongly familiar in discourse. The consequence of this is that this particular incomplete definite description will not admit an attributive use. Thus, we combine Soames' and Devitt's insights in order to account for the full range of incomplete attributive descriptions. Let us now return to the question of definiteness.

### 3. *Reassessing the problem*

A clear consequence of the above is that a sentence like (20) will be unacceptable in the referential use of the definite description.

(20) *Il est arrivé la plus belle femme du monde.*  
 it is arrived the most beautiful woman of-the world

In other words, if it is the case that *la plus belle femme du monde* = *Rita Hayworth*, and if it is the speaker's intention to refer to her by means of the definite description, the sentence will be ruled out as violating whatever principle accounts for the distribution of definite DPs in these contexts. (20) will be acceptable if and only if the definite description is taken as an attributive one. We believe that at least insofar as the correspondence betweenthetic judgments and *there*-insertion contexts<sup>4</sup> is a significant one, the generalization linking the referential/attribution distinction to the conditions on the appearance of definites in these contexts is the correct one. It is obvious that definiteness is not the determining factor; referentiality, in the standard sense of the term, seems a much more appropriate notion instead. If this is correct, it is only fair to make the distinction explicit by renaming what is usually called DE as the *Referential Effect*: definite descriptions that can only be interpreted as referential, e.g., definite DPs that are not modified in the appropriate sense, or that contain hidden indexicals as in Soames' and Devitt's accounts, will display what has been called the DE. It appears then that the nature of the determiner *qua* determiner, definite or indefinite, strong or weak, cannot, *per se*, serve as the appropriate criterion for the DE; it is only a signal and a pointer to further principles to be satisfied, and to where the conditions of their fulfillment are to be found. Several questions have to be answered in connection with this proposal, and due to limitations of space we can only address a few of them in the remaining pages of this paper.

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<sup>4</sup> Recall that we use *there*-insertion contexts as a generic designator here (see note 1).

#### 4. *The emergence of attributive readings*

We now turn our attention to what seems to us the most important question raised by our observations so far, namely, is there any plausible formalization of the attributive reading? In his work, Donnellan invoked as an explanation of the different readings the intentions of the speaker only. We must admit that we do not find such a line of explanation very satisfactory. We wish to substantiate our proposal with a few suggestions concerning the representation of attributive definite descriptions.

Brought to the fore here are two crucial unresolved questions associated with Donnellan's distinction and the discussion that subsequently took place between him and Kripke (1979). Is the attributive/referential distinction a semantically significant fact? And are descriptions semantically ambiguous, or is it just a pragmatic fact, with no special semantic significance? Donnellan argued for the first position (descriptions are indeed semantically ambiguous), while Kripke defended a pragmatic theory. Our theory is compatible with both approaches, but we do favour the first one, which attributes a semantically distinct status to the attributive reading of definite descriptions.

##### 4.1 *Quantification and attributive definite descriptions*

Definite descriptions are standardly represented as quantificational structures, that is, the description in (21) will have a representation roughly as in (22).

(21) *The man who came to the party.*

(22)  $\exists x (\varphi(x)) \wedge \forall y (\varphi(y) \rightarrow (x = y))$

Clearly, such a representation can both translate a referential or an attributive description.<sup>5</sup> A truly referential definite description is such that it antecedently requires, in some form, the presence of an attributive one. Assuming that a referential description is equivalent to the logical  $\iota$  (iota) operator, then the existence of descriptions of the form in (22) constitutes the condition under which the definite article can be translated into a  $\iota$  operator. Consider for instance the use of the definite descriptor in Hilbert & Bernays (1934:384).

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<sup>5</sup> Note that the uniqueness presupposition carried by the definite article is preserved in both kinds of descriptions.

- (23) (i)  $\exists x \varphi(x)$   
 (ii)  $\forall x \forall y (\varphi(x) \wedge (\varphi(y) \rightarrow (x = y)))$
- 
- $\varphi(\iota x: \varphi(x))$

(23) shows the point we want to make in argument form. The formula under the conclusion line requires premises (i) and (ii); in mathematical terms, for the use of the  $\iota$  operator to be legitimate, the existence of a referent must have been proved. If this is on the right track, then what is it that licenses, so to speak, the appearance of the attributive description? Plainly, the condition on its appearance will be that it must be a complete description. Incomplete attributive definite descriptions are obviously disallowed. Therefore, the question becomes: what makes an attributive description complete? Note that property  $\varphi$  in (22) is in fact a composite property: it stands for  $(\psi(x) \wedge \zeta(x))$ , where  $\psi(x)$  is *man* and  $\zeta(x)$  is *who came to the party*; that is, their conjunction forms the restrictor of the operator *the*.<sup>6</sup> Obviously, this amounts simply to modification. As a descriptive statement, this means that the nominal predicate by itself does not provide enough descriptive content to make the description complete. Alternatively, we may think that in fact a simple nominal predicate provides too much descriptive content, whence the need of a *restrictive* modifier.<sup>7</sup> Let us

<sup>6</sup> We will generally conceive of the definite article as a restricted operator. Other analyses are also compatible with our views.

<sup>7</sup> It should be pointed out that this is certainly not fine grained enough as the cases of adjectival and PP modification in (i-iv) show.

- (i) \* *Il est arrivé la belle femme.*  
 it is arrived the beautiful woman
- (ii) ??? *Il est arrivé la femme à la jambe cassée.*  
 it is arrived the woman with the leg broken
- (iii) ?? *Il est arrivé la femme de mes rêves.*  
 it is arrived the woman of my dreams
- (iv) ? *il est arrivé la femme attendue.*  
 it is arrived the woman awaited for

A simple, across the board appeal to modification/restriction is not enough. It seems from the above examples that only sentential, or covertly sentential modifiers, produce candidates for the attributive interpretation. The suggestion here is that the participle in (iv) is covertly a relative clause. The idea above can be implemented in a variety of ways, in terms of syntactic derivations, reflecting this quality of the DP *la femme attendue*, or otherwise. Let the truth on that matter be as it may, we cannot pursue the question any further here. The important point to note is that the semantic proposal that follows is not meant to distinguish between these cases; the difference is clearly a syntactic one.

finally point out that the notion of completeness of an attributive definite description is the key notion with which we want to qualify the view expressed already by Partee (1972) that the referential/attributional distinction generalizes over Indefinite DPs which are more likely to be interpreted attributively.

### 5. *Attributives and substitutional quantification*

Let us repeat here that the proposal outlined in what follows is more of a direction for further research than a fully fledged proposal. It is generally assumed without discussion that natural languages contain only referential quantifiers.<sup>8</sup> Quantifiers may also have what is called a substitutional interpretation. The substitutional interpretation can be paraphrased as follows (adopting standard notational practice for the existential substitutional quantifier): “ $\sum_x, \varphi(x)$  ( $\varphi = \text{Man}$ ): some substitution instance of  $\text{Man}(x)$  is true”. In other words, let us say that the definite article is an ambiguous quantifier which may be interpreted either as a referential quantifier or as a substitutional one. Now substitution is out of a given substitution class. In formal theory of quantification, this is where the semantics of the substitutional and the referential quantifier differ in a crucial way. The substitution class, call it  $C$ , is a non-empty set that contains *terms*. Terms may be any sort of expressions of the object language. The substitutional interpretation for natural language quantifiers, as we see it, cannot be defined in exactly the same terms for the very simple reason that it would be unnatural to assume that natural languages contain substitution classes inherently. Formal languages do because they are so defined. However, we still wish to maintain that the substitutional interpretation is relevant to the interpretation of natural language sentences. The important difference is that whenever in a sentence a substitutionally interpreted quantifier occurs, then the substitution class must be explicitly defined as such.

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<sup>8</sup> By linguists, that is. The substitutional interpretation of quantifiers has been mentioned in various times and places in connection with the semantics of natural languages, mostly though in order to dismiss its relevance. We believe that this tendency is to be explained by the willingness to import the substitutional quantifier with all its formal restrictions from logic and mathematics into natural language semantics. These discussions have been often muddled by questions of ontological commitment (or lack thereof) associated with the substitutional quantifier. Although we think that the discussion provided in this paper and especially the prominent place given to the thematic/categorical distinction may — and probably will — shed some further light on the discussion concerning ontological commitment, we shall not pursue it here. We want to make clear, though, that we do not commit ourselves to the belief that substitutional quantification could or should be imported *as is* in the semantics of natural language. For a more detailed explanation of the version of substitutional quantification that we have in mind, see Tsoulas (1997).

Classes being sets,<sup>9</sup> we have probably made evident by now the answer to the question as to how substitution classes are created. Obviously, they are created by whatever defines a set in natural language, that is, by predicates. Therefore, to make our proposal clearer, the description in (21) will be interpreted as in (24) (roman characters represent substitutional variables, Greek characters referential variables).

(24)

$$\exists \chi \psi(\chi) \wedge \sum_x \varphi(x) \mid (\chi/x)^\Psi \rightarrow \exists \chi (\varphi(\chi) \wedge \psi(\chi)) \wedge \forall \gamma (\varphi(\gamma) \wedge \psi(\gamma) \rightarrow (\chi = \gamma))$$

We may read (24) as follows: for some referential instance of  $\psi(\chi)$  (*is a man*), there is one substitution instance of  $\varphi(x)$  (*came to the party*), such that if we replace the occurrences of the referential variable by the substitutional one, the result, in the scope of only referential quantifiers (here  $\exists$ ), is the standard representation of a definite description. The formula in (24) represents in a transparent way the intuition that the set of individuals defined by the relative clause or other modifiers serves as a substitution class, in the particular way we conceive it here, roughly as the restriction of the substitutional quantifier.<sup>10</sup> It also captures the fact that a referential definite description antecedently requires an attributive one in discourse or abstractly. If this proposal is on the right track, then obviously the discussion concerning the nature of attributive descriptions turns to the advantage of Donnellan's position that it is indeed a semantic distinction.

## 6. Conclusions

In this paper we have brought to light a number of important data concerning the distribution of definites in impersonal constructions. These data clearly showed that the definiteness effect cannot be explained in terms of local constraints. We argued that these sentences representthetic judgments. The most important conclusion to be drawn from the previous discussion is thatthetic judgments only allow attributive definite descriptions as constituents. An important correlatum to this generalization is that, at least forthetic judgments, it is not indefiniteness but attributivity/referentiality that explains the distribution of DPs in *there*-insertion contexts. Furthermore, in scrutinizing the attributive

<sup>9</sup> We abstract away from any differences existing between sets and classes in set-theory. In any case all classes are sets save for proper classes such as the set  $V$  of all sets, not a set itself. We are hardly dealing with such collections here.

<sup>10</sup> Needless to say, more work is needed to flesh out the consequences of the proposal and provide a clear formal theory. We cannot address these complex questions here.

interpretation, we found a convincing argument concerning their derivation by means of the substitutional interpretation of quantifiers, arguing from there that the attributive/referential distinction is indeed a semantic and not a pragmatic distinction. We also proposed an outline of a formal representation for attributive readings. As we indicated in the introduction, the topics addressed here are simply too broad to be fully considered in a limited space. We have concentrated our efforts in providing a path towards the full explanation. It is our hope that we have made clear the approach that seems to us the most promising. A full-fledged formal theory based on these premises is left for further study.

### REFERENCES

- Barwise, Jon & Robin, Cooper. 1981. "Generalised quantifiers and natural language". *Linguistics and Philosophy* 4.159-219.
- Belletti, Adriana. 1988. "The case of unaccusatives". *Linguistic Inquiry* 19.1-34.
- Brentano, Franz. 1973 (1874). *Psychology from an Empirical Standpoint*. Translated by Antos C. Rancurello, D. B. Terrell, and Linda L. McAlister from *Psychologie vom empirischen Standpunkte* (1874). London: Routledge.
- Devitt, Michael. 1981. "Donnellan's distinction". *Minnesota Studies in Philosophy* 6.511-524.
- Donnellan, Keith. 1966. "Reference and definite descriptions". *Philosophical Review* 75.281-304.
- Enç, Mürvet. 1991. "The semantics of specificity". *Linguistic Inquiry* 22.1-25.
- Heim, Irene. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. dissertation, University of Massachusetts, Amherst.
- Hilbert, David & Paul Bernays. 1934. *Grundlagen der Mathematik*. Berlin: Springer.
- Kripke, Saul. 1979. "Speaker's reference and semantic reference". In *Contemporary Perspectives in the Philosophy of Language*, ed. by Peter A. French, Theodore E. Uehling & Howard K. Wettstein, 6-27. Minneapolis: University of Minnesota Press.
- Kuroda, Sige-Yuki. 1972. "The categorical and the thetic judgment". *Foundations of Language* 9.153-185.
- Ladusaw, William. 1994. "Thetic and categorical, stage and individual, weak and strong". In *Proceedings of "Semantics and Linguistic Theory* 4:220-229.
- Marcus, Ruth-Barcan. 1972. "Quantification and ontology". *Noûs* 6.240-256.
- Milsark, Gary. 1974. *Existential Sentences in English*. Ph.D. dissertation, MIT.

- Partee, Barbara. 1972. "Opacity, coreference and pronouns". In *Semantics of Natural Language*, ed. by Donald Davidson & Gilbert Harman, 415-441. Dordrecht: Reidel.
- Safir, Kenneth. 1987. "What explains the Definiteness Effect". In *The Representation of (In)definiteness*, ed. by Eric Reuland & Alice ter Meulen, 71-97. Cambridge, Mass.: MIT Press.
- Sasse, Hans-Jurgen. 1987. "Thethetic/categorical distinction revisited". *Linguistics* 25.511-580.
- Soames, Scott. 1986. "Incomplete definite descriptions". *Notre Dame Journal of Formal Logic* 27.349-375.
- Tsoulas, George. 1997. "A note on substitutional quantification and natural language semantics". Ms., University of York.



# NEGATION AND INDEPENDENT MORPHOLOGICAL DEVELOPMENT

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## **0. Introduction**

Current research in child language acquisition has attempted to explain non-adult syntactic behavior in children in terms of adult syntactic theory. Pierce (1989), for example, explains the post-verbal subjects used by French-speaking children (subjects in declaratives are obligatorily pre-verbal in adult French) by suggesting that subjects do not move out of their VP-internal position, essentially for Case reasons. Syntactic theory in and of itself seems readily able to account for these non-adult-like utterances using independently justified theoretical machinery (Case Theory, Verb Movement, the VP-internal Subject Hypothesis, etc.), notwithstanding the residual problem of how children learn the adult-like Case setting for their grammar. In this paper, however, I will defend the position that some grammatical development must take place in the morphological component of grammar, independently of syntax. The primary empirical evidence for this position comes from child Catalan, in which children produce negative indicatives from the very beginning of speech, but do not begin to use negative imperatives until later. Negative imperatives begin to be used at about the same time 2nd person singular marking and subjunctive morphology, both of which are necessary for forming a negative imperative in Catalan, begin to be used. The straightforward predictions of strictly syntactic accounts (Laka 1993, Zanuttini 1996, Rivero & Terzi 1995) are not capable of capturing these facts on their own. Finally, the small number of utterances which appear to be attempts at producing negative imperatives lack certain affixes in the way predicted by the markedness hierarchy of vocabulary insertion in Halle & Marantz's (1993) Distributed Morphology framework.

### 1. *Negation in child Catalan*

Our data on sentential negation in child Catalan and Spanish comes from the Serrà & Solé corpus of the CHILDES data base (MacWhinney & Snow 1985). In a previous paper (Grinstead 1994), the transcripts of four children from this study were coded and separated into two stages corresponding to an early stage in which no overt subjects were used and a later stage in which overt subjects began to be used. Although overt subject use is irrelevant to the question at hand, these stages nevertheless proved to be a useful way of dividing up the data, as we will see. The essential finding of this study is that while children used both negative and affirmative declarative utterances in the early and late stages (see Table 1), and also used affirmative imperative utterances in the early and late stages, they did not use any negative imperatives in the early stage (see Table 2). Table 3 gives the children's ages, and the number of utterances produced by each of them.

	Early stage	Later stage
Negative declarative verbs	19	217
Affirmative declarative verbs	129	823

Table 1. *Negative Declarative and affirmative declarative verbs in the early and later stages of child Catalan.*

	Early stage	Later stage
Negative declarative verbs	0	28
Affirmative declarative verbs	165	629

Table 2. *Negative imperative and affirmative imperative verbs in the early and later stages of child Catalan.*

	Neg. imper.	Affirm. imper.	Neg. decl.	Affirm. decl.
Laura (1;7-2;2)	0	82	8	70
Laura (2;4-2;11)	8	75	64	289
Pep (1;0-1;8)	0	40	2	20
Pep (1;10-2;4)	5	311	45	228
Guillem (1;0-1;9)	0	31	8	17
Guillem (1;11-2;7)	1	135	36	142
Gisela (1;7-1;11)	0	12	1	22
Gisela (2;1-2;9)	14	108	72	164

Table 3. *Negative and affirmative imperatives and declaratives across two stages, broken down by child.*

## 2. *Strictly syntactic accounts*

Following other research carried out using adult syntactic theory by itself to explain child language development (Pierce 1989, Hyams, Hoekstra & Becker 1996, Borer & Wexler 1987), we may ask if adult theories of negation can explain why this particular pattern of data is instantiated in these children's speech. To answer this question, we will briefly review theories of negation proposed in Laka (1990, 1993), Zanuttini (1991, 1996) and Rivero & Terzi (1995).

Laka (1990, 1993) proposes what she refers to as the Tense C-command Condition (TCC), which states that Tense must c-command all propositional operators of the clause at S-structure, excluding C<sup>0</sup>. Negation would be considered such a propositional operator and, as a result, Tense has to raise, affixed to the verb, to the NegP so that it can c-command the entire clause at S-structure. NegP or (the Sigma Phrase in her terminology) is located above TP and below CP in Spanish, but below TP in English. Laka follows Higginbotham (1985, 1987), who proposed that all verbs carry an event argument as one of their theta roles and that this argument is carried by INFL. Adopting the split-INFL hypothesis, Laka assumes that Tense is the functional head that carries the event argument and that this argument must raise to the Sigma Phrase (ΣP) to c-command the entire clause, including negation, as a result of the TCC. For this reason, verbs in negative and emphatic sentences must raise to ΣP, which carries negative elements as well as emphatic elements (such as *sí* in Spanish, and emphatic *do* in English). Thus we see that for Laka there is a crucial relationship between the Tense head on the one hand and negation on the other.

What, then, is the status of TP in child Catalan? The null hypothesis should be that children have as much adult clause structure as one can plausibly attribute to their speech; so how much evidence of an active TP is there in child Catalan? One obvious place to look to judge whether TP is active or not is tense morphology. Japanese children, for example, use past and non-past tense morphology from the very beginning of speech (1;6-1;7) (Murata 1961, Rispoli 1981). Similarly, De Bode (1997) reports that the child Varvara uses present, past and future tense morphology in child Russian from 1;6. This morphological evidence argues that TP is active in the Japanese and Russian child languages spoken by these children.

Child speakers of Catalan do not use anything other than present tense morphology, which could be argued to be the absence of tense morphology, until they are approximately 2;0. One might interpret this lack of contrastive tense morphology as evidence of a not yet active TP. However, it is still pos-

sible that TP is present and active, but simply not used in the data collected. If TP were active in child Catalan, but merely not uttered or phonologically unrealized for some other reason, one would still expect it to perform some of its basic syntactic functions, such as nominative Case checking. Miyata (1993), for example, found that the nominative Case marker *ga* in child Japanese begins to be used at the same time as the past tense *ta*. Thus, a syntactic reflex of TP's activity appeared on the subject, reinforcing our assumption that TP was active in child Japanese. However, Grinstead (1994) found that in child Catalan, no overt subjects at all were uttered until contrastive tense marking began to be used, around 2;0 (see Tables 4 and 5).<sup>1</sup>

	Early stage	Later stage
Verbs with null subjects	305	1866
Verbs with overt subjects	0	369

Table 4. *Verbs with null subjects versus verbs with overt subjects in the early and later stages of child Catalan.*

	Early stage	Later stage
Non-contrastively tensed verbs	320	1914
Contrastively tensed verbs	2	192

Table 5. *Verbs inflected for non-contrastive tense vs. contrastive tense in the early and later stages of child Catalan.*

Thus, with respect to inflectional morphology as well as non-morphological morphosyntactic (Case) features, there appears to be some evidence that TP is inactive in child Catalan. Given Laka's postulated intimate link between Tense and Negation, how can this Catalan data be explained by her theory?

An implication of Laka's hypothesis is that in the absence of an active TP, children should be unable to produce any sentential negation, because there will be no Tense head to carry the event argument. Her idea is that the absence of a Tense head for the event argument to percolate to should result in negative sentences violating the TCC. Laka's theory, by itself, then, would incorrectly predict that negative indicatives should be impossible, assuming that TP is inactive. Notice that if, contrary to the evidence, TP is active in child Catalan, Laka provides no explanation for why negative imperatives should be impossible.

Zanuttini (1996) also arrives at the conclusion that negation depends on tense on the basis of distributional evidence from Romance. Zanuttini argues

<sup>1</sup> The ages and stages of the children are the same as those given in Table 3.

that there are two types of sentential negation: head negation and specifier negation. In Romance, head negation is pre-verbal negation, while specifier negation is post-verbal. In English, *n't* is head negation, while *not* is specifier negation. Much of Zanuttini's argument rests on the assumption that imperatives lack tense, while subjunctives, infinitives and indicatives do have tense. Looking at negative imperatives in Romance, she finds that there are a class of true imperatives, which are verb forms that do not correspond to other verb forms in language, e.g., the imperatives of Spanish and Catalan, as in (1) and (2).

- |                                |                               |
|--------------------------------|-------------------------------|
| (1) <i>¡Habla!</i><br>'Speak!' | (2) <i>Parla!</i><br>'Speak!' |
|--------------------------------|-------------------------------|

These true imperative forms cannot be negated in these languages. Rather, a "suppletive" negative form of the imperative must be used. "Suppletive" here means that a negated subjunctive, infinitive, indicative or other "tensed" form, under Zanuttini's assumptions, must be used to form the negative imperative. This requirement is stated in terms of selection. Namely, a Negation Phrase selects a Tense Phrase. Consequently, in the absence of a Tense Phrase, a Negation Phrase is impossible. Thus negated true imperatives such as (3) and (4) are impossible in Spanish and Catalan, while the suppletive negative imperative forms in (5) and (6), which use subjunctive forms, are possible.

- |   |  |
|---|--|
| (3) * <i>¡No habla!</i><br>'Don't speak!' | (4) * <i>No parla!</i><br>'Don't speak!' |
| (5) <i>¡No hables!</i><br>'Don't speak!'  | (6) <i>No parlis!</i><br>'Don't speak!'  |

If we assume that Zanuttini's hypothesis in and of itself should explain the child Catalan data, then in the absence of an active Tense Phrase, the Negation Phrase should be impossible as its selectional requirements cannot be met, and consequently sentential negation in the adult sense should be impossible. Given Zanuttini's assumption that the subjunctive forms in imperatives are tensed, both imperative and declarative negatives should be impossible. As we saw in Tables 1 and 2, however, this is not the case. Negative imperatives do not occur while negative declaratives do occur. This finding would appear to contradict the basic prediction of Zanuttini's account. It is true that the frequency of negative indicative verbs increases across the two stages, but this does not imply that any element of the grammar prevents negative indicatives in the early stages.

In another recent proposal to account for the relationship between negation and imperatives, but without involving tense, Rivero & Terzi (1995) attempt to explain the fact that imperatives in languages like Spanish and Modern Greek (what they term Class I Languages) have a distinctive syntax, while imperatives in languages like Serbo-Croatian and Ancient Greek (what they term Class II Languages) distribute like other verbs (subjunctives, declaratives, infinitives, etc.).

Imperatives in Class I raise to C to check syntactic logical mood features. This explains the fact that they precede clitics, as in (7) and (9).

- |   |   |
|---|---|
| (7) <i>¡Termínalo!</i><br>finish it (cl)!<br>'Finish it!'       | (8) <i>Lo terminó.</i><br>it (cl) finished (1sg.)<br>'I finished it.' |
| (9) <i>¡Dámelo!</i><br>give me (cl) it (cl)<br>'Give it to me!' | (10) <i>Me lo dio.</i><br>me it gave (3sg.)<br>'He gave it to me.'    |

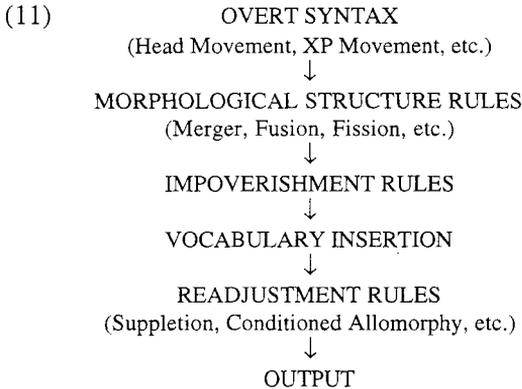
Imperatives in these languages, however, cannot raise in negative sentences because V raising over the negative element would cause a violation of relativized minimality. The idea is that the imperative in C has operator features and so does the Negative element. Consequently, the presence of the negative element in the path of the verb raising to C constitutes a violation of the condition that nothing intervene between the final resting place of a head and its point of origin (Rizzi 1990).

In Rivero & Terzi's account, the occurrence of negation in indicatives in the early non-tensed stage is expected, given that no important link between tense and negation is posited. That is, the fact that there is no tense morphology available in the early stage of child Catalan should not prevent negative declaratives from occurring, which is consistent with the facts presented in Table 1. However, Rivero & Terzi's account, like the others, has no means for distinguishing between negative imperatives and negative indicatives, and consequently has no way of predicting that negatives do not occur in this early tenseless stage.

### 3. *Independent morphological accounts*

Harris (1996) argues against Rivero & Terzi's proposal on independent grounds and proposes that an account of imperatives in Spanish must include both a syntactic and a morphological component. The morphological component Harris assumes follows the Distributed Morphology model of Halle & Marantz (1993): syntax is responsible for moving terminal elements into their

hierarchical relationships, and morphology (which is contained within the PF component) is responsible for the ultimate spell-out forms of morphophonological elements. The Distributed Morphology module of Halle & Marantz, schematized in (11), is argued to be governed by its own internal principles.



Harris argues against, among other things, Rivero & Terzi’s assertion that “[i]mperatives are special because their morphological mood correlates one-to-one with their logical mood, and this is why they involve C in a way that gives them a unique syntax” (1995:305). Harris points out that this claim is false in that Spanish verbs which are characterized by imperative semantics and syntax (with respect to clitics for example), are represented by both imperative and subjunctive morphology. Rivero & Terzi’s claim is similarly false for Catalan. Thus, as (12)-(13) illustrate, Spanish and Catalan affirmative and negative imperative forms use both subjunctive as well as uniquely imperative morphology to represent imperative illocutionary force. Catalan additionally uses indicative morphology in the second person plural to express both the positive and negative imperative.

- |      |   |   |
|------|---|---|
| (12) | <u>Spanish for <i>sing it!</i></u>  | <u>Spanish for <i>don't sing it!</i></u>      |
| a.   | 2sg. — familiar ( <i>tú</i> )<br><i>¡Cánta-la!</i><br>(imperative morph.)   | <i>¡No la-cantes!</i><br>(subjunctive morph.) |
| b.   | 2sg. — formal ( <i>usted</i> )<br><i>¡Cánte-la!</i><br>(subjunctive morph.) | <i>¡No la-cante!</i><br>(subjunctive morph.)  |

- |      |   |  |
|------|---|--|
| c.   | 2pl. — familiar ( <i>vosotros</i> <sup>2</sup> )<br><i>¡Cantad-la!</i><br>(imperative morph.) | <i>¡No la-cantéis!</i><br>(subjunctive morph.) |
| d.   | 2pl. — formal ( <i>ustedes</i> )<br><i>¡Cánten-la!</i><br>(subjunctive morph.)                | <i>¡No la-canten!</i><br>(subjunctive morph.)  |
| (13) | <u>Catalan for <i>sing it!</i></u>  | <u>Catalan for <i>don't sing it!</i></u>       |
| a.   | 2sg. — familiar ( <i>tú</i> )<br><i>Canta-la!</i><br>(imperative morph.)                      | <i>No la-cantis!</i><br>(subjunctive morph.)   |
| b.   | 2sg. — formal ( <i>vosté</i> )<br><i>Canti-la!</i><br>(subjunctive morph.)                    | <i>No la-canti!</i><br>(subjunctive morph.)    |
| c.   | 2pl. — familiar ( <i>vosaltres</i> )<br><i>Canteu-la!</i><br>(indicative morph.)              | <i>No la-canteu!</i><br>(indicative morph.)    |
| d.   | 2pl. — formal ( <i>vostés</i> )<br><i>Cantin-la!</i><br>(subjunctive morph.)                  | <i>No la-cantin!</i><br>(subjunctive morph.)   |

Applying Harris' account to Catalan, we allow the syntactic module of the grammar to move the terminal elements of the syntactic tree into their correct hierarchical positions. To determine their ultimate morphological shape, however, we depend on the language-particular morphological rules of Catalan to add the necessary morphemes. In the case of the possible negative imperatives that Catalan-speaking children could learn in the early stage, we are essentially talking about 2nd person singular familiar (or the *tú* form), because the children do not use plurals in this early stage and also appear to lack the familiar/formal distinction.

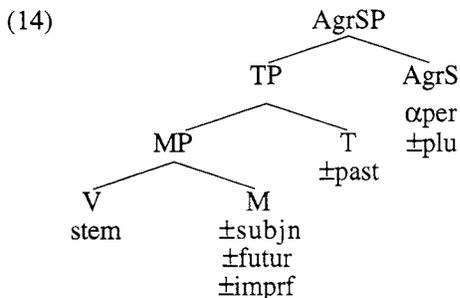
Acquisition of this form entails the learning of two rules beyond adding a theme vowel to the unmarked third person form that they are able to use in the early stage. The rules that spell-out [2nd, fam., imp., neg.] include one which substitutes the verb's conjugation class theme vowel for its subjunctive counterpart, and another which adds the 2nd person familiar /-s/ morpheme.

In a Distributed Morphology account of Catalan imperatives, at the point where syntax turns the derivation overt to morphology, the terminal element in

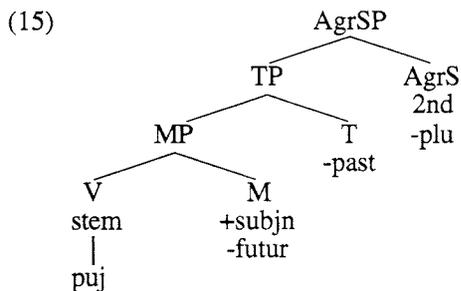
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<sup>2</sup> Used only in Spain.

the verbal category node consists of a bundle of morphosyntactic features along the lines of those outlined in (14), following Harris (1996) for Spanish.



Hence, a 2nd person singular, negative, familiar imperative form, of the type not produced in their early stage, would be the product of a derivation like (15) for the verb *pujar* ‘to go up’, again adapting the representation suggested in Harris (1996).



puj+V	-	-	-	Theme Vowel
IC	-	-	-	Theme Vowel Polarity
↓	-	-	↓	Vocabulary Insertion
puj+i	-	-	s	

In (15), the theme vowel is added in the first step of the Morphological Structure derivation (see Harris [1991] for arguments to the effect that all major category words in Spanish include such an affix). The next step is Harris’ Theme Vowel polarity rule which, in its Catalan instantiation, changes the 1st conjugation theme vowel /a/ to the subjunctive /i/. Finally, the /-s/ person morpheme is added. In a Distributed Morphology account of the absence of negative imperatives in child Catalan, it is the Theme Vowel

polarity rule and Vocabulary Insertion of the 2nd-person /-s/ which have yet to be acquired in the child's grammar.

If the absence of these two rules from the child's grammar is indeed the cause of the child's non-adult-like utterances, we should expect both subjunctive and 2nd-person /-s/ morphemes to be absent across the board, even in constructions which are not negative imperatives. Hence we would not expect to find in the early stage expressions like (16) or (17), which do appear in the later stage.

- (16) *Que no es faci de nit, eh!* Pep (2;4.4)  
 that not cl. refl. makes (3sg., subj.) of night, eh.  
 'Don't let it get to be night time, now!'
- (17) *No la vols?* Gisela (2;4.25)  
 not it (cl. acc. fem. sg.) want (2sg.)?  
 'Don't you want it?'

This prediction is borne out (see Table 6).

	Early stage	Later stage
Non-imperative verbs with 2sg. familiar /-s/ morpheme	5	107
Non-imperative verbs with subjunctive morphology	0	21

Table 6. *Non-imperative verbs with 2sg.-familiar /-s/ and non-imperative verbs with subjunctive morphology in the early and later stages of child Catalan.*

Closer inspection of the five declarative cases of 2nd-person /-s/ in the early stage reveals that they were all uttered by one child using one verb in very similar situations. The form in (18) was repeated five times.

- (18) *La treus.* Laura (1;10.22)  
 cl. (acc., fem., sg.) remove (2sg., indic.)  
 'You take it off.'

It is therefore likely that the form in (18) constituted a lexically learned unit, in which case we may still claim that the /-s/ rule was not yet available to the children in the early stage. Another interesting fact about this transcript of Laura's is that there were two utterances which had the form of 3rd person indicatives (see [19]), but appeared to be used with imperative illocutionary force.

- (19) *No puja!* Laura (1;10.22)  
 Not get up (3sg., indic.).  
 'Don't get up!'

If this is in fact a "logical imperative" with declarative morphology, it lends credence to the idea that Laura simply lacks the two rules necessary to convert this unmarked 3rd singular form into a negative imperative.

Furthermore, that Laura should use declarative morphology in this case is precisely what Halle & Marantz' model predicts. In Distributed Morphology, terminal nodes come from syntax with a particular set of syntactic and morphological features. These nodes are then spelled out by a set of vocabulary insertion rules which are arranged hierarchically by degree of specificity. Hence, with respect to the elements that constitute negative imperatives in a grammar such as Catalan, the following would obtain:

- (a) the stem plus theme vowel would be provided by the least specified vocabulary insertion rule;
- (b) the stem plus a 2nd person /-s/ would be slightly more specified or marked than the previous rule; and
- (c) the stem plus the subjunctive polarity vowel, plus the 2nd-person /-s/ would be the most specified of the three.

Given that Laura has not learned the two more marked, specific rules for the negative imperative, Distributed Morphology's built-in markedness hierarchy dictates that she use the least marked, or default form, which she does.

#### 4. Discussion

We have seen, then, that curious facts about the acquisition of negation in child Catalan do not follow from syntactic proposals alone. Whatever the correct syntactic account of Catalan negation may be, the proposals reviewed crucially do not distinguish between negative imperatives and negative declaratives, and thus fail to make sense of the observed developmental sequence. In light of morphological and syntactic developmental data from other languages, there seems to be evidence that TP in Catalan is initially inactive. This inactivity does not seem to have any consequences for the development of negation. The development of subjunctive and 2nd person morphology on non-imperatives, however, appears to correlate quite closely with the emergence of adult-like negative imperatives. This leads to the conclusion that what the children were missing was the productive use of two morphological rules. Viewed in this way, development can take place in the syntactic component of grammar, as has been assumed in much insightful work in the

acquisition literature, but it can also take place within the morphological subdomain of grammar, independently of syntax.

An interesting aspect of this kind of development is that with the exception of Laura's "default" negative imperatives (with incorrect morphology), the Catalan children essentially refrained from attempting to produce the negative imperative structure — as if their grammar prevented them from making attempts at producing the target structure. As pointed out by Nina Hyams (personal communication), this seems to imply a kind of teleological knowledge of what is being acquired in that no failed attempts are made at producing it. I would suggest that instead of having teleological knowledge of the target structure, the children simply acquire tighter constraints on what can form a possible word at an earlier age in the null-subject languages than they do in overt-subject languages. Hence, the kind of optional non-finite root verb forms found in overt-subject languages (Wexler 1993) are much rarer in Catalan (Grinstead 1994, Torrens 1995), Italian (Guasti 1992), and Greek (Varlokosta et al. 1996). Likewise, non-uninverted questions are unattested in Catalan (Grinstead 1995) and Italian (Guasti 1996), as are non-nominative Case subjects, both of which occur in child English (Davis 1987, Schütze 1997). Thus it appears that overarching aspects of child grammar are fixed early which allow non-adult-like structures in overt-subject languages (English in particular) and prohibit them in null-subject languages. This means that while this dichotomy remains unexplained, we do not have to assume that children learning "null-subject languages know what it is they do not know yet", but rather that they have some basic constraint which limits their errors to errors of omission as opposed to errors of commission, as in the case of children learning overt-subject language. This speculation is of course only an attempt to formulate a serious cross-linguistic learnability question that deserves closer attention and analysis.

## REFERENCES

- Borer, Hagit & Kenneth Wexler. 1987. "The maturation of syntax". In *Parameter Setting*, ed. by Thomas Roeper & Edwin Williams. Dordrecht: Reidel.
- Davis, Henry. 1987. *The Acquisition of the English Auxiliary System and its Relation to Linguistic Theory*. Ph.D. Dissertation, University of British Columbia.
- De Bode, Stella. 1997. "The use of infinitives in Russian". Ms., University of California, Los Angeles.

- Grinstead, John. 1994. *The Emergence of Nominative Case Assignment in Child Catalan and Spanish*. Master's Thesis, University of California, Los Angeles.
- \_\_\_\_\_. 1995. "Subject-auxiliary inversion in child Catalan and Spanish". Ms., University of California, Los Angeles.
- Guasti, Maria Teresa. 1992. "Verb syntax in Italian child grammar". Ms., University of Geneva.
- \_\_\_\_\_. 1996. "The acquisition of Italian interrogatives". In *Generative Perspectives on Language Acquisition*, ed. by Harald Clahsen, 241-270. Amsterdam: John Benjamins.
- Halle, Morris & Alec Marantz. 1993. "Distributed morphology and the pieces of inflection". In *The View from Building 20*, ed. by Kenneth Hale & Samuel Jay Keyser, 111-176. Cambridge: MIT Press.
- Harris, James. 1991. "The exponence of gender in Spanish". *Linguistic Inquiry* 22. 27-62.
- \_\_\_\_\_. 1996. "Spanish imperatives: Syntax meets morphology". Paper presented at the 26th Linguistic Symposium on Romance Languages, Mexico City.
- Higginbotham, James. 1985. "On semantics". *Linguistic Inquiry* 16.547-593.
- \_\_\_\_\_. 1987. "Indefiniteness and predication". In *The Representation of (In)definiteness*, ed. by Eric Reuland & Alice ter Meulen, 43-70. Cambridge, Mass.: MIT Press.
- Hyams, Nina, Teun Hoekstra & Misha Becker 1996. "The underspecification of number and the licensing of root infinitives". Paper presented at the 20th Boston University Conference on Language Development, Boston.
- Laka, Itziar. 1990. *Negation in Syntax: On the Nature of Functional Categories and Projections*. Ph.D. dissertation, MIT.
- \_\_\_\_\_. 1993. "Negation in syntax: the view from Basque". *Rivista di Linguistica* 5.245-273.
- MacWhinney, Brian & Catherine Snow. 1985. *The CHILDES Project*. Hillsdale, NJ: Lawrence Erlbaum.
- Miyata, Hiroko. 1993. "Case marking and the acquisition of functional categories". Paper presented at the 8th Annual Meeting of the Sophia Linguistic Society, Tokyo.
- Murata, Koji. 1961. "Gengo koodoo no kattatsu III: Yookyuu katsuwa no gengo keishiki narabi ni kinoo no shoki Hattatsu katei". *Japanese Journal of Educational Psychology* 9.32-41.
- Pierce, Amy. 1989. *On the Emergence of Syntax: A Crosslinguistic Study*. Ph.D. dissertation, MIT.
- Rispoli, Matthew. 1981. *The Emergence of Verb and Adjective Tense-Aspect Inflection in Japanese*. Master's Thesis, University of Pennsylvania.
- Rivero, María Luisa & Arhonto Terzi. 1995. "Imperatives, V-movement and logical mood". *Journal of Linguistics* 31.301-332.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, Mass.: MIT Press.
- Schütze, Carson. 1997. *INFL in Child and Adult Language: Agreement, Case and Licensing*. Ph.D. dissertation, MIT.

- Torrens, Vicenç. 1995. "The acquisition of the functional category inflection in Spanish and Catalan". Ms., MIT.
- Varlokosta, Spyridoula, Anne Vainikka & Bernhard Rohrbacher. 1996. "Root infinitives without infinitives". Paper presented at the 20th Boston University Conference on Language Development, Boston.
- Wexler, Kenneth. 1993. "Optional infinitives, Head Movement and the economy of derivations". In *Verb Movement*, ed. by David Lightfoot & Norbert Hornstein, 305-350. Cambridge, Mass.: Cambridge University Press.
- Zanutini, Raffaella. 1991. *Syntactic Properties of Sentential Negation: A Comparative Study of Romance Languages*. Ph.D. dissertation, University of Pennsylvania.
- \_\_\_\_\_. 1996. "On the relevance of tense for sentential negation". In *Parameters and Functional Heads*, ed. by Adriana Belletti & Luigi Rizzi, 183-209. Oxford: Oxford University Press.

## ENCLITIC *-n* IN SPANISH\*

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### 0. Introduction

When clitic pronouns follow a plural imperative verb form in Spanish, the verb's plural inflectional suffix *-n* may appear in the configurations illustrated in (1), among others. These examples are synonymous: they all mean 'pass it to me'; the understood subject is *ustedes* 'you' (pl.).<sup>1</sup>

- (1) a. *Pásen-me-lo* (standard)  
b. *Páse-me-n-lo* ('intrusion')  
c. *Pásen-men-lo* ('iteration')  
*Pásen-me-lon*  
*Pásen-men-lon*

In (1a), *-n* is attached to the verb stem as expected, and the clitics follow this inflected word. In (1b), *-n* follows the first clitic, which is attached directly to the verb stem; the second clitic follows. I will call this pattern "morphological intrusion" since the clitic appears inside the inflected verb. In (1c), *-n* appears once on the intact verb stem as expected and again on one or both of the clitics. I will call these patterns "morphological iteration". The standard (1a) pattern is used by the vast majority of speakers. The remaining patterns, though con-

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<sup>1</sup> *Ustedes* is the plural of 'polite' *usted* in all dialects of Spanish and also of 'familiar' *tú* and *vos* in Latin America. In some dialects, notably *platense* (Río de la Plata area), enclitics are stressed under certain conditions. I omit this detail in the transcription of examples. As an aid to the reader, I separate clitics from their hosts with a hyphen not used in standard orthography.

demned by prescriptivists and stigmatized to different degrees in different milieux, are widely attested as minority phenomena.<sup>2</sup> Some speakers report that they use the two minority patterns in free variation; some prefer iteration over intrusion; others have the opposite preference. This variation is apparently uncorrelated with any other grammatical property. According to Kany (1951) and Rosenblat (1946), iteration is historically prior to intrusion.

The verbal plural marker is the only instance of the segment /n/ involved in intrusion and iteration.<sup>3</sup>

- (2) a.    ;*De(n)-men eso!*       ‘Give me that!’  
       b.    ;*Ten-me eso!*       ‘Hold that for me!’  
       \*    ;*Te(n)-men eso!*

In (2a), plural *den* consists of stem *de* plus suffixal *-n*. In (2b), the last segment of nearly homophonous singular *ten* is an integral part of the stem; this /n/ cannot be involved in intrusion or iteration.

Only clitic pronouns can trigger intrusion and iteration; even homophonous definite articles cannot.

- (3) a.    ;*Hága(n)-lon mejor!*    ‘Do it better!’  
       b.    ;*Hagan lo-mejor!*    ‘Do the best (thing)!’  
       \*    ;*Hága(n) lon-mejor!*

In (3a), *lo* is the accusative clitic pronoun; it can host *-n*. In (3b), *lo* is the neuter definite article; iteration and intrusion cannot touch it.

The examples in (2) and (3) establish that iteration and intrusion are not phonological phenomena.

The minority patterns are striking in that (i) the verbal inflection *-n* appears on nonverb stems, namely the pronominal clitics, which are moreover not plural themselves; (ii) the integrity of a “word”, usually inviolable, is breached by the intrusion of the clitic into the inflected verb in cases like *páse-me-n*; (iii) multiple copies of a syntactically single inflection appear in cases like *pásen-men* and *pásen-men-lon*. In short, the phonological exponent *-n* of the syntactic plural feature of the verb appears in unexpected, syntactically unmotivated positions. Such “mismatches” between syntactic and phonological form

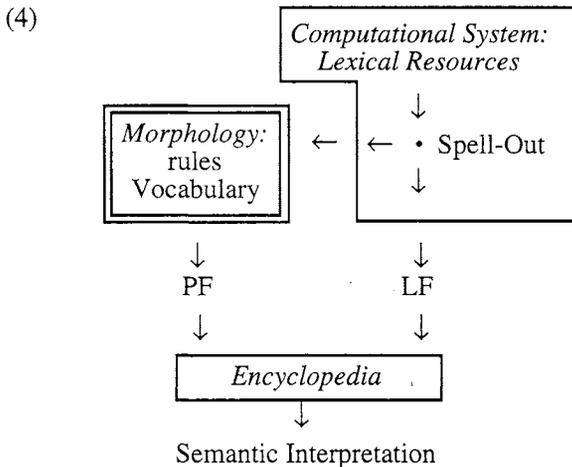
<sup>2</sup> Kany (1951), Menéndez Pidal (1962), and Rosenblat (1946) provide written examples from every every Spanish-speaking country except Bolivia. The data that I have personally elicited are from Argentina, Bolivia, Costa Rica, the Dominican Republic, Mexico, Peru, Spain, and Uruguay.

<sup>3</sup> When it is not relevant to distinguish between the two patterns, I write examples thus: *de(n)-men*.

challenge us to provide a descriptively adequate and principled analysis of the structure of verb and clitic stems, their inflectional affixes, and their combinations. I propose such an analysis now. Because space is limited, I can discuss only the most basic elements, leaving much aside.

### 1. *Groundwork*

I assume the framework of Distributed Morphology, which has been articulated in some detail elsewhere.<sup>4</sup> Distributed Morphology postulates an autonomous Morphological Component that mediates between syntax and phonology, converting independently motivated syntactic structures into the representations required by independently motivated phonological principles. Distributed Morphology adopts a large part (though not all) of the framework of the Minimalist Program (Chomsky 1993, 1994, 1995, and much related work); thus our model of grammatical organization can be schematized essentially as in (4).

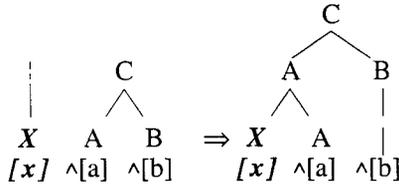


The morphological operations (rules) that we will be concerned with are shown schematically in (5).

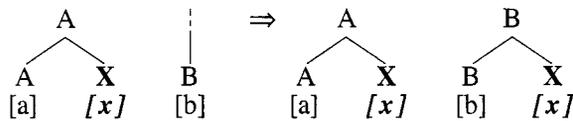
<sup>4</sup> Calabrese (1994, 1996, 1995), Halle (1996), Halle & Marantz (1993, 1994), Harris (1994a,b, 1995, 1996a,b, 1997, forthcoming), Marantz (1996), Noyer (1997, forthcoming), and references therein.

## (5) a. Merger (Adjunction)

^ = structural adjacency, linear order irrelevant

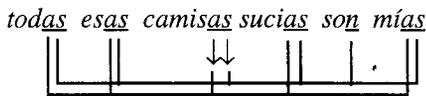


## b. Copy



Morphological Merger (5a) has the same structural effect as adjunction in syntax. Copy (5b) adjoins a duplicate feature bundle in a designated source (A) onto a designated destination (B). Copy is motivated by concord phenomena in every dialect of Spanish, for example:

## (6) 'all those dirty shirts are mine'



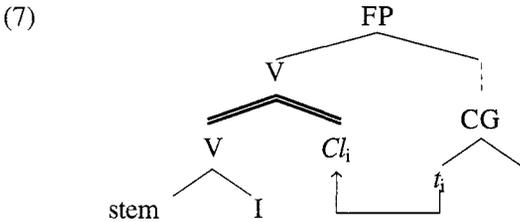
There is only one syntactic source here for gender and number features, namely the feminine plural noun *camisas* 'shirts'. The feature [feminine], however, is manifested phonologically five times via the marker /a/ on quantifier, demonstrative, noun, adjective, and possessive; [plural] is realized as -s on all of these and as -n on the verb *son*. I claim that these multiple overt manifestations of single syntactic features are the result of Copy (5b).

The Vocabulary subcomponent of the Morphological Component provides phonological exponents for syntactic terminals (feature bundles) modified by Merger and Copy and other morphological operations not relevant here. Vocabulary insertion is illustrated in numerous examples below.

I will now provide the background necessary to support the claim that the minority patterns of iteration and intrusion involve only mechanisms common to all dialects of Spanish.

1.1 *Verbs and clitics; cliticization*

As illustrated in (1)-(3), the minority patterns involve only post-verbal clitics. According to Rivero & Terzi (1995), Romero (1996), Uriagereka (1995), and other syntactic analyses, Verb-Clitic order arises when verb stems, generated in VP, raise to a functional projection that I will identify as “FP” that dominates the projection “CG”, for Clitic Group.<sup>5</sup> For concreteness, I assume that cliticization itself is due to Merger (5a).<sup>6</sup>



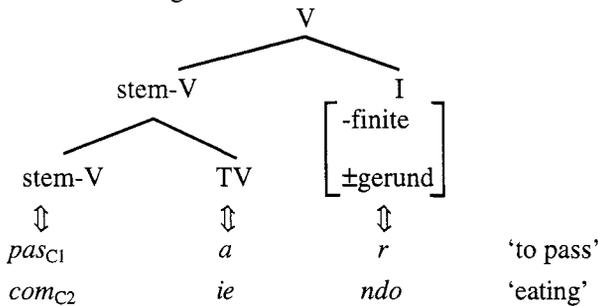
1.2 *Internal morphology of verb forms*

Current analyses do not agree on IP-internal syntax in Spanish, but the overt morphology of Spanish verb forms, illustrated in (8), is relatively clear and can be related within a comfortable margin of error to syntactic representations generated by the Computational System.

(8) TV = Theme Vowel, T = tense/mood/aspect

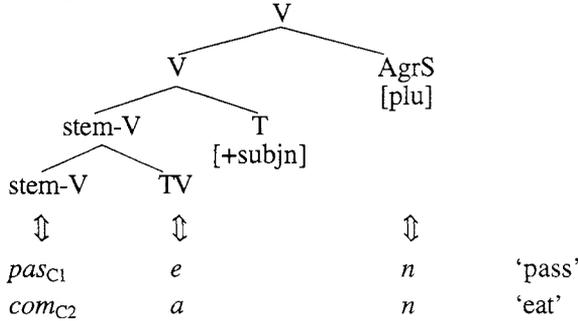
The symbol “ $\Updownarrow$ ” indicates insertion of Vocabulary entries.

a. infinitives and gerunds



<sup>5</sup> The labels FP and CG are variables that I use in order to generalize over the notation and/or substantive claims of several analyses.

## b. plural imperatives



Verb stems in Spanish belong to one of three lexically arbitrary conjugational classes indicated by subscript “C*n*” in (8). Stems may have a Theme Vowel extension, whose phonological shape depends on conjugational class and other morphological information. Other details of (8) have been discussed elsewhere (Alcoba 1991; Ambadiang 1993; Harris 1996b, forthcoming; and references therein). The crucial points in the present context are the following. Infinitives and gerunds have an inflectional morpheme whose phonological exponent is always *-r* in infinitives and *-ndo* in gerunds. Absence of an AgrS node in (8a) reflects the fact that infinitives and gerunds are never inflected for subject agreement in Spanish. Spanish imperatives, on the other hand, do show subject agreement, hence an AgrS node in (8b). Imperatives that agree with *ustedes* have the overt morphology of present subjunctives, as indicated by the feature [+subjunctive] in (8b).<sup>7</sup>

I give a sample of the entries relevant to Spanish verbs in (9):<sup>8</sup>

## (9) Vocabulary; context [...\_\_\_\_\_]v

- a. TV:      *ie* ⇔ / [C2] \_\_\_\_ [+gerund]  
               *e* ⇔ / { [C2] \_\_\_\_  
                           [C1] \_\_\_\_ [+subjn] }
- a* (default)

<sup>6</sup> Here and subsequently, tree branches drawn with a double line call attention to the result of adjunction.

<sup>7</sup> For discussion see Harris (forthcoming).

- b. I:      *ndo* ⇔ [+gerund]  
             *r*      ⇔ [-finite]
- c. AgrS:   *n*      ⇔ [plu]

### 1.3 Internal morphology of clitics

The ten phonologically distinct pronominal clitics used in Latin American Spanish are shown in (10):

- (10) M=masculine, N=neuter, F=feminine, ACC=accusative,  
 DAT=dative, REF=reflexive

		SINGULAR	PLURAL
1pers		<i>me</i>	<i>nos</i>
2pers		<i>te</i>	*
	ACC	M/N    F <i>lo    la</i>	M/N    F <i>los   las</i>
	DAT	<i>le</i>	<i>les</i>
	REF	<i>se</i>	

These points are important now.<sup>9</sup> First, the asterisk: there is no overt second person plural morphology at all in Latin American Spanish; all semantically and/or syntactically second person plural items, including clitics, have the same overt form as the corresponding third person items. Second, the plural form of the so-called “reflexive” clitic *se* lacks the suffix *-s* that appears on all other plural clitics—and indeed on all other plural nouns, pronouns, adjectives, and determiners in the language. This fact is captured by the Vocabulary entries shown in (11), which provide overt zero for the plural of *se* but /s/ elsewhere.

- (11) Vocabulary; context [...\_\_\_\_...]<sub>[+N]</sub>

$$[\text{plu}] \Leftrightarrow \left\{ \begin{array}{l} \emptyset / \quad [ [\text{REF}] \text{____} ] \\ s \quad \quad (\text{default}) \end{array} \right\}$$

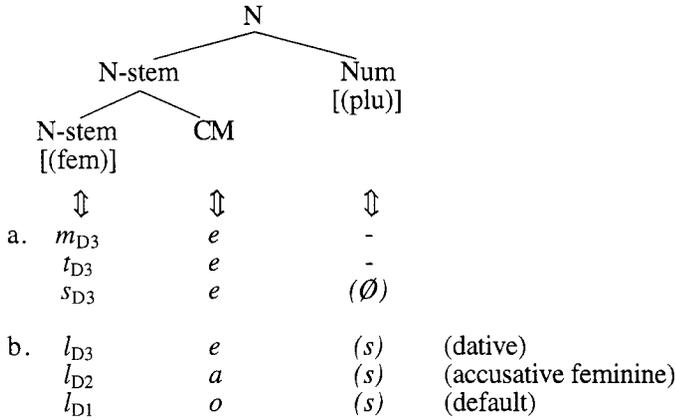
The overt constituent structure of clitics, like that of all nominals in Spanish, is essentially as illustrated in (12):<sup>10</sup>

<sup>8</sup> The theory of Vocabulary insertion presupposed by (9) has interesting consequences that we cannot not go into now (cf. Halle 1996, Harris 1997). Also, complete coverage of the elaborate system of Spanish verb inflection would result in different entries in some cases.

<sup>9</sup> Extensive discussion can be found in Harris (1994a, 1995).

<sup>10</sup> Harris (1991a, b; 1994a, b; 1995; 1996a).

## (12) CM=Class Marker



Clitic stems (like those of other nominals) belong to one of three primary declensional classes, indicated by subscript “D<sub>n</sub>”. Each class has a particular Class Marker: /o/, /a/, and /e/ for Classes 1, 2, and 3, respectively. The clitics *me*, *te*, and *se* (12a), invariably belong to Class 3 as a lexical idiosyncrasy. On the other hand, the third person stem *l-* (12b) is predictably assigned to Class 3 when dative, otherwise to Class 2 when feminine, otherwise to Class 1 by default.

The redundancy rule that assigns third person dative *l-* to Class 3 can be stated essentially as in (13), where the formal representation of “third person” is the default person feature [-participant]:

$$(13) [-\text{participant}] \rightarrow [D3] / [ \_\_\_ [\text{DAT}]]$$

I give Vocabulary entries relevant to clitics in (14), which includes the entry for [plural] previewed in (11).

$$(14) \text{Vocabulary; context } [ \dots \_\_\_ \dots ]_{[+N]}$$

a. STEM:	<i>n</i> <sub>D1</sub>	⇔	[+ppnt, +spkr] / $\_\_\_ [plu]$ <sup>11</sup>
	<i>m</i> <sub>D3</sub>	⇔	[+ppnt, +spkr]
	<i>t</i> <sub>D3</sub>	⇔	[+ppnt]
	<i>l</i>	⇔	[-ppnt, acc/dat]
	<i>s</i> <sub>D3</sub>	⇔	(default)

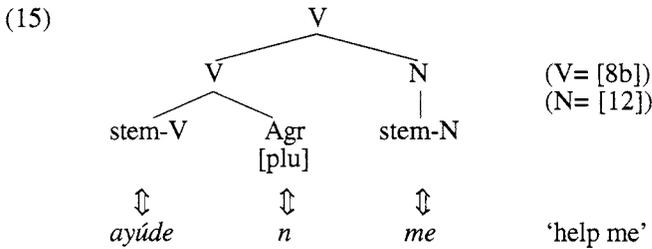
<sup>11</sup> 1pers = [+participant, +speaker]; 2pers = [+participant, -speaker].

- b. CM:  $e \Leftrightarrow / [D3] \_\_\_$   
 $a \Leftrightarrow / [D2] \_\_\_$   
 $o \Leftrightarrow / (\text{default})$
- c. Num.  $\left\{ \begin{matrix} \emptyset \\ s \end{matrix} \right\} \Leftrightarrow [\text{plu}] \left\{ \begin{matrix} [[\text{REF}] \_\_\_\_ ] \\ (\text{default}) \end{matrix} \right\}$

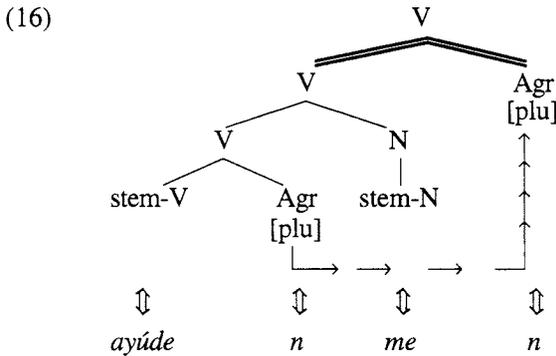
**2. Analysis; iteration and intrusion**

2.1 *Basic mechanisms*

The minority patterns of iteration and intrusion arise, of course, in the cliticization structure (7), repeated in (15). I have inserted tree (8b) for the imperative verb and tree (12) for the clitic. I have also pruned inessential branches.

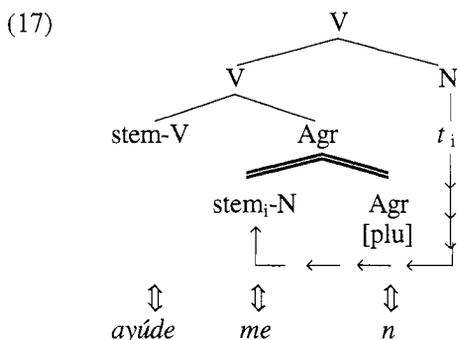


In standard dialects, (15) is realized phonologically as such: *ayúden-me*. The corresponding form in iteration dialects is *ayúden-men*. The role of Copy (5b) in the derivation of this form is illustrated in (16).



The arrows in (16) indicate that Copy adjoins a duplicate of the verb's [plural] feature to the superior V node in (15). Vocabulary sublist (9c) provides the phonological exponent *-n* to both instances of [plural] since both are dominated by V. The only relevant difference between standard and iteration dialects is that the latter employ Copy (5b) as shown in (16) but standard dialects do not.

The output of structure (15) in intrusion dialects is *ayúde-m-en*. Morphological Merger (5a) derives this pattern, as illustrated in (17).

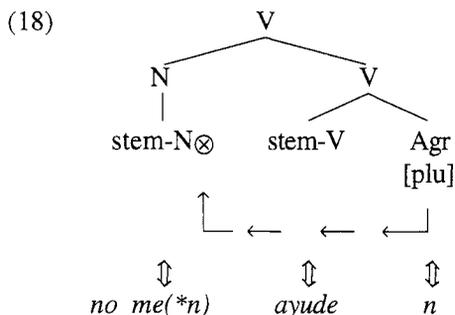


Merger adjoins the clitic to the adjacent Agr node of the imperative verb form. Consequently, the clitic appears between the verb stem and its inflectional suffix in phonological form.

## 2.2 Consequences and predictions

### 2.2.1 Negative imperatives

The minority patterns do not occur in negative imperatives, where clitics precede the verb. For example, no dialect allows *\*no me<sub>n</sub>-ayude(n)* 'don't help me'; only *no me-ayuden* is possible in iteration and intrusion dialects just as in standard dialects. The analysis just sketched explains why; this is illustrated in (18).



Merger (5a) cannot add *-n* to the clitic because the clitic stem and the source feature [plural] on the verb are not adjacent as this operation requires. Copy (5b) cannot either, because a duplicate of the [plural] feature on the clitic stem would be dominated by N; therefore Vocabulary sublist (9c) cannot insert the verbal suffix /n/. In short, the correct results follow directly from the analysis.

### 2.2.2 A hierarchy of clitics

Minority-pattern dialects differ as to which clitics are involved in iteration and intrusion; dialects rank from conservative to liberal in the order shown in (19).<sup>12</sup>

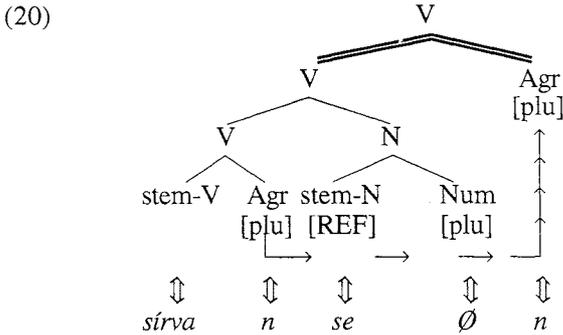
(19)	YES	NO		
a.	<i>se<u>n</u></i>	<i>me<u>n</u></i>	<i>le<u>n</u></i>	<i>lo<u>n</u>/la<u>n</u></i>
b.	<i>se<u>n</u></i>	<i>me<u>n</u></i>	<i>le<u>n</u></i>	<i>lo<u>n</u>/la<u>n</u></i>
c.	<i>se<u>n</u></i>	<i>me<u>n</u></i>	<i>le<u>n</u></i>	<i>lo<u>n</u>/la<u>n</u></i>
d.	<i>se<u>n</u></i>	<i>me<u>n</u></i>	<i>le<u>n</u></i>	<i>lo<u>n</u>/la<u>n</u></i>

For the most conservative speakers, *se* is the only clitic that can take *-n* productively; other speakers allow *men* as well; still others extend the set to *len*; the most liberal speakers add *lon* and *lan*. This hierarchy is strictly observed: *men* is used productively by a given speaker only if *sen* is too, and so on successively.<sup>13</sup>

The synchronic ranking in (19) is consistent with history: verbal *-n* is found earliest on *se* and at successively later times on *me*, *le*, and *lo/la* as well. Further, iteration preceded intrusion (Kany 1951:112, Rosenblat 1946:231). Thus the first minority-pattern dialects were type (19a) with iteration. I use the example *sírvan-sen* 'serve yourselves' in (20) to illustrate how plural reflexive imperatives are derived in this case.

<sup>12</sup> Kany (1951), Menéndez Pidal (1962), Rosenblat (1946).

<sup>13</sup> The word "productively" may be crucial. Some speakers apparently use the intrusion form *de-me-n* 'give me' who do not use either intrusion or iteration with any other verb or any other clitic.



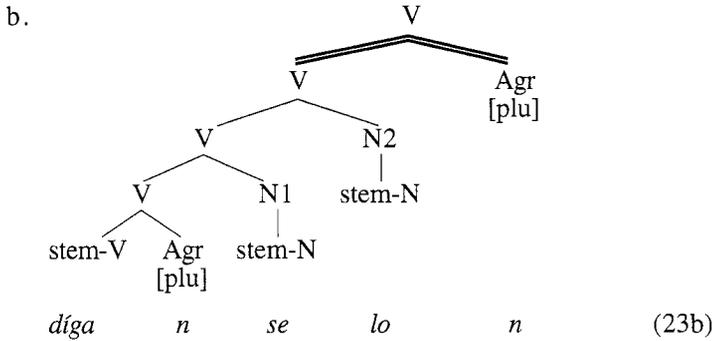
Though both verb and clitic are semantically and syntactically plural, the clitic's [plural] feature is overtly zero, as reflected in Vocabulary sublist (14c). Otherwise, (20) is identical to (16) in every relevant way.

Why do forms like *sírva*-*se* evolve into iteration forms like *sírva*-*se**n*? Tradition has it that speakers add *-n* to the clitic because “without it the legitimate feeling for number is frustrated” (Kany 1951:112). This is plausible but inadequate: speakers could relieve their putative frustration by simply forsaking the special zero plural peculiar to *se*; that is, by removing the first case of Vocabulary entry (14c). Syntactically plural *se* would then take the same overt suffix *-s* as every other clitic, noun, pronoun, adjective, and determiner in the language. However, no plural *\*ses* is ever attested in any dialect of Spanish. We must therefore identify a specific grammatical mechanism that accords with linguistic fact, namely that verbal *-n* is added to a nominal enclitic. As we see in (20), the Copy operation (5b) provides *se* with an overt plural morpheme, albeit a surrogate one. No other general account of all the historical and synchronic data is known.

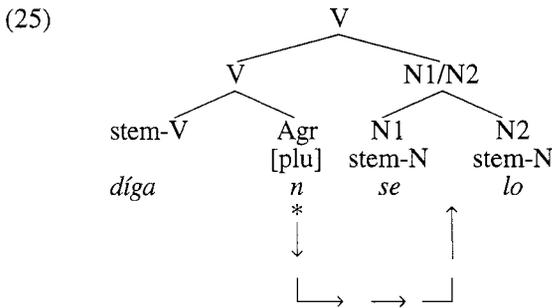
The extension in type (19b) dialects of *-n* to *me* as well as *se* is traditionally attributed to phonological analogy on the grounds that *me* and *se* both end in *-e* (Kany 1951, Rosenblat 1946). But *le* also ends in *-e*. Why then is *\*le<sub>n</sub>* impossible in type (19b) dialects? The proposals illustrated in (12)-(14) offer an appropriate grammatical (morphological) generalization: the *-e* of *se*, *me*, and *le* is the marker of declensional Class 3. Membership in this class is unpredictable for *se* and *me*; their [D3] is specified lexically. The stem of *le*, on the other hand, is lexically unspecified for Class; its [D3] is predictably assigned by dative case, as reflected in rule (13). This must be the distinction exploited by the grammar of type (19b) dialects. The point is worth noting since the facts under discussion provide unexpected and subtle support for our analysis of the declensional class affiliation of clitics.







The fact that no speaker both rejects (23a) and accepts (23b) allows us to construct a *reductio ad absurdum* argument that tells us how clitics are *not* adjoined. Suppose that (25) is the result of a cliticization process that adjoins N1 to N2, or N2 to N1, instead of adjoining each one successively to the verb as in (24).



In (25), it is not possible for a copy of the feature [plural] placed between the two clitics to be dominated by V; that rules out (23a). But (23b) can be derived by adjoining a duplicate [plural] feature to the highest V. Since these results are factually impossible, we can conclude that the premise is false; that is, (25) is not generated by the grammar of any dialect of Spanish.

### 3. *Wrap-up*

The most general lesson the minority patterns teach is that overt form reflects semantic and syntactic organization indirectly and misleadingly. In particular, Spanish enclitic *-n* appears in positions where semantics and syntax say it doesn't belong. This may be rooted, as tradition claims, in an intuitive drive to provide *se* with an overt plural marker, but analogy comes nowhere near

explaining the real historical and synchronic data. The key to the proposals advanced above is that representations generated in the Computational System continue to undergo formal manipulations on the PF path in an autonomous Morphological Component, independently of interpretation at LF. In particular, morphological Merger (5a) leads to the intrusion pattern (1b) and the Copy operation (5b) leads to iteration (1c). This analysis poses a clear challenge to the currently popular view that syntax alone determines virtually every aspect of the distribution of morphemes.

### REFERENCES

- Alcoba, Santiago. 1991. "Morfología del verbo español: conjugación y derivación deverbal". In *Lenguajes naturales y lenguajes formales*, vol. 6, ed. by C. Martín Vide, 87-119. Barcelona: Promociones Publicaciones Universitarias.
- Ambadiang, Théophile. 1993. *La morfología flexiva*. Madrid: Taurus Universitaria.
- Calabrese, Andrea. 1994. "Syncretism phenomena in the clitic systems of Italian and Sardinian dialects and the notion of morphological change". *North East Linguistics Society* 25, vol. 2, 151-173.
- \_\_\_\_\_. 1995. "The sentential complementation of Salentino and Distributed Morphology". Ms., Harvard University.
- \_\_\_\_\_. 1996. "Some remarks on the Latin case system and its development in Romance". Paper presented at the 26th Linguistic Symposium on Romance Languages, Mexico City.
- Chomsky, Noam. 1993. "A Minimalist Program for linguistic theory". In *The View from Building 20*, ed. by Kenneth Hale & S. Jay Keyser, 1-52. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1994. *Bare Phrase Structure*. MIT Occasional Papers in Linguistics, 5. Cambridge, Mass.: MIT Working Papers in Linguistics.
- \_\_\_\_\_. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Halle, Morris. 1996. "Distributed morphology: Impoverishment and fission". Ms., MIT.
- Halle, Morris & Alec Marantz. 1993. "Distributed morphology and the pieces of inflection". In *The View from Building 20*, ed. by Kenneth Hale & S. Jay Keyser, 111-76. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1994. "Some key features of distributed morphology". *MIT Working Papers in Linguistics* 21.275-288.
- Harris, James. 1991a. "The exponence of gender in Spanish". *Linguistic Inquiry* 22.27-62.
- \_\_\_\_\_. 1991b. "The form classes of Spanish substantives". *Morphology Yearbook* 1.65-88.
- \_\_\_\_\_. 1994a. "The syntax-phonology mapping in Catalan and Spanish clitics". *MIT Working Papers in Linguistics* 21:321-353.

- \_\_\_\_\_. 1994b. "El traslado de pluralidad en los pronombres clíticos del español". Paper presented at III Encuentro de Lingüística del Noroeste, Universidad de Sonora, Hermosillo, México.
- \_\_\_\_\_. 1995. "The morphology of Spanish clitics". In *Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero*, ed. by Héctor Campos & Paula Kempchinsky, 168-197. Washington, D.C.: Georgetown University Press.
- \_\_\_\_\_. 1996a. "The syntax and morphology of class marker suppression in Spanish". In *Grammatical Theory and Romance Languages*, ed. by Karen Zagona, 99-122. Amsterdam: John Benjamins.
- \_\_\_\_\_. 1996b. "There is no imperative paradigm in Spanish". In *Issues in the Phonology of the Major Iberian Languages*, ed. by Fernando Martínez-Gil & Alfonso Morales-Front, 537-557. Washington, D.C.: Georgetown University Press.
- \_\_\_\_\_. 1997. "Why *n'ho* is pronounced [li] in Barceloní Catalan; morphological impoverishment, merger, fusion, and fission". *Recherches Linguistiques de Vincennes* 26.61-86.
- \_\_\_\_\_. Forthcoming. "Spanish imperatives; syntax meets morphology". *Journal of Linguistics*.
- Kany, Charles E. 1951. *American-Spanish Syntax*. Chicago: University of Chicago Press.
- Marantz, Alec. 1996. "Cat as a phrasal idiom: consequences of late insertion in Distributed Morphology". Ms., MIT.
- Menéndez Pidal, Ramón. 1962. *Manual de gramática histórica española*. Madrid: Espasa-Calpe.
- Noyer, Rolf. 1997. *Features, Positions and Affixes in Autonomous Morphological Structure*. New York: Garland.
- \_\_\_\_\_. Forthcoming. "Impoverishment theory and morphosyntactic markedness". In *Morphology and its Relation to Syntax and Phonology*, ed. by Steven Lapointe, Diane K. Brentari & Patrick Farrell. Stanford: CSLI.
- Real Academia Española. 1973. *Esbozo de una nueva gramática de la lengua española*. Madrid: Espasa-Calpe.
- Rivero, María Luisa & Arhonto Terzi. 1995. "Imperatives, V-movement and logical mood". *Journal of Linguistics* 31.301-332.
- Romero, Juan. 1996. "Construcciones de doble objeto y movimiento de clíticos en español". *Cuadernos de Lingüística* (Madrid, Instituto Universitario Ortega y Gasset) 4.117-132.
- Rosenblat, Ángel. 1946. "Notas de morfología dialectal". In *Estudios sobre el español de Nuevo Méjico (Parte II, Morfología)*, ed. by Aurelio M. Espinosa, 103-316. Buenos Aires: Biblioteca de Dialectología Hispanoamericana.
- Uriagereka, Juan. 1995. "Aspects of the syntax of clitic placement in Western Romance". *Linguistic Inquiry* 26.79-123.



# *JE VEUX QUE PARTE PAUL*

## A NEGLECTED CONSTRUCTION

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### 0. *Introduction*

All studies dedicated to French Stylistic Inversion (i.e., to constructions with postverbal subject) focus on interrogative contexts, as in (1), and assume that Stylistic Inversion also occurs in relative clauses (as in [2]) and subjunctive clauses (as in [3]).

- (1) *Quand est parti Paul?*  
'When has Paul left?'
- (2) *La femme de qui rêve souvent Paul est mariée.*  
'The woman Paul often dreams about is married.'
- (3) *Je veux que parte Paul.*  
'I want Paul to leave.'

The details of the occurrence of the subject in postverbal position in subjunctive clauses have not received sufficient attention in the literature. In this article I will demonstrate that a postverbal subject is not allowed in all subjunctive contexts, and that its presence is submitted to very strong constraints which apply neither to interrogative nor relative clauses, and thus that its occurrence cannot be accounted for within existing theories of Stylistic Inversion. A close study of those constraints will lead to the conclusion that focus plays an important role in the occurrence of postverbal subject in subjunctive clauses.

The relevant facts will be presented in Section 1. In Section 2, I propose a formal analysis of postverbal subject constructions in subjunctive clauses within the Minimalist framework. In Section 3, I will account for the constraints illustrated in Section 1, making crucial use of the notion of focus.

## 1. *Postverbal subject in subjunctive clauses: the facts*

### 1.1 *The category of the verb*

The appearance of a subject in postverbal position in subjunctive clauses is limited to ergative and passive verbs. Compare sentences (4-6) to (7-9).

- (4) \* *Je veux que parle Paul à Marie.*  
'I want Paul to talk to Marie.'
- (5) \* *Je veux qu'habite Marie avec Pierre.*  
'I want Mary to live with Pierre.'
- (6) \* *J'exige que distribue le facteur ces prospectus.*  
'I demand that the postman distribute those prospectuses.'
- (7) *Je souhaite que parte ton ami.*  
'I wish your friend to leave.'
- (8) *J'exige que soient distribués ces prospectus.*  
'I demand that those leaflets be distributed.'
- (9) *Je ne veux pas que soit renvoyé cet homme.*  
'I do not want that man to be fired.'

(4)-(6) are grammatical without inversion of the subject, as illustrated in (10), corresponding to (4). Subject inversion is optional in subjunctive clauses, so that (7)-(9) are grammatical with preverbal subject as well, as illustrated in (11), corresponding to (7).

- (10) *Je veux que Paul parle à Marie.*
- (11) *Je souhaite que ton ami parte.*

Besides ergative and passive verbs, some unergatives allow for a postverbal subject, like the activity verbs *téléphoner*, *dormir* or *travailler*, as shown in (12)-(14). The subject may occur in preverbal position in those sentences as well.

- (12) *Je voudrais que me téléphone Marie.*  
'I would like Mary to phone me.'
- (13) *J'aimerais tant que dorment les enfants.*  
'I would like it so much if the children slept.'
- (14) *Il veut que travaillent les enfants.*  
'He wants the children to work.'

Strikingly, these verbs are often of the type which, besides ergative and passive verbs, can occur in impersonal constructions and in the so called PP-preposing constructions, as illustrated in (15) and (16).

- (15) *Il dort un chat au coin de la cheminée.*  
 'There sleeps a cat at the corner of the fireplace.'
- (16) *Près de la cheminée dormaient deux chats*  
 'By the fireplace slept two cats.'

Stylistic Inversion, in contrast, is possible with any type of verbs in wh-contexts, as shown in (17) and (18), opposed to (4) and (5).

- (17) a. *De quoi a parlé Paul à Marie?*  
 'About what has Paul talked to Mary?'  
 b. *Je connais l'homme dont a parlé Paul à Marie.*  
 'I know the man about whom Paul has talked to Mary.'
- (18) a. *Où habite Marie avec Pierre?*  
 'Where does Mary live with Pierre?'  
 b. *La maison où habite Marie avec Pierre sera vendue.*  
 'The house where Mary lives with Pierre will be sold.'

Déprez (1990) notes that subject inversion is odd with Individual Level predicates, but I do not share her intuitions on that point.

### 1.2 *Restrictions on the subjunctive clause*

As Kayne & Pollock (1978:603 n11) indicate, not all subjunctive clauses allow for a postverbal subject. In all the grammatical sentences given so far, the subjunctive clause is the complement of a volitional verb. Subject inversion is also possible in the subjunctive complement of other types of verbs ([19]-[21]), and in non complement clauses ([22]-[23]). On the other hand, (24) and (25) show that in the complement clause of an epistemic and a factive verb respectively, the subject may not be postverbal (these two sentences are grammatical with a preverbal subject).

- (19) ? *Je doute que vienne Paul.*  
 'I doubt Paul will come.'
- (20) *Je crains que ne vienne Paul.*  
 'I am afraid that Paul will come.'
- (21) *Pierre a nié qu'aient été relâchés des criminels.* (Pollock 1986:232)  
 'Pierre denied that criminals were released.'

- (22) *Vienne la nuit, sonne l'heure.* (Apollinaire, *Alcools*,  
*Les jours s'en vont, je demeure* 'Le Pont Mirabeau')  
 'Come the night, ring the hour  
 Days go by, I stay.'
- (23) *Qu'aient été condamnés des innocents, toi,* (Pollock 1986:226)  
*ça te laisse indifférent?*  
 'That innocent people have been condemned, you do not care?'
- (24) \* *Je ne crois pas que vienne Paul.*  
 'I do not think that Paul will come.'
- (25) \* *Je regrette que vienne Paul.*  
 'I regret that Paul is coming.'

We can conclude from the examples above that not all subjunctives allow for the inversion of the subject. Apparently, the occurrence of a postverbal subject depends on the context: it is not allowed in a subjunctive clause which is the complement of an epistemic verb or a factive verb like *regretter*. However, the relevant feature allowing for subject inversion must be present in the subjunctive clause, since (22) and (23) are grammatical and do not contain a complement subjunctive clause (see Section 3).

### 1.3 Other restrictions

Besides the restrictions on the verb of the subjunctive clause and on the contextual properties of this clause, there are other constraints on subject inversion in subjunctive clauses concerning the use of complements, adjuncts, as well as VP- and clause-final adverbs. Compare (26)-(27) to (3), and (28)-(29) to (8).

- (26) \* *Je veux que parte Paul aux Etats-Unis.*  
 'I want that Paul leaves for the United States.'
- (27) \* *Je veux que parte Paul demain.*  
 'I want Paul to leave tomorrow.'
- (28) \* *J'exige que soient distribués ces prospectus \*par les enfants /*  
*\*avant mon départ.*  
 'I demand that those leaflets be distributed by the children /  
 before I leave.'
- (29) a. \* *J'exige que soient distribués ces prospectus rapidement.*  
 b. *J'exige que soient rapidement distribués ces prospectus.*  
 c. ? *J'exige que soient distribués rapidement ces prospectus.*  
 d. *J'exige que ces prospectus soient rapidement distribués /*  
*distribués rapidement.*  
 'I demand that these leaflets be quickly distributed.'

All the ungrammatical sentences above would be grammatical with preverbal subject, e.g., (30), corresponding to (27).

(30) *Je veux que Paul parte demain.*

(29) above shows that there are restrictions on the cooccurrence of VP-final adverbs and postverbal subjects: while VP-final adverbs can freely occur with preverbal subjects (29d), they are disallowed when they occur after postverbal subjects (29a).

These restrictions do not seem to hold when the subject is an indefinite DP. Compare (31) to (27), (32) to (33) and (34) to (28).

(31) *Je veux que viennent trois avocats demain.*  
'I want three attorneys to come tomorrow.'

(32) *J'aimerais que viennent plus de linguistes à nos réunions.*  
'I would like more linguists to come to our meetings.'

(33) \* *J'aimerais que viennent ces linguistes à nos réunions.*  
'I would like these linguists to come to our meetings.'

(34) *J'exige que soient distribués des prospectus par les enfants/avant mon départ.*  
'I demand that leaflets be distributed by the children/before I leave.'

None of these restrictions, which I will account for in Section 3, plays any role in subject inversion in wh-contexts. Compare for instance (35) to (28).

(35) *Je me demande quand sera dégusté ce vin par les invités.*  
'I wonder when this wine will be drunk by the guests.'

There are restrictions on the occurrence of complements in wh-contexts, which have to do with the basic position of the wh-word: subjects can only be followed by complements which occur on the right of the moved wh-element. For a detailed analysis of those restrictions, see Wind (1995).

I have shown in this section that there are some strong constraints on the occurrence of a postverbal subject in subjunctive clauses: in addition to the contextual properties of the subjunctive clause, the category of the embedded verb and the presence of other constituents are decisive for the postposition of the subject. A postposed subject can only appear with an ergative, a passive verb and some unergatives, and no complement, clause-final adverb, or adjunct may be present in the embedded clause, while VP-final adverbs may occur depending on their position. I have shown that the same restrictions do

not hold for the occurrence of a postverbal subject in *wh*-contexts. Let us now consider the formal analysis of the subjunctive inversion construction.

## 2. Formal analysis

### 2.1 *The position of the subject*

Given the fact that the verbs allowed in subjunctive inversion clauses belong to the same categories as those used in impersonal and PP-preposing constructions, I assume that the subject is generated in the same position as in those constructions. When the verb is an ergative or passive verb, I assume, following current thinking (Burzio 1986, Perlmutter 1978), that the subject is generated in object position. As for the subjects of unergatives, I adopt Hoekstra & Mulder's (1990:4, 28-29) proposal to assign the following D-structure to impersonal constructions like (15) and PP-preposing constructions like (16).

(36) [IP I [VP V [SC NP PP]]]

They assume that the postverbal subject is generated as the subject of a Small Clause, which is a complement of the verb. In PP-preposing constructions, the PP is preposed, allowing the subject to stay in its base position, while in impersonal constructions, the expletive *il* is inserted and PP as well as the subject stay in their base positions.

In subjunctive inversion constructions, neither *il* nor a lexical PP occupies the preverbal position, so that we have to answer to the following question: if the subject stays in its base position, how is the Extended Projection Principle (EPP) satisfied?

### 2.2 *Silent expletive pro*

Given the resemblance between subjunctive inversion constructions and impersonal constructions, one could consider that the [Spec, AgrS] position is occupied by the silent equivalent of expletive *il*. According to Chomsky (1995:274), *il* is analogous to English *it*. Since *it* has Case and phi-features, next to a D feature, it satisfies the EPP, checks the Case-feature of T overtly, and agrees with the verb. This accounts for the fact that the verb agrees with the expletive and not with the inverted subject, as shown in (37).

(37) *Il est sorti trois hommes / \*il sont sortis trois hommes.*  
'There came out three men.'

In subjunctive inversion clauses, contrary to what happens in impersonal constructions, there is agreement between the verb and the postverbal subject, as

shown in (32) for instance. [Spec, AgrS] could therefore not be occupied by a silent *pro* equivalent of expletive *il*.

Given the differences recalled above, none of the analyses proposed for the impersonal construction could apply to the subjunctive inversion construction. Moreover, there are more differences between impersonal constructions and subjunctive inversion constructions: the postverbal subject must be an indefinite in impersonal constructions, as shown by the ungrammaticality of (38), whereas, in most of the subjunctive clauses presented in this paper, the postverbal subject is definite. The restriction on the postverbal subject in impersonal constructions is known as the Definiteness Effect (DE): one proposal (Belletti 1988) is that the postverbal subject, which gets inherent (partitive) Case from the ergative or passive verb, must be interpreted as an indefinite.

- (38) \* *Il est sorti Paul.*  
'There has gone out Paul.'

We have noticed that there are restrictions on the use of complements, adjuncts and adverbs in subjunctive inversion clauses when the subject is definite, but they cannot be accounted for by Belletti's proposal.

In PP-preposing constructions, the postverbal subject agrees with the verb (see [16]) and does not need to be indefinite, as shown in (39).

- (39) *Dans cette maison mourut Napoléon.*  
'In this house died Napoleon.'

There seem to be restrictions on the use of definite subjects in these constructions as well, as shown by the contrast between (40) and (41).

- (40) *Dans cette ville ont été tués mille soldats par l'armée.*  
Lit. 'In this town have been killed a thousand of soldiers by the army.'
- (41) *Dans cette ville a été tué Henri IV \*par Ravaillac.*  
Lit. 'In this town has been killed Henry IV by Ravaillac.'

Hoekstra & Mulder (1990) consider English existential constructions like (42) as cases of preposing of the locating adverbial *there*, i.e., as cases like (16) and (39).

- (42) *There is a man in the garden.*

Following this idea and given the resemblance between PP-preposing constructions and postverbal subject constructions in subjunctive clauses, I assume that postverbal subject constructions are the French equivalent of the English *there*-constructions.

Chomsky (1995) points out that the verb does not agree with *there*, but with the postverbal subject. He accounts for this by assuming that *there* is an expletive which has neither phi- nor Case-features, just a D feature, which satisfies the EPP. It is licensed by the associate DP, whose phi- and Case-features move to AgrS to check covertly the Case-feature of T and ensure agreement. As a consequence, the associate subject will bind and control as if it were in preverbal subject position. I assume that in French subjunctive inversion constructions, [Spec, AgrS] is occupied by a silent expletive *pro* with the same properties as the phonetically realized *there*: it has neither phi- nor Case-features, just a D feature, which satisfies the EPP. Just like *there*, it has to be licensed by an associate DP, the postverbal subject, whose phi- and Case-features move covertly to AgrS to check the Case-feature of T and ensure agreement.

If Chomsky (1995:273) is right in assuming that the associate of *there* will bind as if it were in preverbal position, the associate of silent expletive *pro* should too. This prediction seems to be borne out, given the contrast between (43) and (44).

- (43) \* *Je veux qu'en viennent trois.*  
 (44) *Je veux qu'il en vienne trois.*  
 'I want three of them to come.'

Note that (43) entails a violation of Principle B of Binding Theory.

Just like *there* is a kind of clitic (Chomsky 1995:155 calls it an affix), *pro* is a locative clitic, which accounts for the ungrammaticality of (45) and (46), since using *y* or *en* entails doubling clitic *pro*, which is obviously not allowed.

- (45) \* *Je veux qu'y vienne Paul.*  
 'I want Paul to come there.'  
 (46) \* *Je veux qu'en sorte Paul.*  
 'I want Paul to go out of there.'

*There*-constructions normally show Definiteness Effects. Still, just like in subjunctive inversion constructions, the postverbal subject may be a definite DP, as shown by Ward & Birner (1995). According to them, the DE is just an epiphenomenon of a general requirement: the subject DP must refer to hearer-new information. An indefinite DP represents hearer-new information, while a

definite DP requires that the referent constitutes known information. It may be used, though, if it “represents an entity that is not presumed by the speaker to constitute shared knowledge” (Ward & Birner 1995:728).

Applying that idea to the subjunctive inversion construction, we formulate the condition in (47) for the licensing of *pro*.

- (47) The associate DP of silent expletive *pro* must refer to hearer-new information.

If a DP is not compatible with this interpretation, the sentence will be ungrammatical.

Note that the postverbal subject in PP-preposing constructions must refer to hearer-new information too, because the PP is topicalized, and as such presented as old information, which forces the postverbal subject to be presented as hearer-new information. This explains the contrast between (40) and (41) above.

We now have to establish that the definite DP in subjunctive inversion constructions refers to hearer-new information. One way to present information as asserted, instead of presupposed, is focus. This leads us to assume that the postverbal definite DP in subjunctive inversion constructions, and in PP-preposing constructions, is presented as hearer-new information because it qualifies as focus. Let us consider how focus is assigned and show how this accounts for the constraints illustrated in Section 1.3.

### 3. *An account of the formal constraints*

#### 3.1 *The role of focus*

Zubizarreta (1994) shows that focus plays a role in syntactic processes. She assumes that an [F] feature, indicating informative focus, is assigned freely at S-Structure. Everything that [F] dominates will be interpreted as part of an assertion and everything that it does not dominate as a part of the presupposition of the sentence. She suggests that some processes take place so that the focused syntactic constituent can meet the PF-constraint in (48).

- (48) *Accentual Licensing Constraint (ALC)*: A constituent marked [F] must dominate the lexical item that bears the main accent in its intonational domain (or I-domain). (Zubizarreta 1994:473)

Following Cinque (1993), she assumes that the most embedded node in a given I-domain receives primary stress. As a consequence, the nucleus of a focused constituent will be the most deeply embedded node in its I-domain. In (49), with stressed subject, wide focus is possible, so (49) in Spanish can be an answer to *What happened?* or *Who called?*

- (49) *Llamó Pedro.*  
 'Pedro called.'

Preverbal subjects, as in (50), can never function as the presentational focus. If accented, they are interpreted as contrastive.

- (50) *Pedro rompió el vidrio.*  
 'Pedro broke the window.'

Adopting a Larsonian representation of sentences, Zubizarreta shows that the subject may be focused if it is the most embedded element of a sentence, i.e., if no complement or adjunct occupies a position in the clause which is deeper than the position of the subject.

Following this idea enables us to account for the fact that in sentences like (3), the postverbal subject represents hearer-new information: it bears the main accent so that it qualifies as focus or as a part of the focus. It cannot refer to old information. (3) can never be an answer to *Que veux-tu que Paul fasse?*, as shown in (51).

- (51) *Que veux-tu que Paul fasse? \*Je veux que parte Paul.*  
 'What do you want Paul to do? I want Paul to leave.'

We are now able to account for the constraints on the occurrence of VP- and clause final adverbs, complements and adjuncts after the postverbal definite subject in subjunctive clauses. The subject DP, being in the object position, will not occupy the most embedded position if a complement or an adjunct, or an adverb which is more deeply embedded in the VP, is present. It will not get main stress and thus will not qualify as focus. Being a definite DP, it has to qualify as focus, according to condition (47). The only way for the subject to get main stress is to appear alone. This accounts for the ungrammaticality of sentences (26)-(29a) and (33) above.

There is a contrast between the two sentences in (52) ([52a] repeats [23]).

- (52) a. *Qu'aient été condamnés des innocents, toi, ça te laisse indifférent?*  
 Lit. 'That have been condemned innocent people, you do not care?'
- b. \* *Qu'aient été condamnés ces innocents, toi, ça te laisse indifférent?*  
 Lit. 'That have been condemned these innocent people, you do not care?'

We can now account for this contrast: the subject clause in these two sentences has been topicalized. As such, it represents old information. The postverbal subject of the subject clause cannot qualify as focus, hence the ungrammaticality of (52b), according to Condition (47).

### 3.2 *The role of the subjunctive*

As mentioned earlier, in indicative clauses *il* must be inserted: it has phi- and Case-features, so that it overtly checks the Case-feature of T. Indicative T thus has a strong nominative feature. This entails that in PP-preposing constructions, the preposed PP checks overtly this strong Case-feature or turns it into a weak one, as proposed by Wind (1995) for *wh*-phrases. As expletive *pro*, which occupies [Spec, AgrS] in subjunctive inversion constructions, has no Case-feature, subjunctive T should have a weak nominative feature. As mentioned in Section 1.2, not all subjunctives allow for postverbal subjects. To account for the restrictions mentioned there, I assume that the weak/strong characteristic of the nominative Case-feature in T depends on the nature of CP, in particular on the nature of C. In Kampers-Manhe (1992:144-145), I argued that C in the complement of volitional verbs lacks a semantic Tense feature. This semantic feature is, however, present in subjunctive clauses which are the complements of an epistemic verb. This is not surprising given the fact that an epistemic verb normally selects an indicative complement clause. The presence or the absence of that feature is decisive for the Case-feature in T: it is weak if there is no Tense feature in C, but strong if there is a Tense feature in C. When the Case-feature is weak, it does not need to be overtly checked. As a consequence, the subject does not have to move overtly to [Spec, AgrS]. This explains why in sentences (19)-(23) above the subject can be postverbal, and why (24) is ungrammatical with a postverbal subject. Example (25), however, is more problematic. The postverbal subject is excluded while the complement CP selected by a factive verb like *regretter* is always a subjunctive clause. Note that the complement clause has an independent truth value. I will assume that in clauses of this type there is, exceptionally, a semantic Tense feature in C, so that their T has a strong nominative Case-feature.

### 4. *Conclusion*

I have shown that the postverbal subject construction in subjunctive clauses is not the same phenomenon as subject inversion in *wh*-clauses. It is closer to the existential *there* construction in English. Following the ideas of Chomsky (1995), I have proposed that [Spec, AgrS] is occupied by a silent expletive *pro* with no features other than the categorial D feature, which satisfies the EPP,

while the subject DP is in object position. Moving the Case-feature of the postverbal subject ensures checking of the Case-feature of T (covert Case checking).

To account for the fact that the postverbal subject may be definite, I have proposed that the associate DP of silent *pro* is interpreted as referring to hearer-new information. Definite postverbal subjects can represent hearer-new information if they get main stress, thus qualifying as focus. The fact that the definite postverbal subject has to qualify as focus accounts for the strong constraints on its occurrence. The optionality for the subject to be in preverbal position is due to the absence of a feature in the C of most subjunctive clauses, which makes the nominative Case-feature in T weak. Overt movement of the subject to [Spec, AgrS] is optional in that case.

#### REFERENCES

- Belletti, Adriana. 1988. "The case of unaccusatives". *Linguistic Inquiry* 14.1-34.
- Burzio, Luigi 1986. *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Cinque, Guglielmo. 1993. "A null theory of phrase and compound stress". *Linguistic Inquiry* 24.239-297.
- Déprez, Viviane. 1990. "Two ways of moving the verb in French". *MIT Working Papers in Linguistics* 13.47-85.
- Hoekstra, Teun & René Mulder. 1990. "Unergatives as copular verbs; locational and existential predication". *The Linguistic Review* 7.1-79.
- Kampers-Manhe, Brigitte. 1992. "The French subjunctive and the ECP". In *Linguistics in the Netherlands*, ed. by Reineke Bok-Bennema & Roeland van Hout, 137-148. Amsterdam: John Benjamins.
- Kayne, Richard S. & Jean-Yves Pollock. 1978. "Stylistic inversion, successive cyclicity, and move NP in French". *Linguistic Inquiry* 9.4.595-621.
- Perlmutter, David. 1978. "Impersonal passives and the Unaccusative Hypothesis". *Berkeley Linguistics Society* 4.157-189. Berkeley: Berkeley Linguistics Society.
- Pollock, Jean-Yves. 1983. "Accord, chaînes impersonnelles et variables". *Linguisticae Investigationes* 8.131-181.
- \_\_\_\_\_. 1986. "Sur la syntaxe de *en* et le paramètre du sujet nul". In *La grammaire modulaire*, ed. by Mitsou Ronat & Daniel Couquaux, 111-146. Paris: Minuit.
- Ward, Gregory & Betty J. Birner. 1995. *Definiteness and the English Existential*. *Language* 71.722-742.

- Wind, Maarten de. 1995. *Inversion in French*. Ph.D. dissertation, Groningen University.
- Zubizarreta, Maria Luisa. 1994. "Some prosodically motivated syntactic operations". In *Paths Towards Universal Grammar. Studies in Honor of Richard S. Kayne*, ed. by Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Raffaella Zanuttini, 473-485. Washington, D.C.: Georgetown University Press.



# MOOD PHRASE, CASE CHECKING AND OBVIATION

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## **0. Introduction**

In the GB approach to binding, there is an implicit link between Case assignment and computation of binding domains, established via the notion of government: the binding domain of  $\alpha$  is the minimal domain in which  $\alpha$  is governed (and which contains a subject), and government is the necessary relation for Case assignment to take place. If government as a theoretical concept is eliminated from the theoretical construct, as proposed by Chomsky (1995) as part of the Minimalist Program, then clearly a reexamination of how the grammar computes binding domains is in order.

In this paper I will suggest an approach to defining binding domains which takes as its point of departure the assumption that there is in fact a correlation between the domain of Case assignment (or Case checking) and the binding domain. The empirical basis of the paper is the well-known referential properties of pronominal subjunctive subjects in the Romance languages, a topic of intensive investigation in GB syntax precisely because they seem to be the most clear-cut case of an apparent divergence between domain of Case assignment and binding domain: for the majority of the Romance languages, the subjunctive subject receives nominative Case (or is Case checked) in its own clause, but has as its binding domain the superordinate clause. One approach was to define the binding domain in terms of temporal independence; the subjunctive clause, supposedly lacking independent tense in spite of its overt tense morphology, could not constitute a binding domain (see Johnson 1984, Piccolo 1985 and others). The other approach, which I took in my own work (Kempchinsky 1990), was to extend the binding domain of the subject via LF movement of its governor, the subjunctive Infl, to the subjunctive Comp in order to identify the subjunctive modal operator. What I hope to do in the

analysis sketched out in this paper is to synthesize aspects of both these approaches.

The essence of the analysis is as follows. Subjunctive complements to certain matrix predicates do not project a CP level, but rather only MP (Mood Phrase). The subjunctive subject has its nominative Case checked by T, but this Case checking must be ultimately licensed by a C° node (Koizumi 1995, Watanabe 1993). Hence the binding domain of the subject will be defined as the CP in which its nominative Case checking is licensed. The possibility of a higher C° node licensing the Case checking of a lower T will be argued to arise from the temporal dependency between the two clauses.

The obviation facts of subjunctive clauses are familiar. For the core set of cases, the generalization is that a pronominal subjunctive subject cannot be bound by a DP in the higher clause if the subjunctive clause is a complement to a volitional predicate (*querer* 'want', *vouloir* 'want', etc.), and the higher DP is the subject of its clause. Pronominal subjunctive subjects can be bound by a DP in the higher clause if the subjunctive clause is a complement to a (negated) epistemic or factive- emotive predicate, or if the higher DP is the object of its clause. There is some cross-linguistic variation with respect to obviation in factive- emotive complements which I will not be able to address here.

### 1. *The subjunctive operator and the nature of Comp*

The Infl-to-Comp approach to subjunctive obviation is based on the idea that Comp in at least some subjunctive clauses is fundamentally different from Comp in other complement clauses. This difference is lexically marked in some languages such as Romanian and Russian, as shown in (1) and (2).

- (1) a. *Ana vrea ca eu să merg la Bucharest.*  
Lit. 'Ana wants that I SUBJ-PRT go to Bucharest.'
- b. *Ana crede că eu merg la Bucharest.*  
Lit. 'Ana believes that I go to Bucharest.'
- (2) a. *Volodja xočet čtoby Nadja pocelovala Feliksa.*  
Lit. 'Volodya wants that Nadja kiss Felix.'
- b. *Volodja skazal čto Nadja pocelovala Feliksa.*  
'Volodya said that Nadya kissed Felix.'

(Avrutin & Babyonyshev 1997:230-231)

Subjunctive Comp was proposed to be the site of a covert subjunctive operator which could be overtly identified either by the morphological form of the complementizer itself, or, in languages where the shape of the complementizer

did not differ, by the subjunctive morphology on the verb. This analysis in effect attributes to the subjunctive Comp two functions: as in the general case, it serves as a marker of subordination, and it also serves as a marker of modality. There are, however, a number of empirical and theoretical arguments against this conflation.

First of all, there are languages in which the two functions are clearly carried by separate morphemes, as in the Romanian example of (1) above and the Piedmontese example in (3) below (cited in Giorgi & Pianesi 1996):

- (3) *A venta che Majo ch'a mangia pi'tant.*  
 'It is necessary that Majo eat more.'

The existence of overt subjunctive markers such as the Romanian particle *să* or the second instantiation of *che* in (3) argue for a separate functional projection headed by the subjunctive marker. Thus, for example, Rivero (1994) proposes that there is a functional projection MP (Modal Phrase) located between CP and TP; in a language such as Romanian this MP is overtly headed by the subjunctive particle.

Secondly, various theoretical arguments for separating the subordinating function of Comp from the modality function have been advanced, as for example by Bhatt & Yoon (1991), who examine the syntax of subordinating complementizers and *wh*-modality operators in a number of languages. Along similar lines, Giorgi & Pianesi (1996) propose that subjunctive clauses to non-factive verbs are headed by Mood Phrase but not Comp. There is a separate line of inquiry which also leads to this conclusion, namely, research focusing on the relationship between *s*-selection and *c*-selection for different types of clausal complements. Ormazabal (1995) proposes that a clausal complement projects to the CP level, and hence is headed by a complementizer (overt or null), when the clause is of the semantic category PROPOSITION; correspondingly, only IP is projected when the semantic category of the clause is EVENTUALITY, as determined by the matrix predicate which selects the clause. Concretely, he proposes that C is a type of two-place predicate, whose internal argument is the IP and whose external argument denotes the mapping from eventualities to truth values. By this story, of the predicates which select subjunctive complements, volitional predicates should therefore *c*-select IP rather than CP, while (negated) epistemic predicates and factive-emotive predicates should *c*-select CP.<sup>1</sup>

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<sup>1</sup> Rochette (1988) reaches very similar conclusions.

The account proposed here draws very much on the spirit of Giorgi & Pianesi's proposal as well as on the insights of the work on the s-selection to c-selection relation. My fundamental assumptions are as follows:

- (a) a functional head position may be projected if
  - (i) the lexical item corresponding to the F head is present in the array (where a lexical item may be phonologically null), or if
  - (ii) there is an element in the array which must appear in the Spec position of that F head for licensing purposes.
 Otherwise the functional category is not projected (Giorgi & Pianesi 1996);
- (b) when the matrix predicate semantically selects PROPOSITION, a CP must be projected;
- (c) when the matrix predicate semantically selects EVENTUALITY, a CP is not projected *unless* there is a lexical C° head in the array, in which case the C° lacks an external argument;
- (d) volitional predicates, as intensional predicates, s-select EVENTUALITY in a set of possible worlds, which is mapped to the syntax as a Mood Phrase (Farkas 1993, Kempchinsky 1995);
- (e) Mood Phrase (MP) is characterized by a modal operator in its Spec position which must be identified by Spec-Head agreement. This last assumption entails that the head position of the MP must be occupied at some point in the derivation by the relevant morphological marker of subjunctive.

Consider first subjunctive complements in Spanish to factive-emotive and negated epistemic predicates. Because these predicates s-select PROPOSITIONS, their clausal complement must be of the category CP, as illustrated in the examples of (4). I will return below to the question of the position of the subjunctive subject.

- (4) a. *Lamentamos* [<sub>CP</sub> *que* [<sub>MP</sub> OP [<sub>M</sub> *viva*] [<sub>TP</sub> t<sub>V+T</sub> [<sub>VP</sub> t<sub>V</sub> *aquí*]]]]  
 'We regret that s/he lives here.'
- b. *No creo* [<sub>CP</sub> *que* [<sub>MP</sub> OP [<sub>M</sub> *viva*] [<sub>TP</sub> t<sub>V+T</sub> [<sub>VP</sub> t<sub>V</sub> *aquí*]]]]  
 'I don't believe that s/he lives here.'

In contrast, the clausal complement to the volitional predicate *querer* will project only to MP, as shown in (5).

- (5) *Quiero* [<sub>MP</sub> OP [<sub>M</sub> *que*] [<sub>TP</sub> [<sub>T</sub> *viva*] [<sub>VP</sub> t<sub>V</sub> *aquí*]]]  
 Lit. 'I want that (s/he) live here.'

An exception to the “less than CP” status of volitional subjunctive clauses is provided by Romanian. Romanian, in effect, doubly marks the subjunctive. When the subjunctive complementizer *ca* is present in the array, the CP level is projected, following assumption (c); however, it is a syncretic category in that it combines both CP and a second higher MP, as shown in (6).

- (6) *Vreau* [<sub>CMF</sub> *ca* [<sub>MP</sub> *Ana*<sub>i</sub> [<sub>MP</sub> OP [<sub>M</sub> *să*] [<sub>TP</sub> *vină* [<sub>VP</sub> *t<sub>i</sub>* *t<sub>v</sub>* ]]]]]]  
 Lit. ‘I want that Ana SUBJ-PRT come.’

In (6) the subjunctive particle *să* is the head of a lower MP, which I suggest is a Modal Phrase rather than Mood Phrase, thus unifying true subjunctive clauses with other occurrences of *să* in the grammar of Romanian (for example, in future clauses). The rationale for proposing the syncretic C/MP projection in (6) is that the subjunctive clause acts like a CP in terms of Case licensing and binding, as we will see below, but like an MP in terms of semantic properties.

It will be noted that in these structures there is no AgrS projection. Following Chomsky (1995), I assume that Agr exists as a separate projection only when there is overt morphosyntactic evidence for it, i.e., when it is strong and forces overt movement to a position clearly distinct from [Spec, TP]. Since there is no [Spec, AgrS] position, the position for nominative Case checking is [Spec, TP]. Overt movement of the subject to this position would therefore in the case of the subjunctive complements in (4a) and (4b) yield the order complementizer—verb—subject. This of course is a possible order in Spanish, although not the only one. However, it is highly restricted in Italian and generally not possible at all in French. There are a number of possible ways to derive the order complementizer—subject—verb. One approach would be to assume that the subject adjoins to MP, which, following a suggestion by Rivero (1994), may be for purposes of predication. This would yield a representation such as (7).

- (7) *No creo* [<sub>CP</sub> *que* [<sub>MP</sub> *los niños*<sub>i</sub> [<sub>MP</sub> OP [<sub>M</sub> *vivan*] [<sub>TP</sub> *t<sub>v+T</sub>* [<sub>VP</sub> *t<sub>i</sub>* *t<sub>v</sub>* *aquí*]]]]]  
 ‘I don’t believe that the children live here.’

Alternatively, it could be the case that nominative Case is checked in [Spec, MP] when MP is projected, the idea being that within the MP there are in fact two Spec positions, one of which is occupied by the modal operator and the other of which is a Case-checking position for the subject. Stowell (1996) proposes something along these lines for TP; he argues that TP contains both a Spec position for its own external argument, which denotes the Reference

Time, and a nonthematic Spec position for Case checking of the subject DP. In the next section, however, I will provide an argument against the double Spec approach.

## 2. Mood Phrase and complementizer deletion

Empirical support for the proposed clausal structures in (5) and (6) comes from an examination of the phenomenon of complementizer deletion. Uriagereka (1995) shows that complementizer deletion in subjunctive complements to volitional predicates vs. factive predicates has different properties. In the former the embedded subjunctive verb must be adjacent to the matrix verb, allowing no intervening material except clitics (see [8] vs. [9]).

- (8) a. *Quiere (\*a sus hijos) les trate bien la vida.*  
'S/he wants life to treat them (his/her children) well.'
- b. *Quiere (\*sus hijos) sean felices en la vida.*  
Lit. 'S/he wants (her/his children) be happy in life.'
- (9) a. *Lamentamos (a tu hermano) le quitaran el trabajo.*  
'We regret that they took away his/(your brother's) job.'
- b. *Lamentamos (tu hermano) haya perdido su trabajo.*  
'We regret (your brother) has lost his job.'

In this respect subjunctive complements to factive predicates behave exactly like indicative complements which also allow complementizer deletion for some speakers.

- (10) *Dijo (a su confesor) le había de contar tales cosas.*  
'S/he said (to his confessor) s/he had to tell him such things.'

By the analysis offered here, these examples have the structures in (11):

- (11) a. *Quiere* [<sub>MP</sub> [<sub>les trate</sub>]<sub>i</sub> [<sub>TP</sub> [<sub>pro</sub>] <sub>t<sub>i</sub></sub> [<sub>VP</sub> <sub>t<sub>v</sub></sub> *bien la vida*]]]]
- b. *Lamentamos* [<sub>CP</sub> [<sub>C</sub> Ø] [<sub>MP</sub> [<sub>le quitaran</sub>]<sub>i</sub> [<sub>TP</sub> [<sub>pro</sub>] <sub>t<sub>i</sub></sub> [<sub>VP</sub> <sub>t<sub>v</sub></sub> *el trabajo*]]]]]
- c. *Dijo* [<sub>CP</sub> [<sub>C</sub> Ø] [<sub>TP</sub> *le había de contar tales cosas*]]]

In (11b) and (11c), the C° position is occupied by a phonologically null complementizer; otherwise the structures are identical to what obtains when *que* is overtly present. The derivation of (11a) differs however. Since the subjunctive complementizer *que* is not present, the subjunctive verb itself must move to the M° position to identify the operator in [Spec, MP].

It will be noted that this account is somewhat similar to Giorgi & Pianesi's (1996) account of complementizer deletion in Italian subjunctive complements. For them, "complementizer deletion" is the projection of the syncretic category Mood/AgrP, with the subject checking its Case in Spec, while subjunctive clauses with overt complementizers have separate Mood and Agr projections. However, if nominative Case can be checked in [Spec, MP], either because it is a syncretic category with Agr or because it may contain two Spec positions, one would expect the order matrix verb—subjunctive subject—embedded verb to be possible in Spanish volitional subjunctives without *que*. But this, we have seen, is not possible. If on the other hand the subjunctive subject precedes a verb which has moved through the T° position to the M° position via adjunction to MP, as suggested above, then the facts follow, on the usual assumption that adjunction to maximal projections which are arguments is prohibited. MP itself is the clausal complement of the verb only in the case of volitional subjunctives, and therefore only in that case will adjunction to MP be disallowed.

Thus, the data from the complementizer deletion cases give empirical support for the clausal structures proposed thus far. I now turn to the implications for binding theory.

### 3. *Case checking, binding, and tense*

Koizumi (1995), following earlier work by Watanabe (1993), proposes a three-layered system of Case checking according to which Case checking of a DP consists of three steps. For accusative Case, the Case feature of the object DP is copied on to AgrO, the Case feature of the V is copied on to Agr O, and then this pair is copied on to T, which is the ultimate licenser of objective Case. For nominative Case, the subject DP and T copy their matching Case features on to T, which then copies its pair of Case feature on C, the ultimate licenser of nominative Case.

Suppose that it is the case that the binding domain of a DP argument  $\alpha$  is the domain in which Case checking of  $\alpha$  is licensed. Then the implications of this approach to Case licensing for the analysis here are straightforward. If the subjunctive clause lacks CP, as I have argued to be the case for volitional subjunctive complements, then the domain in which the nominative Case checking subjunctive subject is ultimately licensed will be the superordinate C, accounting straightforwardly for the contrast in the binding properties of subjects in volitional complements vs. those of subjects in other subjunctive complements. Only when the volitional complement has a lexical C° distinct from the identi-

fier of the subjunctive operator, as in Romanian, will the subjunctive subject be free to corefer outside of its clause.

That the domain of Case checking of the nominative subject is crucial in determining its binding domain is given empirical support from Russian. Avrutin & Babyonyshev (1997) show that pronominal subjects of volitional subjunctive complements display the same obviation effects familiar from Romance, but only for nominative subjects. If the subject bears dative Case, coreference with the matrix subject is permissible, as shown in (12).

- (12) a. *Volodja<sub>i</sub> xočet čtoby on<sub>j/\*i</sub> počeloval Nadju*  
 ‘Volodya wants him to kiss Nadju.’
- b. *Volodja<sub>i</sub> xočet čtoby emu<sub>i</sub> bylo veselo.*  
 Volodja wants that him-DAT was fun  
 ‘Volodja wants to have fun.’

Avrutin & Babyonyshev’s own analysis of subjunctive obviation draws on the role of nominative Case licensing, but along different lines than what is being proposed here.

In Koizumi’s story of Case licensing, Case licensing by a higher potential Case licenser is blocked if there is an intervening head with its own independent Case feature. Thus, for example, restructuring-type processes cannot apply so as to allow T in the matrix clause to license objective Case checking of a lower object if the matrix V has its own independent Case feature. The situation sketched here is slightly different in that the initial Case checking of the subjunctive clause is accomplished by T in that clause. Nevertheless, on principled grounds one would like to limit the extent to which Case licensing can extend into a higher clause. My proposal here is that the subjunctive T is accessible to Case licensing by the matrix C via the temporal dependency which holds between the two tense nodes.

Stowell (1996) proposes an analysis of the syntax of tense according to which TENSE is a two-place predicate which takes arguments of the category ZP (Zeit Phrase). The external argument ZP is located in [Spec, TP] and denotes the Reference Time of the event argument of the verb, while the internal argument ZP is the complement of T and in turn takes VP as its complement. The head of this ZP binds the event argument of the verb itself, which Stowell assumes to be the verb’s true external argument, located in Spec of the highest VP shell. Following Miguel (1990), I will assume that the event argument is located in AspectP above VP, although in the analysis below nothing crucial hinges on this choice.

In matrix clauses with past tense morphology, the external argument ZP of TENSE is equivalent to Speech Time, yielding the reading that Speech Time is after the event time of the verb.

- (13) [<sub>TP</sub> ZP [<sub>T</sub> PAST<sub>i</sub> [<sub>ZP</sub> Z<sub>i</sub> [<sub>AspP</sub> e<sub>i</sub> VP ]]]]

In complement clauses the external argument of TENSE, represented as PRO-ZP, must be controlled, and its controller is the closest c-commanding ZP. This is the event argument of the matrix verb, yielding the reading that Speech Time is after the Event Time of the matrix verb, which in turn is after the Event Time of the embedded verb. That is, the interpretation is a shifted past reading, which is the only reading possible for event verbs.

Past tense stative verbs embedded under a past matrix have, as is well known, two interpretations: the shifted reading and the simultaneous reading. Stowell proposes that the simultaneous reading is obtained as follows: tense morphology originates in the head of the ZP complement to T and then moves to T<sup>o</sup>, which is otherwise null (the essence of “sequence of tense”). Morphological *past*, as a past polarity item, must be in the scope of a past polarity trigger. If the lower clause itself is “tenseless”, then an embedded morphological *past* is licensed by virtue of being in the scope of a PAST tense in the higher clause, yielding the simultaneous reading. The shifted reading is obtained as before, with the morphological *past* of the lower clause licensed by PAST tense in the same clause.

A frequent claim in the literature is that subjunctive clauses differ fundamentally from indicative clauses in that the former are essentially “tenseless”, as manifested by the strong sequence of tense effects which hold in subjunctive clauses. If Stowell’s approach to simultaneous past interpretations is right, then “tenselessness” cannot be a distinguishing feature of only subjunctive clauses. Further, I have argued elsewhere (Kempchinsky 1986, 1990) that subjunctive clauses in at least some languages cannot be characterized as tenseless, in the sense that a present tense subjunctive clause embedded under a past matrix must take as its reference time the moment of speaking, not the Event Time of the matrix verb.

There is, however, another temporal difference between indicative and (volitional) subjunctive clauses. The subjunctive modal operator is of course a future-shifting operator which, like other such operators, shifts the Event Time of the verb to the future (and which may also shift the Event Time of present tense indicative verbs embedded under it to the future as well, thus distinguishing it from PAST and PRESENT). Crucially, this future is always minimally future with respect to the time of the event of the matrix verb; i.e., what is

unavailable is a “shifted past”-type reading in which the *past* morpheme of a past subjunctive clause denotes a time which is before the time of the event of the matrix verb, and then the modal operator shifts forward from this time.

- (14) *Ana dijo (el viernes) que la carta llegó (el miércoles).*  
 ‘Ana said (on Friday) that the letter arrived (on Wednesday).’
- (15) # *Ana quería el viernes que la carta llegara el miércoles.*  
 ‘Ana wanted on Friday that the letter arrive (SUBJ) on Wednesday.’

(15) is anomalous on the interpretation that we are speaking of Wednesday and Friday of the same week.

I would like to propose the following account of the temporal syntax of volitional subjunctive complements. The tense head of the subjunctive clause contains a temporal polarity item (*past* or *present*), which must therefore be bound by a higher temporal expression, as in Stowell’s approach. The crucial difference in the temporal architecture of volitional subjunctives vs. other embedded clauses, I suggest, lies in the lack of an external argument for TENSE. TENSE in subjunctive clauses is “defective” in that it does not have its own Reference Time at all (as opposed to having a PRO-ZP Reference Time which is controlled by a higher temporal entity). It is the lack of this external temporal argument which underlies the absence of a shifted-type reading.

The T° node in the subjunctive clause dominating the temporal polarity item must therefore be able to access the Reference Time of the matrix clause, i.e., the external ZP argument of the matrix TENSE. Simultaneously, following a proposal by Avrutin & Babyonyshev (1997), the subjunctive modal operator must move out of the scope of the matrix event variable. I suggest that this is achieved via LF-adjunction of the subjunctive clause (that is, the MP), to the matrix AspP, yielding the configuration in (16).

- (16) [<sub>TP</sub> ZP [<sub>T</sub> PAST<sub>i</sub>] [<sub>AspP</sub> [<sub>MP</sub> OP [<sub>TP</sub> [<sub>T</sub> *past*<sub>i</sub>] [<sub>AspP</sub> ev VP ]]]]  
 [<sub>AspP</sub> ev VP ]]]

In (16) the *past* polarity item in the subjunctive clause bears the same index as the PAST node in the matrix clause, i.e., it picks out the same time relative to the Reference Time denoted by the external PRO-ZP in the upper [Spec, TP] as PAST in the matrix clause. I am following Stowell in treating TENSE and its temporal arguments as referential in nature; however, I assume that modal operators are of a different nature: rather than picking out times, they denote, if anything, possible worlds, which may be intensional or extensional. Thus

although intuitively the “time” of the event denoted by the subjunctive verb is linked to the future moment to which the modal operator shifts, it is not in fact bound by that operator in the way that true temporal expressions bind event arguments.

The structure in (16) gives two desirable results. First of all, the T node in the subjunctive clause is “closer” to the C° node dominating the matrix T°, which allows that C node to license the nominative Case checking. Secondly, the subjunctive clause is c-commanded only by the subject of the matrix clause, so only with the subject will obviation effects obtain.

The analysis sketched here thus allows us to draw on the important insights of earlier analyses of the subjunctive obviation facts, while also suggesting an approach to the definition of binding domains which does not appeal to the notion of government but which retains all of the empirical coverage of earlier definitions. A number of problems remain which I have not been able to touch upon here, such as the extension of the analysis to obviation effects observed in factive- emotive complements in some dialects of Spanish, certain adverbial subjunctive clauses, and subjunctive complements to derived nominals of volitional predicates. These will be addressed in future work.

## REFERENCES

- Avrutin, Sergei & Maria Babyonyshev. 1997. “Obviation in subjunctive clauses and AGR: Evidence from Russian”. *Natural Language and Linguistic Theory* 15.229-262.
- Bhatt, Rakesh & James Yoon. 1991. “On the composition of COMP and parameters of V2”. *West Coast Conference on Formal Linguistics* 10.41-52.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Farkas, Donka. 1993. “On the semantics of subjunctive complements”. In *Romance Languages and Modern Linguistic Theory*, ed. by Paul Hirschbühler & Konrad Koerner, 69-104. Amsterdam: John Benjamins.
- Giorgi, Alessandra & Fabio Pianesi. 1996. “Verb movement in Italian and syncretic categories”. *Probus* 8.137-160.
- Johnson, Kyle. 1984. “Some notes on binding and subjunctive clauses in Icelandic”. Ms., MIT.
- Kempchinsky, Paula. 1986. *Romance Subjunctive Clauses and Logical Form*. Ph.D. dissertation, University of California, Los Angeles.
- \_\_\_\_\_. 1990. “Más sobre el efecto de referencia disjunta del subjuntivo”. In *Indicativo y subjuntivo*, ed. by Ignacio Bosque, 234-258. Madrid: Taurus.

- \_\_\_\_\_. 1995. "From the lexicon to the syntax: The problem of subjunctive clauses". In *Evolution and Revolution in Linguistic Theory: Studies in Honor of Carlos Otero*, ed. by Héctor Campos & Paula Kempchinsky, 228-250. Washington, D.C.: Georgetown University Press.
- Koizumi, Masatoshi. 1995. *Phrase Structure in Minimalist Syntax*. Ph.D. dissertation, MIT.
- Miguel, Elena de. 1990. *El aspecto verbal en una gramática generativa del español*. Ph.D. dissertation, Universidad Autónoma de Madrid.
- Ormazabal, Javier. 1995. *The Syntax of Complementation: On the Connection Between Syntactic Structure and Selection*. Ph.D. dissertation, University of Connecticut.
- Picallo, Carme. 1985. *Opaque Domains*. Ph.D. dissertation, City University of New York.
- Rivero, María-Luisa. 1994. "Clause structure and V-movement in the languages of the Balkans". *Natural Language and Linguistic Theory* 12.63-120.
- Rochette, Anne. 1988. *Semantic and Syntactic Aspects of Romance Sentential Complementation*. Ph.D. dissertation, MIT.
- Stowell, Tim. 1996. "The phrase structure of Tense". In *Phrase Structure and the Lexicon*, ed. by Johan Rooryck & Laurie Zaring, 277-291. Dordrecht: Kluwer Academic Press.
- Uriagereka, Juan. 1995. "Parataxis". Paper given at the Georgetown University Round Table Pre-session on Spanish Linguistics.
- Watanabe, Akira. 1993. *Agr-based Case Theory and its Interaction with the A-bar System*. Ph.D. dissertation, MIT.

**SYLLABLE STRUCTURE  
AND SONORITY SEQUENCING  
EVIDENCE FROM EMILIAN\***

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**0. *Sonority***

The role of the sonority hierarchy in determining the organization of segments into syllables has long been recognized in linguistic research, at least since Whitney (1874).<sup>1</sup> Albeit appealing, the notion is much-debated: the list of problems includes, among others, the universal vs. language-specific nature of the hierarchy and its substantive motivation (articulatory, acoustic and/or perceptual). In this paper I will concentrate on one of the controversial issues concerning the sonority hierarchy, viz. the status of the Sonority Sequencing Generalization (henceforth SSG): “In any syllable, there is a segment constituting a sonority peak that is preceded and/or followed by a sequence of segments with progressively decreasing sonority values” (Selkirk 1984:116). The specific question which will be addressed here is the following: “[I]s the Sonority Sequencing Generalization an absolute constraint on representations, or simply a preference condition expressing universal markedness values?” (Blevins 1995:210-211).

I argue in favor of the latter option, and try to demonstrate its superiority over a theory imposing absolute sonority-based constraints on the structure of phonological representations. This conclusion is motivated by empirical evidence drawn from Emilian dialects.

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<sup>1</sup> See Ohala & Kawasaki 1984, Clements 1990, Dogil & Luschützky 1990 for discussion.

### 1. *The problem: syllable structure and the SSG in Emilian*

The Italo-Romance varieties spoken in Emilia-Romagna are well known among Romance scholars for being fairly rich in consonant clusters. Some examples from Bolognese are listed in (1).

- (1) Bolognese (Coco 1970)
- a. Word initial: [zbdɛ:l] 'hospital', [tstɪ'moni] 'witness',  
[ʃkar'er] 'to talk', [ʃdɔ:t] 'eighteen',  
[ʃgrɔʃja] 'misfortune', [kɲos] 's/he knows',  
[ptɔŋ] 'button', [vzɛŋ] 'near'.
  - b. Word internal: [mɑ:ndgɔ] 'sleeve', [zdɔŋdɪɔ] 's/he swings',  
[dmɔŋdɔ] 'Sunday', [ar'kɲoser] 'to know',  
[a'sptɛ:] 'to wait', [forbza] 'scissors'.
  - c. Word final: [tɔvd] 'lukewarm', [tɔ:zɔ] 'poisons', [saɪ'va:zɔ]  
'wild', [pɔ:rdɔ] 'porch', [pɔŋdɔ] 'mice',  
[sɔŋgɔ] 'blood', [gambɔ] 'elbow'.

This situation, while rather unusual for Romance, is reminiscent of Slavic languages, as is apparent from a comparison with the Polish examples in (2).<sup>2</sup>

- (2) Polish (Rubach & Booij 1990:122ff)
- a. Word initial: *czkawka* [ʃk] 'hiccup', *szdura* 'nonsense',  
*rtęć* 'mercury', *lwy* 'lions', *kpić* 'joke'.
  - b. Word internal: *spulchnić* 'to make soft', *zmiękczyć* 'soften',  
*siebrny* 'silver' (adj.).
  - c. Word final: *siostr* 'sister' (gen. pl.), *babsk* 'witch' (gen. pl.),  
*kopć* 'smoke' (imper.).

The present discussion will be limited to the syllabification of word-initial consonant clusters, and in particular to the empirical problem of establishing whether or not the Bolognese clusters in (1a) are syllabified as onsets. If the

<sup>2</sup> The parallelism extends to diachrony, as in both Slavic and Emilian most of the consonant clusters that violate the SSG have arisen through vowel deletion — yer deletion in Slavic, syncope of pretonic vowels (see [10]-[11] below) and loss of final vowels in Emilian (see Rohlfs 1966:169-171). Some exceptional cases are found in Polish: e.g., *rtęć* < *tręć* 'mercury', which originated via metathesis affecting a previously "better" initial cluster (see Dziubalska-Kolaczyk 1995:80). In Emilian, as far as I know, metathesis has sometimes affected clusters which had arisen via syncope and were already "bad" with respect to the SSG: e.g., [ʃdɔ:t] 'eighteen', from a previous stage comparable to Italian *diciotto*.

SSG is interpreted as an absolute constraint on syllabification, the answer follows straightforwardly: since most of the clusters in (1a) do not comply with the SSG, they are not onsets. This is actually what is currently proposed for Polish. According to Rubach & Booij, “[t]he consonant at an edge of a word [...] does not count from the point of view of the SSG” (1990:122). Consequently, in each of the Polish words in (2a), the initial consonant cluster is not exhaustively syllabified as an onset. In Rubach (1996:79), a process of Initial Adjunction is assumed, which “adjoin[s] word-initial \*C to the phonological word node” (where \*C is a consonant which is not linked to the syllable node).

Following some background discussion in Sections 2 and 3.1, I examine in Sections 3.2. and 4 whether an analysis along the same lines is tenable in the case of Emilian.

## 2. *A litmus test for syllable structure*

According to a further, widely adopted criterion for onsethood, a cluster is analyzed as an onset if it behaves like onsets with respect to some rule of the language (see Kaye et al. 1990:204). A clear example of the application of this rule-based criterion is provided by the selection of the masculine singular definite article in Standard Italian (see Camilli 1913, Davis 1990, Marotta 1993, among others):

- (3) a. /il/: *il pane* ‘the bread’, *il piano* ‘the piano’,  
           *il premio* ‘the prize’, *il plettro* ‘the plectrum’.
- b. /lo/: *lo sparo* ‘the shot’, *lo [f:]ame* ‘the swarm’,  
           *lo bdellio* ‘the bdellium’, *lo pterodattilo* ‘the pterodactyl’.

The data in (3a-b) can be analyzed as follows: the allomorph /il/ is selected before word-initial onsets, whereas the allomorph /lo/ is selected in front of geminates or other clusters which are not entirely syllabified as onsets. This generalization is perfectly in keeping with syllabification in word-internal position: word-internally, syllable-sensitive processes such as open syllable vowel lengthening and diphthongization (e.g., *p[a:]ne* vs. *p[a]sta*, *v[je:]ne* ‘comes’ vs. *r[ε]sta* ‘remains’) apply before the same consonant clusters which trigger /il/-selection when occurring word-initially (e.g., *c[a:]pra* ‘goat’, *d[je:]tro* ‘behind’). Clearly, the SSG-based criterion and the rule-based criterion for onsethood match perfectly here, since we find that exactly the same word-initial clusters fail to comply with the SSG, *and* do not behave like onsets phonologically (with respect to *il/lo* selection).

Suppose, however, that the two criteria were to yield contradictory results for a given language. In other words, suppose that we find that, in a given dialect, (at least some) clusters not obeying the SSG yet behave as true onsets with respect to some syllable-driven rule applying in the language. This finding would pose a problem for the SSG-based criterion, if formulated in terms of an absolute constraint on phonological representations. If, on the contrary, sonority-based generalizations regarding syllabification are stated in terms of preferences, the problem vanishes. One such statement, concerning onset structure, is Vennemann's Head Law (where *head* is equal to *onset* in the present context):

- (4) *Head Law*: A syllable head is the more preferred: (a) the closer the number of speech sounds in the head is to one, (b) the greater the Consonantal Strength value of its onset [= its first segment], and (c) the more sharply the Consonantal Strength drops from the onset toward the Consonantal Strength of the following syllable nucleus. (Vennemann 1988:13)

Under a theory including (4), predictions concerning syllable structure will be implicational in nature. This will allow for languages to choose different syllabification options, provided that they respect the implicational generalizations summarized in (4).<sup>3</sup> Which language chooses which option should be decided by considering positive evidence provided by syllable-sensitive rules, along the lines illustrated in (3) for standard Italian.

### 3. Empirical evidence

In this section, I will discuss empirical evidence from Romance militating in favor of the parametric view of syllable structure exemplified in (4). I will briefly mention some facts concerning French (re)syllabification (Section 3.1), and then return to Emilian (Section 3.2), in order to conclude the discussion on the analysis of onset structure started in (1a) above (Section 4).

#### 3.1 Fast-speed resyllabification in French

An example of the approach advocated here is provided by Laeuffer's (1991) analysis of fast-speed resyllabification in French. As she convincingly argues, a binary contrast between clusters obeying vs. not obeying the SSG does not account for the data provided by resyllabification processes found in

<sup>3</sup> There is a non-negligible difference between the conception of syllable structure exemplified in (4) and alternative theories formulated in terms of relative markedness. The superiority of the former approach over the latter is demonstrated in Vennemann (1986:49ff).

French. A finer-graded hierarchy for onsethood must be established instead, as shown in (5).

- (5)  $C_1C_2$  complying with the SSG [SD = sonority distance]
- |   |                      |
|---|----------------------|
| a. actually occurring onsets (sufficient SD): | <i>kjV, krV, klV</i> |
| b. absent underlyingly (insufficient SD):     | <i>ksV, mrV, nlV</i> |
- $C_1C_2$  not complying with the SSG
- |                        |                      |
|------------------------|----------------------|
| c. sonority plateaux:  | <i>gbV, mnV, nmV</i> |
| d. sonority reversals: | <i>stV, ltV</i>      |

As Laeuffer shows, there is strong evidence supporting the claim that, when arising postlexically through schwa-deletion, clusters (5b-c) are resyllabified as onsets whereas clusters in (5d) never are. One piece of evidence for this resyllabification comes from a well-known syllable-driven phenomenon of French, viz. the distribution of lax and tense mid vowels.<sup>4</sup>

- |                                 |                             |
|---------------------------------|-----------------------------|
| (6) a. [e] in open syllable     | b. [ɛ] in closed syllable   |
| <i>r[e]aliser</i> 'to realize'  | <i>r[ɛ]ster</i> 'to remain' |
| <i>r[e]sister</i> 'to resist'   | <i>r[ɛ]spect</i> 'respect'  |
| <i>r[e]tracter</i> 'to retract' | <i>pr[ɛ]sque</i> 'almost'   |

Resyllabification of the cluster types (5b-c) is evidenced by the application of tensing in (7b):<sup>5</sup>

- |                           |                       |                   |               |
|---------------------------|-----------------------|-------------------|---------------|
| (7) a. <i>slow speech</i> | b. <i>fast speech</i> |                   |               |
| [mɛd.sɛ̃]                 | [mɛ.tsɛ̃]             | <i>médecin</i>    | 'doctor'      |
| [ɛm.ɔd]                   | [ɛ.mɔd]               | <i>émeraude</i>   | 'emerald'     |
| [krɛn.lɛ]                 | [krɛ.nlɛ]             | <i>crénelé</i>    | 'crenelated'  |
| [ɛt.nɔlɔg]                | [ɛ.tnɔlɔg]            | <i>ethnologue</i> | 'ethnologist' |
| [seg.mãte]                | [se.gmãte]            | <i>segmenter</i>  | 'to segment'  |
| [ɛn.mi]                   | [ɛ.nmi]               | <i>ennemi</i>     | 'enemy'       |

If sonority-based constraints on onset formation are a matter of parameters, rather than principles constraining possible representations, then these data make perfect sense: clusters that are bad candidates for onsethood can become

<sup>4</sup> The data from French is well-known, as is the sensitivity to syllable structure of the [e/ɛ] distribution. True, [ɛ] can also occur in open syllables, as in *r[ɛ]veur* 'dreamer', *gr[ɛ]ler* 'to hail', *m[ɛ]grir* 'to lose weight' or *l[ɛ]* 'milk' (in conservative accents). Crucially, however, tense [e] never occurs in a closed syllable.

<sup>5</sup> In some of the cases reported in (7), tensing applied only variably in Laeuffer's corpus (see Laeuffer 1991:28 for more detail). Tensing was only one of the acoustic correlates measured by Laeuffer (see p. 25).

onsets in fast speech, where sonority distance requirements imposed on syllable structure are relaxed.

### 3.2 Empirical evidence for onset structure in southern Emilian

We now return to Emilian. Not to urban Bolognese, however, but to a rural variety thereof which is spoken in Grizzana Morandi, some 40 km south of Bologna.<sup>6</sup> As illustrated in (8), Grizzanese likewise displays the same richness in consonant clusters:

(8)	<i>word initial</i>		<i>word internal</i>	
	[klo:ɾ]	'colour'	[dɔndɪa]	'weasel'
	[pɲa:ta]	'pot'	[ar'kɲoser]	'to recognize'
	[dʒe:va]	'was saying'	[ma:ndga]	'sleeve'
	[ptʃ:]	'button'	[as'pte:]	'to wait'
	[stme:na]	'week'	[zdiʒde:]	'to wake up'
	[zbdu'če:]	'to delouse'	[ka:zka]	'(it) falls'

To decide how these clusters are syllabified, consider the list of hypothetically conceivable word-initial clusters in (9) (clusters are ordered left to right according to their degree of compliance with the SSG) (T = stop, S = fricative, N = nasal, R = rhotic, L = lateral, J = glide).

- (9) a. b. c. d. e. f. g. h. i. j. k.  
 \*JT- \*RT- \*LT- NT- ST- T<sub>1</sub>T<sub>2</sub>- TS- TN- TL- TR- TJ-

<b>worse</b>	→	<b>better</b>
[with respect to the Head Law (4)]		

Strings like (9a-c) (glide/liquid + stop) do not occur word-initially. Actually, as shown in (10) (p. 161), initial strings such as (9b-c) should have arisen in diachrony as a product of Emilian syncope. Their rise was prevented via /a/-prosthesis.

This also happened, at least partially, for nasal + consonant clusters ([9d]). As shown in (11), /n/ + C was not tolerated word-initially, whereas /m/ + C, when arising through syncope, was tolerated and consequently occurs word-initially today:

<sup>6</sup> This choice is motivated by two factors. One factor is that I happen to have done field-work on this variety (Loporcaro 1991). The other factor is that this dialect turns out to possess phonological processes which provide us with evidence for onset structure, as will become apparent in what follows.

(10) Latin	Romance development			Grizzanese
			<i>West. Rom. voicing</i>	<i>Emilian syncope</i>
REMANERE	> remanere	>	*rmanér	> [ar'ma'ne:] 'to remain'
RESPONDERE	> respondere	>	*rspònder	> [ar'spònder] 'to answer'
*LIGICARE	> lekkare	>	*lker	> [al'ke:] 'to lick'
LAETAMEN	> letame	> ledame	*ldam	> [al'da:m] 'manure'

Note: The fact that a prosthetic /a/ was added in (10)-(11) shows that the clusters involved (viz. [9b-c] and partly [9d]) were not tolerated as onsets. As a result, they only occur word-internally, where they are undoubtedly heterosyllabic: ['gamba] 'leg', ['manda] 'sends'.

(11) Latin	Romance development			Grizzanese
			<i>West. Rom. voicing</i>	<i>Emilian syncope</i>
*NITIDARE	> nettare	>	*nter	> [an'te:] 'to clean'
NEPOTEM	> nepote	> nevide	*nvod	> [aŋ'vo:d] 'nephew'
MINESTRA(-RE)	> minestra	>	mnestra	> ['mne:stra] 'soup'
METEBAT	> meteva	> medeva	mdeva	> ['mde:va] 'was harvesting'

The remaining clusters in (9e-k) all occur word-initially. In order to ascertain which ones among them have to be analyzed as onsets, we have to take a look at the form of the clitic pronouns of Grizzanese. This domain will in fact provide us with a decisive piece of evidence. As shown in (12), Grizzanese has subject and object clitics, which all precede the verb in declarative utterances.

(12) a. Subject clitics

	1st	2nd	3rd:m	3rd:f
<i>singular</i>	a	t	e/ɿ	la/ɿ
<i>plural</i>	a	a	i/j	a/a/ɿ

b. Direct object clitics

	1st	2nd	3rd:m	3rd:f	3rd:REFL
<i>singular</i>	m	t	(a)l	la/	s
<i>plural</i>	s	v	i	li	s

As can be seen, most subject clitics end in a vowel and most object clitics simply consist of one consonant, so that the combination most frequently arising has the shape V#C.

- (13) a            t            'vɛd/'krɛd/'zɛzɛd  
 1st:SUBJ    2nd:OBJ    see/believe/wake:1st  
 'I see/believe/wake you up.'

In (13) no significant phonological changes occur, regardless of the number and kind of verb-initial consonants.<sup>7</sup> As shown in (14), the same is true when a subject clitic ending in a consonant directly precedes the verb.

- (14) a l            'vɛden/'krɛden/'zɛzɛden  
 6th:f:SUBJ    see/believe/wake:6th  
 'they:f see/believe/wake up'

However, when the 3rd person feminine plural clitic /a/, which ends in a consonant, precedes an object clitic which consists of a consonant, cluster simplification takes place, as shown in (15)-(16).

- (15) a. /a l            t            'vɛden/            → [a t 'vɛden]  
 6th:F:SUBJ    2nd:OBJ            see:6th  
 'they:F see you.'
- b. /a l            t            'krɛden/            → [a t 'krɛden]  
 6th:F:SUBJ    2nd:OBJ            believe:6th  
 'they:F believe you.'
- (16) a. /a l            t            'zɛzɛden/            → [a l t i 'zɛzɛden]  
 6th:F:SUBJ    2nd:OBJ            wake:6th  
 'they:F wake you up.'
- b. /a l            s            'vɛzɛven/            → [a l s i 'vɛzɛven]  
 6th:F:SUBJ    3rd:REFL            saw:6th  
 'they:F were seeing each other.'

<sup>7</sup> Some low-level processes (optional voicing assimilation: [a d 'vɛd]/[a ɖ 'vɛd]; final devoicing: [a t 'vɛd]) can be ignored here.

- c. /a|            s            'mde:ven/    →    [a| si 'mde:ven]  
 6th:F:SUBJ 3rd:REFL    harvested:6th  
 'they:F were harvested.'

This cluster simplification is achieved either by deletion of the final /l/ of the subject clitic, as in (15), or by [i]-epenthesis between the object clitic and the initial consonant of the following verb, as in (16). Whether the former or the latter process applies depends on the initial consonant (cluster) in the verb: [l]-deletion takes place before CV- or other clear onset strings such as C+rhotic (see [15]), whereas [i]-epenthesis applies before word-initial clusters which score low on the sonority-based scale of candidate onsets in (9): fricative + stop, as in (16a-b), or nasal + stop, as in (16c).

These facts strongly suggest that both cluster simplification strategies in (15)-(16) are syllable-driven, a speculation which receives further confirmation from the data in (17).

- (17) a. [a|            t            a'rẽ:            'vist]  
 6th:f:SUBJ 2nd:OBJ    have:FUT:6th    seen  
 'they:F will have seen you.'
- b. [a|            t            a've:ven            'pũ:t]  
 6th:f:SUBJ 2nd:OBJ    have:IMPF:6th    stung  
 'they:F had stung you.'

When the verb following the clitics begins with a vowel, both the subject and the object clitic surface without any changes. And if nothing happens before a vowel in (17), it is reasonable to infer that what happens in (15)-(16) (be it [l]-deletion or [i]-epenthesis) depends on syllabification constraints. Clearly, too many consonants are crowded underlyingly in (15)-(16) for them to be properly syllabified.

Note that [l]-deletion takes place also when the word-initial consonant of the verb is /r/ (e.g., [a t res'te:ven] '(they:F) were left for you'), which could in principle be resyllabified to form a complex syllable onset, at least with the 2nd sg. object clitic /t/. This would in turn allow the preservation of the final consonant of the subject clitic /a|/, thus achieving maximal syllabification of the segmental material available (see Itô 1989). Intuitively, however, what happens is that only word-initial segments which are not already syllabified in the onset are allowed to take part in the sandhi resyllabification processes at work

in (15)-(16). These never affect the part of the following word beginning with the first segment syllabified as onset at the lexical level.<sup>8</sup>

If the processes applying in (15)-(16) are sensitive to syllable structure, a striking parallelism with standard Italian *il/lo* selection emerges. This parallelism is underscored in (18).

- |      |                  |            |                                    |
|------|------------------|------------|------------------------------------|
| (18) | Standard Italian |            | Grizzanese                         |
|      | a. [lɔ 'spɑ:ɾo]  | 'the shot' | [al tɪ 'stɔfɛn] 'they:F bore you'  |
|      | b. [il 'prɑ:to]  | 'the lawn' | [a t 'krɛdɛn] 'they:F believe you' |

In both varieties, the occurrence of a word-initial /s/+C cluster requires the occurrence of a vowel-ending form of the clitic, to allow the syllabification of the (non-onset) initial fricative (or nasal, in the case of Grizzanese [16c]). If this is correct, we now have at our disposal a test for onsethood in Grizzanese, which is just as reliable as Italian *il/lo* selection.

- |      |                     |                           |                     |
|------|---------------------|---------------------------|---------------------|
| (19) | [l]-deletion:       | __#C# <sup>\$</sup> C(C)- | (before onsets)     |
|      | vs. [i]-epenthesis: | #C__#C <sup>\$</sup> C-   | (before non-onsets) |

[l]-deletion applies in the case of word-initial onsets; [i]-epenthesis applies before word-initial non-onset consonants, which have to be resyllabified as coda consonants. And to do so, they need a preceding vowel to be inserted.

Let us now apply the test in (19) to the remaining onset candidates on the scale in (9). As shown in (20), the three cluster types in (9i-k) — which best suit the SSG and are therefore most likely to be syllabified as onsets — indeed trigger [l]-deletion, thus patterning like singleton initial consonants. This is far from unexpected, and proves that these initial clusters *are* syllabified as complex onsets.

- |         |            |         |            |   |                    |
|---------|------------|---------|------------|---|--------------------|
| (20) a. | /al        | t       | 'pjɛ:zɛn/  | → | [a t 'pjɛ:zɛn]     |
|         | 6th:F:SUBJ | 2nd:OBJ | please:6th |   | 'you like them:F'  |
| b.      | /al        | t       | 'brɛ:zɛn/  | → | [a t 'brɛ:zɛn]     |
|         | 6th:F:SUBJ | 2nd:OBJ | scold:6th  |   | 'they:f scold you' |

<sup>8</sup> As Bernard Tranel pointed out to me, this fact could be accounted for in an Optimality Theoretic framework by ranking a constraint ALIGN LEFT over those responsible for resyllabification, however formulated. I agree entirely. Actually, as far as I can see, an OT account of the data I have described can be produced without much effort. The alternatives would differ essentially in adopting vs. rejecting the rule metaphor for descriptive purposes; this is however a general theoretical issue which exceeds the scope of the present paper.

- c. /a|            t            klu're:ven    →    [a t klu're:ven]  
       6th:F:SUBJ 2nd:OBJ    paint:IMPF:6th    'they:F painted you'

We finally come to the remaining two onset candidates in (9f-h): sonority plateaux (stop + stop/affricate, nasal + nasal) and clusters of increasing sonority in which there is a small sonority distance between the two consonants (obstruent + nasal, stop + fricative). The behavior of these clusters is exemplified in (21).

- (21) a. [a| ga'hɪn a t 'pke:ven]  
       'The chickens pecked you.'
- b. [a| 'me: 'sɪi a t 'dʒe:ven]  
       'My aunts told you.'
- c. [a| 'fjo:li a t 'mne:ven]  
       'The girls were beating you.'
- d. [a| 'fjo:li a t dman'de:ven]  
       'The girls were asking you.'
- e. [a| 'fjo:li a t kma:n'de:ven]  
       'The girls commanded you.'
- f. [a| 'me: 'sɪi a t 'kɲosen 'bɛ:]  
       'My aunts know you well.'
- g. [a| su're:l a t 'pse:ven 'veder]  
       'The sisters could see you.'
- h. [aʌ ur'ti:g a t 'psɪ:gen]  
       'The nettle:F.PL. makes you itch.'

What happens here is /l/-deletion, as in (15) and (20), rather than [i]-epenthesis, as in (16).

#### 4. Conclusion

From a descriptive point of view, we can conclude that in this variety of Italo-Romance, the clusters in (21) (plosive + plosive, plosive + affricate, plosive + nasal, etc.) pattern like onsets by test (19), in that they trigger /l/-deletion. This generalization is confirmed by distributional facts: these clusters can freely occur word-internally after a coda consonant, as shown in (22b).



selecting clusters which can be syllabified as onsets. As can be seen in (23), the choice is not random; rather, it obeys strict sonority-based implicational constraints.

Note that the comparative account in (23) follows straightforwardly, without any additional stipulation, from the combination of independently needed general assumptions (the existence of a sonority hierarchy and of Head Law (4), which governs the relative well-formedness of candidate onsets with respect to the hierarchy) with the empirical evidence drawn from syllable-sensitive rules at work in the two varieties compared (*viz.* (3) for Italian and (19) for Grizzanese). What the empirical evidence shows, in the final analysis, is that there is far more room for parametric variation in syllable structure, in Romance and elsewhere, than often assumed on deductive grounds by many theoretical phonologists.

To further corroborate this result, let us briefly consider by way of conclusion another case in point, that of the syllabification of C+/r/ clusters. Many current theories include some principle from which it follows that V.CRV is the only possible syllabification, whereas VC.RV is ruled out (Kaye et al. 1990:210). That this actually turns out to be empirically the case in Romance languages has been specifically argued by Steriade (1988) and Bullock (1997), among others. The kind of evidence usually brought to bear to empirically substantiate this claim is exemplified in (24).

- (24) a. Canadian French [sa 'ptsit a'mi] = [vi'bʁe] ≠ [vif]  
                           *sa petite amie*           *vibrer*           *vif*
- b. Standard Italian ['vje:ne] = ['pje:tra] ≠ ['bel:ɔ]  
                           'comes'                   'stone'           'nice'

The situation represented in (24a-b) is by far the most commonly attested, within Romance and across languages: syllable-related processes which affect vowels in closed syllables usually do not affect vowels preceding C+/r/ clusters, as is the case for high vowel laxing in Canadian French ([24a]; see Picard 1979:124-126, Kaye et al. 1990:209-211). Symmetrically, processes which apply to vowels in open syllables do affect vowels preceding C+/r/ clusters, as was the case for /ɛ/ (as well as /ɔ/) diphthongization in Italian ([24b]). However, as argued in Loporcaro (1996, 1997), in most southern Italian dialects (represented in (25) by an Apulian variety), syllable-related pro-

cesses applying to stressed vowels in open syllables (/CV.CV/) never affect vowels preceding C+/r/ clusters.<sup>10</sup>

(25) Altamurano (Loporcaro 1996, 1997)

- a. [ˈkɛɪs] ← /ˈkɛsə/      ≠ [ˈlatr̥] ← /ˈlatrə/ = [ˈkwanz] ← /ˈkwandə/  
     < CASA(M) 'house'      < LATRO 'thief'      < QUANDO 'when'
- b. [ˈfiɪ] ← /fɪə/      ≠ [ˈvitr̥] ← /ˈvitrə/ = [ˈvist] ← /ˈvistə/  
     < FILU(M) 'thread'      < VITRU(M) 'glass'      < \*VISTU(M) 'seen'

The lack of diphthongization in (25a-b) and the non-application of the diachronic change /a/ > /ɛ/ in [ˈlatr̥] ([25a]) (both applying in the context /\_\_ \$CV]\_Phonological Word) are evidence for a syllabification VC.RV in this dialect. This is also true of dozens of well-described systems all over southern Italy. Thus, if empirical evidence is to be taken seriously, it should not be possible to claim that VC.RV is *empirically* not an available option throughout Romance and cross-linguistically. Unless an alternative analysis of the changes in (25) is provided showing that they are not sensitive to syllable structure and consequently are not reliable diagnostics for syllabification, the existence of both (24) and (25) militates in favor of a preference theory of syllable structure. Such a theory predicts that VC.RV is less frequent, in that it is disfavored by the bad sonority relation across the syllable contact. Symmetrically, the variation in syllabification exemplified by (24)-(25) also shows that theories which directly encode sonority-based constraints in the structure of phonological representation are in error.

## REFERENCES

- Blevins, Juliette. 1995. "The syllable in phonological theory". In *The Handbook of Phonological Theory*, ed. by John A. Goldsmith, 206-244. Oxford: Blackwell.
- Bullock, Barbara. 1997. "The metrical resolution of doubtful syllable quantity in Early Romance". Paper presented at the 27th Linguistic Symposium on Romance Languages, University of California, Irvine.
- Camilli, Amerindo. 1913. "I rafforzamenti iniziali in italiano". *Archiv für das Studium der neueren Sprachen und Literaturen* 131.170-174.

<sup>10</sup> A further process, viz. final /ə/ deletion, is at work in (25). It is important to emphasize that it is not schwa deletion which is responsible for the diphthongization focussed on in (25) (as argued in Kenstowicz 1994:448). This is shown by the fact that diphthongization and final schwa can co-occur (e.g., in the hyperarticulated [ˈkɛɪsə]; see Loporcaro 1988:159ff).

- Clements, George N. 1990. "The role of the sonority cycle in core syllabification". In *Papers in Laboratory Phonology*, ed. by John Kingston & Mary E. Beckman, 283-333. Cambridge: Cambridge University Press.
- Coco, Francesco. 1970. *Il dialetto di Bologna*. Bologna: Forni.
- Davis, Stuart. 1990. "Italian onset structure and the distribution of *il* and *lo*". *Linguistics* 28.43-55.
- Dogil, Grzegorz & Hans Christian Luschützky. 1990. "Notes on sonority and segmental strength". *Rivista di Linguistica* 2.3-54.
- Dziubalska-Kolaczyk, Katarzyna. 1995. *Phonology Without the Syllable. A Study in the Natural Framework*. Poznań: Motiwex.
- Itô, Junko. 1989. "A prosodic theory of epenthesis". *Natural Language and Linguistic Theory* 7.217-259.
- Kaye, Jonathan, Jean Lowenstamm & Jean-Roger Vergnaud. 1990. "Constituent structure and government in phonology". *Phonology* 7.193-231.
- Kenstowicz, Michael. 1994. *Phonology in Generative Grammar*. Oxford: Blackwell.
- Laeuffer, Christiane. 1991. "Syllabification and resyllabification in French". In *New Analyses in Romance Linguistics*, ed. by Dieter Wanner & Douglas A. Kibbee, 19-36. Amsterdam: John Benjamins.
- Loporcaro, Michele. 1988. *Grammatica storica del dialetto di Altamura*. Pisa: Giardini.
- \_\_\_\_\_. 1991. "Di alcuni caratteri morfosintattici del dialetto di Grizzana, sull'Appennino bolognese". *L'Italia Dialettale* 54.57-126.
- \_\_\_\_\_. 1996. "On the analysis of geminates in Standard Italian and Italian dialects". In *Natural Phonology: The State of the Art. Papers from the Bern Workshop on Natural Phonology*, ed. by Bernhard Hurch & Richard A. Rhodes, 149-174. Berlin: Mouton de Gruyter.
- \_\_\_\_\_. 1997. "L'esito dei nessi -GR-, -GN-: un mutamento di struttura sillabica nei dialetti italiani centro-meridionali". In *Atti del III Congresso della Società Internazionale di Linguistica e Filologia Italiana*, ed. by Luciano Agostiniani, Paola Bonucci, Giulio Gianecchini, Franco Lorenzi & Luisella Reali, 337-374. Napoli: Edizioni Scientifiche Italiane.
- Marotta, Giovanna 1993. "Selezione dell'articolo e sillaba in italiano: un'interazione totale?". *Studi di grammatica italiana* 15.255-296.
- Ohala, John J. & Haruko Kawasaki. 1984. "Prosodic phonology and phonetics". *Phonology Yearbook* 1.113-127.
- Picard, Marc. 1979. "The syllable boundary in generative phonology". *Canadian Journal of Linguistics* 24.119-131.
- Rohlf, Gerhard. 1966. *Grammatica storica della lingua italiana e dei suoi dialetti. Vol.1: Fonetica*. Turin: Einaudi.
- Rubach, Jerzy. 1996. "Nonsyllabic analysis of voice assimilation in Polish". *Linguistic Inquiry* 27.69-110.
- Rubach, Jerzy & Geert Booij. 1990. "Syllable structure assignment in Polish". *Phonology* 7.121-158.
- Selkirk, Elisabeth O. 1984. "On the major class features and syllable theory". In *Language Sound Structure*, ed. by Mark Aronoff & Richard T. Oehrle,

- with Frances Kelley & Bonnie Wilker Stephens, 107-136. Cambridge, Mass.: MIT Press.
- Steriade, Donca. 1988. "Gemination and the Proto-Romance syllable shift". In *Advances in Romance Linguistics*, ed. by David Birdsong & Jean-Pierre Montreuil, 371-409. Dordrecht: Foris.
- Vennemann, Theo. 1986. *Neuere Entwicklungen in der Phonologie*. Berlin: Mouton de Gruyter.
- \_\_\_\_\_. 1988. *Preference Laws for Syllable Structure and the Explanation of Sound Change*. Berlin: Mouton de Gruyter.
- Whitney, William D. 1874. "The relation of vowel and consonant". *Oriental and Linguistic Studies*. Second series, 277-300. New York: Scribner, Armstrong & Co.

## CONDITION ON FEATURE SPECIFICATION AND NEGATIVE LEXICALIZATION IN SPANISH

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### 0. *Negative elements as Negative Polarity Items (NPI)*

Spanish may be classified as a *negative agreement* or *negative concord* language where a preverbal surface negator and a postverbal negative element may cooccur. It is characteristic of negative concord languages that both constituents, the negator and the negative element, jointly mark a single instance of sentential negation. In other words, the negative elements do not contribute additional negative content to the sentence. Rather, they are interpreted as indefinite expressions in the scope of the negator.

- (1) *Picasso \*(no) fotografió (jamás) a nadie.*  
'Picasso never photographed anyone.'

Whenever one or more of these elements appear(s) preverbally, the negator is absent from the surface, even if another negative element appears postverbally in the same clause.

- (2) a. *Nadie (\*no) pintaría tal cuadro en esa época.*  
'Noone would (\*not) paint such a picture in that period.'  
b. *(Jamás) a nadie (\*no) le explicó Picasso el "Guernica".*  
'Picasso never explained "Guernica" to anyone.'  
c. *Tampoco (\*no) explicó ninguna otra pintura.*  
'He did not explain any other painting either.'

According to Suñer (1995), Spanish negative elements are amenable to a uniform treatment as NPIs, i.e., indefinite expressions which are dependent on the head NegP (Zanuttini 1991), rather than as independent negative quantifiers (Longobardi 1991). Suñer's main argument comes from the patterning, with respect to wh-islands, between the negative element and the NegP signalling its

scope. As (3) shows, when the left-dislocated negative element is linked to the clitic over an embedded CP wh-island, the negator must be lexically realized (3f), contrary to what we find in the absence of wh-islands (3a)-(3c).

- (3) a. *A ninguna de sus esposas<sup>i</sup>, (\*no) las<sup>i</sup> invitó a la exposición*  
 'He did not invite any of his wives to the exhibition'
- b. *Quisiera saber por qué a nadie<sup>i</sup>, Picasso (\*no) le<sup>i</sup> dejó escrito eso.*  
 'I would like to know why Picasso did not leave this written for anyone'
- c. *A ninguno de ellos<sup>i</sup>, dicen que Picasso (\*no) les<sup>i</sup> dejará nada.*  
 'They say that Picasso will not leave anything to any of them'
- d. *A ninguno de ellos<sup>i</sup> me pregunto por qué Picasso \*(no) les escribió*  
 'I wonder why Picasso did not write to any of them'
- e. *A ninguno de ellos<sup>i</sup> me dijeron que Picasso (\*no) les<sup>i</sup> había escrito.*  
 'They told me that Picasso had not written to any of them'
- f. *¿A ninguno de ellos<sup>i</sup>, quién te dijo que él \*(no) les<sup>i</sup> había escrito?*  
 'Who told you that he had not written to any of them?'

We find the same pattern in focus constructions. Negative elements may be focused in main and embedded clauses. As expected, when there is a wh-phrase between the negative element and the coindexed trace, the negator is phonetically present (4b). Otherwise, it remains null, as in (4a).

- (4) a. *[A NADIE]<sup>i</sup> dijo Dali que Gris [<sub>Neg</sub> Ø] podría retratar e<sup>i</sup> fielmente.*  
 'Dali said that Gris could not portray anyone faithfully.'
- b. *[A NADIE]<sup>i</sup> dijo Dali que quién [<sub>Neg</sub> no] podría retratar e<sup>i</sup> fielmente.*  
 'Dali said that who could not portray anyone faithfully.'

Lexicalization of the negator is also obligatory when the NPI itself contains a wh-phrase, as shown in (5a-d).

- (5) a. *Ninguno de los cuadros cubistas (dicen que) (\*no) se subastó.*  
 '(They say that) none of the cubist paintings were auctioned.'
- b. *¿[Ninguno de cuáles cuadros] (dicen que) \*(no) se subastó?*  
 '(They say that) none of which paintings were auctioned?'
- c. *Ninguno de sus cuadros (\*no) fueron vendidos*  
 'None of his paintings were sold'

- d. ¿[*Ninguno de los cuadros de quién*] \*(no) fueron vendidos?  
 ‘None of whose paintings were sold?’

The effect of wh-islands on the link between the NPI and the negator is also observed with relative clauses.

- (6) [*Ninguno de los cuadros*]<sup>i</sup>, *este es [el pintor [que \*(no) los<sup>i</sup> pintaría]]*  
 Lit. ‘None of the paintings, this is the painter that would not paint them’

When the negator is inside a relative clause which also contains the trace of a left-dislocated NPI, it must be realized overtly. That is, a relative clause constitutes an island for the licensing of a null negator.

### 1. *Mutual licensing of NPI and negator*

Suñer accounts for the realization conditions on sentential negators by proposing an obligatory null-operator raising operation. She assumes that NPIs must be licensed in order to neutralize their formal [+neg] feature. When the NPI is preverbal, licensing is carried out by raising the null negative operator  $Op_n$  prior to LF and adjoining it to the constituent containing the NPI. Once raised,  $Op_n$  c-commands the NPI as required. When the NPI is postverbal,  $Op_n$  remains in its base-generated position [Spec, NegP]. Morphologically,  $Op_n$  raising is motivated by the formal features of the NPIs, i.e., the preverbal NPI “attracts” the operator because of its formal [+neg] feature. Semantically, NPI licensing is required in order to end up with a single instance of negation.

- (7) [<sub>AgrP</sub>  $Op_n$  *Nadie* [<sub>Agr'</sub> [<sub>Agr</sub> 0 *come*]<sub>k</sub>] [<sub>NegP</sub>  $t_p$  [<sub>Neg'</sub> [<sub>Neg</sub>  $t_k$ ][TP ...]]]]]

The chain formed by the raising of  $Op_n$  is interrupted when [Spec, CP] is occupied by an *affective* wh-phrase. This split does not prevent the null-operator  $Op_n$  from raising to its adjunction site; but the Neg head must be spelled out to overcome the minimality effect created by the wh-phrase so as to unambiguously ascertain the scope of the NPI. For Suñer, this spelling of the null Neg is an instance of resumptive negator: the Neg head acquires a phonetic matrix in order to identify the content of a negative *pro* bound by the raised null negative operator.

A potential counterexample to the assumption that wh-phrases block the licensing relation between a preverbal NPI and its negator can be found in cases where the NPI forms part of the antecedent of the relative clause. In these contexts, the NPI may cooccur with a phonetically null negator in its complement clause (8a-b). However, when the relative clause (and hence the negative element) is postverbal, the negator is obligatorily overt (8c).

- (8) a. *Ninguno de los cuadros que (\*no) se vendió (\*no) era original.*  
 ‘None of the paintings that were sold were original.’
- b. *Ninguno de los cuadros por los que (\*no) pagaron los turistas (\*no) van a exponer en esta sala.*  
 ‘None of the paintings for which the tourists paid will be shown in this room’
- c. \* *(No) tenía rasgos específicos [ninguno de los cuadros cubistas [que (\*no) se vendió ayer]].*  
 ‘None of the cubist paintings that were sold yesterday had any specific features.’

In cases where the relative pronoun forms part of a partitive together with the NPI, the negator in the IP-complement of the relative pronoun must be covert, as shown in (9).

- (9) a. *Tengo cuadros cubistas, [ninguno de los cuales] (\*no) vendería.*  
 ‘I have several cubist paintings, none of which I would sell.’
- b. *Vendí varios cuadros, [ninguno de las cuales] (\*no) me satisfacía.*  
 ‘I sold several paintings, none of which satisfied me.’

Another problem with Suñer’s proposal is that if it is indeed a barrier that breaks the chain between the raised operator and the negator, other configurations identifying the same type of barrier should prevent this relation. *Wh-islands* belong to the groups of islands identified as *subjacency* barriers, which also include *complex-NP structures* and *IP-adjoined structures*. Surprisingly, neither one of the latter two configurations prevent a NPI from licensing a null negator. As shown in (10), a NPI may be linked to a null negator in acknowledged subjacency islands, while it may not do so in contexts not blocked by subjacency.

- (10) a. *Jamás, a las exposiciones (\*no) invitaron a los pintores.*  
 ‘They never invited the painters to the exhibitions.’
- b. *¿En qué época, a las exposiciones \*(no) invitaron a los pintores?*  
 ‘In what period didn’t they invite the painters to the exhibitions?’
- c. *A ningún pintor, he oído el rumor que (\*no) invitaron a venir.*  
 ‘I’ve heard the rumour that they didn’t invite any painter to come.’
- d. *¿Ningún pintor, a qué negociante dijeron que \*(no) invitó a la fiesta?*  
 ‘What dealer did they tell that he didn’t invite any painter to the party?’

- e. *A ninguna ciudad son muchos los pintores que \*(no) han ido.*  
 'There are many painters that have not gone to any city.'

This indicates that it is not only the presence of a subadjacency barrier, but also the nature of the intervening element, that is relevant in the interruption the chain between NPI and a null negator.

Further, Suñer's analysis cannot be upheld under Minimalist principles. While we may assume that a *wh*-phrase is inserted in the derivation of the matrix clause (thus satisfying the *wh*-criterion) and it is subsequently coindexed with the resumptive pronoun in the embedded clause, no such insertion is permitted for the null-operator. If displacement of a constituent in overt syntax is limited to morphologically conditioned operations on that constituent, it is hard to find a reason why the null element should be adjoined to the NPI. Therefore, the adjunction of the null-operator constitutes an altruistic operation contrary to Minimalist assumptions. Even if such considerations were put aside, no explanation is given for the counterintuitive proposal that an overt movement of a covert element (the operator) is necessary to license another (the NPI) with consequences in PF (the non-lexicalization of the negator). In other words, an overt morphological requirement on the NPI must be satisfied by a null (i.e., covert) element. Also, as Suñer herself points out, satisfaction of the Neg requirement would have to differ from other agreement relations such as *wh*-movement and Case, which require movement of the specific constituent carrying the necessary feature to the spec location where that feature can be matched. Finally, Suñer's proposal involves an unexpected asymmetry in the "matching" relation between the NPI and the raised operator: the operator neutralizes the neg-feature of the NPI, while the NPI simply provides "the clue" for the raised position of the operator.

## 2. Condition on feature specification

Let us assume that Neg and negative phrases are marked with the feature [+neg] which must be matched at LF at the latest. Matching takes place in the overt syntax when Neg is filled by a negator (11a) or when the negative element occupies [Spec, NegP] (11b). Once matched, the feature disappears from both Neg and the negative phrase. If the feature remains, it must be eliminated by LF processes. One such process involves raising of the NPI to [Spec, NegP], which allows feature matching at LF. Another process involves LF insertion of a null negator ( $Neg_n$ ), which cancels the [+neg] feature in Neg (11c). In this event, however, the full content of  $Neg_n$  must be recovered via c-command by the negative phrase (11d). In this respect, we interpret  $Neg_n$  simply as a scope marker devoid of negative content. That is, we are splitting

the content of Neg into its scope and negative properties. Neg<sub>n</sub> is void of negative content unless identified by a c-commanding negative element. Once identified, it may license the preverbal negative phrase as a NPI after the latter is reconstructed within the scope of Neg<sub>n</sub> at LF (Uribe-Etxebarria 1994).

- (11)
- a. [CP [AgrP [NegP [Neg no +neg] VP]]] > [CP [AgrP [NegP [Neg no] VP]]]
  - b. [CP [AgrP [NegP NPI [Neg +neg] VP]]] > [CP [AgrP [NegP NPI Neg VP]]]
  - c. [CP [AgrP [NegP [Neg Neg<sub>n</sub> +neg] VP]]] > [CP [AgrP [NegP [Neg Neg<sub>n</sub>] VP]]]
  - d. [CP NPI<sup>i</sup> ... [NegP [Neg Neg<sub>n</sub><sup>i</sup>] VP]]

Since content recovery takes place at LF, it is not constrained by subjacency. Therefore, it is irrelevant in principle whether any type of island — wh-island or otherwise — intervenes between the NPI and the Neg<sub>n</sub> that it identifies semantically.

- (12) a. [NPI<sup>i</sup> ... [CP wh-phrase [C +wh V[Agr [Neg<sub>n</sub><sup>i</sup> tv]]] [AgrP t<sub>A</sub>]  
[NegP [Neg t<sub>N</sub>] ... [VP tv]]]]]
- b. [NPI<sup>i</sup> ... [CP topic [C +top V[Agr [Neg<sub>n</sub><sup>i</sup> tv]]] [AgrP t<sub>A</sub>] [NegP  
[Neg t<sub>N</sub>] ... [VP tv]]]]]

The phonetic presence of the negator is obligatory in cases where the NPI is linked to a Neg head inside an interrogative sentence. Let us assume that in these clauses the verb raises overtly through Neg on its way to Comp. This operation is triggered by the [+wh] in Comp (the wh-criterion) and must be satisfied prior to Spell Out. I propose that a *Condition on Feature Specification (CFS)* requires that a head must advance cyclically in its feature matching (13).

- (13) X cannot match  $\phi_{+1}$  at cycle  $C_{+1}$ , unless X satisfies  $\phi$  at cycle C.

In the specific cases under discussion, a verb marked [+wh] must move to Comp<sub>[+wh]</sub> (at the latest) by LF to satisfy the wh-criterion. Movement of V<sub>[+wh]</sub> through Neg onto Comp is impossible unless the [+neg] feature of Neg is eliminated via agreement with a NPI in [Spec, NegP] or by the presence of a negator in Neg.

- (14) \*[CP [C V<sub>[+wh]</sub>] [AgrP [Agr tv] [NegP [Neg +neg tv] ... [VP tv]]]]]

If the negator is overtly present, the verb may proceed onto Comp in the absence of [+neg] in Neg. However, if no negator is overt, the verb may not move to Comp as this operation would violate the CFS. Since the verb must

move overtly, the LF insertion of  $Neg_n$  is irrelevant in this derivation, as illustrated in (15).

$$(15) [_{CP} \text{wh-phrase } [_{C} [\text{no } V_{[+wh]}] [_{AgrP} [_{Agr} t_V] [_{NegP} [_{Neg} \text{no } t_V] \dots [_{VP} t_V]]]]]$$

As a result, the only possible structure is that in which the negator is phonetically realized, any other configuration being blocked by the unavailability of  $Neg_n$  identification.

In both (12) and (14), the NPI must move to [Spec, NegP] to match the [+neg] feature at LF and subsequently “reconstruct” into its thematic position within the scope of the sentential negator (Uribe-Etxebarria 1994). Assuming that LF movement is not constrained by subjacency, the final chain constitutes a proper chain.

Take now the case of relative clauses. Here the [+wh] feature of Comp need only be matched at LF. Therefore, verb raising may take place after  $Neg_n$  insertion, which also takes place at LF. Once the feature [+neg] is matched, the verb may proceed onto Comp without violation of the CFS in (13). As discussed earlier, the presence of  $Neg_n$  imposes a new requirement, namely the recovery of the semantic content of this null category. The NPI must c-command  $Neg_n$ . However, as the verb containing [+wh] incorporates to Neg and forms the complex [ $Neg_n$  V], it is the features of the verb that must project and not those of  $Neg_n$ . Otherwise, the [+wh] feature could not be matched in Comp as required. Failure of the feature of  $Neg_n$  to project, on the other hand, prevents the NPI to identify  $Neg_n$  and the null head cannot receive the desired interpretation at LF. No such problem arises if the negator occurs overtly. The [+neg] feature of Neg being matched and hence deleted, the verb may move onto Comp as required. Furthermore, since the negator is overt, no recovery of semantic content is necessary.

(16)

$$*[NPI^i [_{CP} \text{wh-XP } [_{C} [Neg_n V_{[+wh]}] [_{AgrP} [_{Agr} t_V] [_{NegP} [_{Neg} t_V] \dots [_{VP} t_V]]]]]$$

Again, the NPI must be lowered to the [Spec, NegP] of the relative clause at LF to match its [+neg] feature, with subsequent raising to head-position to create a proper chain.

Other relative clauses allow the verb to raise to Comp even if Neg is not lexically realized. The question that must be answered is how  $Neg_n$  recovers its content in these cases. If the verb adjoins to Neg on its way to Comp as in the previously examined instances,  $Neg_n$  would again be invisible to the NPI.

$$(17) [_{NegP} [_{DP} [_{CP} \text{wh-phrase } \dots]^i [_{Neg} Neg_n^i] \dots [_{VP} t_V]]]$$

Observe, however, a crucial difference between these relative clauses and the one above. In the relative clauses under consideration (schematically shown in [17]), either the antecedent of the relative pronoun or the relative pronouns contains the [+neg] feature. Let us assume that this feature percolates to the entire DP, which can then serve as a NPI. If this NPI is in [Spec, NegP], it can identify the content of  $Neg_n$  before the verb raises to Comp at LF and the structure converges. Percolation of the [+neg] feature appears to be at work in other instances such as (18b).

- (18) a. *No trajeron [el cuadro de nadie famoso], sólo basura.*  
 ‘They did not bring the painting by anyone famous, only trash.’  
 b. *[El cuadro de nadie famoso] trajeron, sólo basura.*  
 ‘They brought the painting by noone famous, only trash.’

Our analysis accounts for the contrast in (18a-b) as arising from the position of the NPI containing the relative clause. The acknowledged difference between the two structures is left unexplained under Suñer’s proposal. If — as she assumes — relative pronouns do not block the licensing relation established between the NPI and the negator, we should expect the negator to remain unlicensed in both cases and hence to be obligatorily overt. A related question that remains unanswered under Suñer’s proposal is the fact that “the negative element in the antecedent is not licensed by a Neg head in its complement clause but by a null *no* in the matrix” (1995:244). This is observed when the negator is overt.

- (19) [ $Neg_P$  [ $DP$  [ $CP$  wh-phrase ...]<sup>i</sup> [ $Neg$   $Neg_n^i$ ] ... [ $VP$   $t_V$ ]]]

The interpretation of the embedded relative clause in (19) differs from (16) in that the sentence without an overt negator means that the paintings were indeed sold. However, if Suñer (p. 245) is correct in assuming that the NPI is permitted to link with a null negator when the negative element forms part of the antecedent, or when the same element belongs with the relative pronoun, then the latter should be possible and the verb should receive a negative reading. It is not clear why this link is unavailable in (19). The present analysis covers the unavailability of this interpretation. As pointed out earlier, a null  $Neg_n$  in the Neg of the relative clause must recover its content at LF. This is not possible after the verb containing the feature [+wh] moves through Neg on its way to Comp at LF. The feature [+neg] is unreachable for the NPI at that level.

Furthermore, we expect that even if the negator is phonetically overt, the sentence should be ungrammatical with the intended interpretation linking the

NPI and *no*. We have posited that the NPI must match its [+neg] feature at LF by lowering and subsequent raising. Assuming that lowering of an antecedent into its relative clause is impossible, the needed NPI-[Spec, NegP] chain would constitute an improper chain at LF.

(20) \**[Ninguno de los cuadros [que no se vendió ayer]] era original.*

Let us now turn to instances where no [+wh] feature is involved, as in complex NPs or IP-adjoined structures such as (21a-b). In these cases, the verb need not raise to Comp prior to LF. Hence, insertion of  $Neg_n$  at LF is possible and recovery of the content of  $Neg_n$  may take place by linking it to the appropriate c-commanding NPI.

(21)

- a.  $NPI^i$  [<sub>IP</sub> V [<sub>DP</sub> DP [<sub>CP</sub> [<sub>IP</sub> [<sub>AgrP</sub> [<sub>Agr</sub> [<sub>Neg</sub>  $Neg_n^i$  V]]] [<sub>NegP</sub>  $t_V$  [<sub>VP</sub>  $t_V$ ]]]]]]]]
- b.  $NPI^i$  [<sub>IP</sub> PP [<sub>IP</sub> [<sub>AgrP</sub> [<sub>Agr</sub> [<sub>Neg</sub>  $Neg_n^i$  V]]] [<sub>NegP</sub>  $t_V$  [<sub>VP</sub>  $t_V$ ]]]]]]

In contrast with the grammatical (21b), a topicalized phrase blocks the relation between the NPI and the null negator, i.e., the negator must be present where the NPI is linked to the negator of a sentence containing a topicalized phrase in [Spec, CP] (cf. [22]).

(22)

- \* $[NPI^i$  [<sub>CP</sub> [<sub>CP</sub> topic [<sub>C</sub> [<sub>Neg\_n</sub> V<sub>[+top]</sub>] [<sub>AgrP</sub> [<sub>Agr</sub>  $t_V$ ] [<sub>NegP</sub> [<sub>Neg</sub>  $t_V$ ] [<sub>VP</sub>  $t_V$ ]]]]]]]]]

In these clauses, both the topicalized phrase and the embedded verb move to the domain of Comp where they match their [+topic] feature under Spec-Head agreement (topic criterion) (Mallen 1992). Matching may take place at LF in Spanish as evidenced by (21a). In other words, the verb must raise covertly through Neg on its way to Comp. In accordance with the CFS, the head must advance cyclically in its feature matching. Not having satisfied the [+neg] feature in Neg, the [+topic] verb cannot move on to Comp to match its feature as required. Insertion of  $Neg_n$  could in principle save the derivation. However, even if  $Neg_n$  matches [+neg] at LF, the feature content of  $Neg_n$  cannot be recovered for the same reasons mentioned above for relative clauses. The feature [+topic] must be the one projecting. As a result, the [+neg] feature is unavailable for the NPI at LF.

Compare (22) with topicalization in matrix clauses in (23a-b). In contrast with (22), both preverbal nominal phrases in (23a) are in the domain of the same Comp. However, while the NPI is adjoined to CP, the topic phrase is in [Spec, CP], where it matches the [+topic] feature of Comp as required. Verb

raising — as in (22) — makes the presence of the negator obligatory. That is, the verb may only proceed to Comp to match [+topic] after the [+neg] feature of Neg is checked by an overt negator. This situation contrasts with (23c). Here the negator must be absent, as in (22).

- (23) a. *[A ningún pintor]<sup>i</sup>, este cuadro\*(no) le<sup>i</sup> han encargado, pero sí ese otro.*  
 ‘No painter has been commissioned this painting, but that one.’
- b. \*  $[_C \text{NPI}^i [_{CP} \text{topic} [_C [_{\text{Neg}_n} \text{V}_{[+top]}]]] [_{\text{AgrP}} [_{\text{Agr}} \text{t}_V] [_{\text{NegP}} [_{\text{Neg}} \text{t}_V] [_{\text{VP}} \text{t}_V]]]]]$
- c. *Este cuadro, [a ningún pintor]<sup>i</sup> (\*no) le han encargado, pero sí ese otro.*  
 ‘This painting has not been commissioned to any painter, but that one has.’
- d.  $[_{CP} \text{Topic} [_C [_{\text{Neg}_n} \text{V}_{[+top]}]]] [_{\text{AgrP}} [_{\text{Agr}} \text{t}_V] [_{\text{NegP}} [_{\text{Neg}} \text{t}_V] [_{\text{VP}} \text{t}_V]]]]]$

This result is not unexpected under our analysis if the NPI is not adjoined to CP in this case, but is instead in [Spec, NegP]. The NPI may then identify the content of Neg<sub>n</sub> in Neg before the verb moves to Neg on its way to Comp in order to match [+topic] at LF.

The proposed analysis is further confirmed by sentences such as (24). We mentioned earlier that percolation of [+neg] allows a DP containing a NPI to match this feature in [Spec, NegP] and/or to identify the content of Neg<sub>n</sub>. Notice, however, that when the NPI is contained in a wh-phrase or a topicalized phrase, the verb must raise to Comp to match independent [+wh] or [+topic] features. As a result, the feature of Neg<sub>n</sub> is unavailable to the NPI and Neg<sub>n</sub> cannot be identified.

- (24) a. *¿Qué cuadro de ningún pintor famoso \*(no) trajiste a la exposición?*  
 Lit. ‘What painting by no famous painter didn’t you bring to the exhibit?’
- b. *Ese cuadro de ningún pintor famoso \*(no) trajiste a la exposición.*  
 Lit. ‘You did not bring to the exhibit that painting by no famous painter’

### 3. Conclusion

Our account explains the differences and similarities between interrogative sentences, relative clauses, and topic structures. The negator must be overt only in those cases where it must raise along with the feature-containing verb

to Comp at LF, thus becoming invisible to the c-commanding NPI. When the NPI occupies a local position with respect to the negator,  $Neg_n$  recovers its content and the derivation converges at LF.

Our analysis also explains the unexpected contrast between wh-islands and other subjacency islands. If lexicalization of the negator is forced by the unavailability of operator raising, any subjacency island (and not just wh-islands) should block the relevant derivation. As pointed out, this is not the case. However, under the assumption that it is the [+wh] feature that is responsible for verb raising prior to the potential LF insertion of  $Neg_n$ , we explain the difference in grammaticality between these configurations. Any subjacency barrier which does not involve a [+wh] feature should allow insertion of  $Neg_n$  at LF.

## REFERENCES

- Longobardi, Giuseppe. 1991. "In defence of the Correspondence Hypothesis: Island effects and parasitic constructions in Logical Form". In *Logical Structure and Linguistic Structure*, ed. by C.-T. James Huang & Robert May, 149-196. Dordrecht: Kluwer Academic Press.
- Mallen, Enrique. 1992. "Subject topicalization and inflection in Spanish". *Theoretical Linguistics* 18.179-208.
- Suñer, Margarita. 1995. "Negative elements, island effects and resumptive no". *The Linguistic Review* 12.233-273.
- Uribe-Etxebarria, Myriam. 1994. *Interface Licensing Conditions on Negative Polarity Items: a Theory of Polarity and Tense Interactions*. Ph.D. dissertation, University of Connecticut.
- Zanuttini, Rafaella. 1991. *Syntactic Properties of Sentential Negation: A Comparative Study of Romance Languages*. Ph.D. dissertation, University of Pennsylvania.



# VESTIGIAL TROCHEES IN OÏL DIALECTS

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## 0. *Introduction*

This paper examines vestigial traces of trochees in the dialects of the Northern half of France and focuses on some distributional phenomena which characterize the right edge of words. At first glance, any attempt to associate the notion of trochees, especially syllabic trochees, to the phonetics of word-final segments in Oïl dialects appears ill-fated, since it is well-known that all the Northern Gallo-Romance varieties have been most deeply affected by phonetic erosion, which has eaten its way even into the root of words, with the result that all these dialects, including Standard French (SF), are oxytonic. It takes exceptional circumstances for a final schwa to be heard anywhere north of a La Rochelle-Genève line. One should thus be prepared to accept that the success of this research be measured by its ability to uncover *any* kind of evidence for trochees, however indirect or controversial. Were it direct or uncontroversial, as documented by alternations and dynamic phonology, one would clearly observe the presence of trochees rather than vestigial traces. In this case, what can be observed is merely static patterns of distribution. In no way does this constitute negligible evidence, however, as we shall proceed to demonstrate.

The supra-segmental properties of Modern French are such that robust evidence for any particular type of foot — and arguably, the very existence of feet — is obfuscated: final schwas are no longer heard and secondary stress effects remain minimal. The trochaic rhythm that French inherited from its Romance ancestor no longer prevails; hence common claims that either (i) the trochee has completely disappeared, to be replaced by the application of an End Rule (ER/right) which reflects the place of phonetic stress at the end of a breath group, or that (ii) French prosody must be reanalyzed as iambic, on the basis of the behavioral patterns of prosodic morphology.

Not all agree. In earlier work (Montreuil 1994), I reanalyzed the behavior of schwa to show that its [ɛ] vs. [œ / ø] vs. zero distribution follows from lexical structures in a straightforward manner provided that (i) the notion of prosodic domain is understood as relating only indirectly to the morphology, and (ii) a trochee be built right-to-left from the right edge of the prosodic domain. This suggested that the best trochee is of the type proposed by Selkirk (1978), i.e., an imbalanced trochee consisting of a full syllable followed by a deficient syllable. In other words, it was maintained that, although the Selkirkian foot had received sustained criticism from various quarters in the 1980's, it was fundamentally sound and well-motivated. All problems arose from domain-definition: Selkirk had wrongly assumed a domain as large as the word or larger. In recent work, Bullock (1995a, b) further develops the notion of an uneven trochee and analyzes the Modern French data as the result of a dominating constraint of Foot-Optimization (a constraint that remains subservient in Southern French).

The presence of deficient syllables word-internally can be related, at least in some cases, to the floating properties of schwa. Thus in *lèverons* [levrõ] vs. *lèverions* [levørjõ], schwa directly points to a deficient syllable, and thus to an uneven foot in the root. This provides motivation to work from an underlying form  $l\bar{e}v\text{-}l_{\phi}$  + suffix, rather than from  $l\bar{e}v\text{-}l_{\sigma}$  + suffix. This paper assumes that the necessity of positing uneven feet word-internally has been demonstrated, and turns its attention to word-final position, raising the possibility of a misalignment between prosody and phonetics at the right edge of words. To the extent that  $[\sigma x]$ , rather than  $[\sigma]$ , is motivated as the proper prosodic representation of [lev] in *lèverons*, is it not as proper to analyze [lev] in *soulève* also as  $[\sigma x]$ , thus maintaining a formal identity of stem? Admittedly, deficient syllables are much harder to substantiate word-finally. Arguments given in Tranel (1981) to the effect that underlying final schwas should not be posited at the segmental level are still valid. But it does not follow that there are no final deficient syllables in input forms, since it is well-known that phonological information rarely disappears at one go, and that prosodic structure tends to linger on long after segmental information has disappeared.

Consider the disappearing three-way contrast represented in (1). Borrowing terminology from historical linguistics, let us call the final C in [kap] *cap* a C in absolute final position, and the final C in [kap] *cape* as a C in non-absolute final position. To what extent does this contrast still exist, given that we have a phonetic merger between *cap* and *cape*?

- |     |                    |  |
|-----|--------------------|--|
| (1) | [kapo] <i>capo</i> | Two syllables, two feet. ....C <sub>1</sub> VC <sub>2</sub> V          |
|     | [kap] <i>cap</i>   | One syllable, one foot. ....C <sub>1</sub> VC <sub>2</sub>             |
|     | [kap] <i>cape</i>  | Two syllables, one (uneven) foot. ....C <sub>1</sub> VC <sub>2</sub> - |

Bullock (1995a) suggests that the uneven trochee take two shapes (unary and binary) and that there be an undominated constraint (\*Φ<sup>F</sup>/Bin) which prohibits the binary expansion of feet in final position. The proposal of this paper runs along similar lines, and exploits the basic idea of weak prosodic position, a notion that is not new and that is commonly used in the analyses of lenition processes. Suppose that in the phonotactic forms given in (1), C<sub>2</sub> weakens in C<sub>1</sub>VC<sub>2</sub>V, but not in C<sub>1</sub>VC<sub>2</sub>: we recognize a pattern of lenition which is positionally determined. What happens to the third form, C<sub>1</sub>VC<sub>2</sub>-, is crucial: if C<sub>2</sub> in C<sub>1</sub>VC<sub>2</sub>- patterns in every way after C<sub>2</sub> in C<sub>1</sub>VC<sub>2</sub>, then the distinction between absolute and non-absolute finds no support. If the same consonant patterns after C<sub>2</sub> in C<sub>1</sub>VC<sub>2</sub>V, and weakens as if it were in intervocalic position, then this constitutes indirect evidence for foot-structure.

In this context, the present research discusses several processes which occur in some contemporary dialects of Northern Gallo-Romance. Although final schwa is phonetically absent, the phonology of adjacent segments, specifically of the consonant, or the clusters, that precede it retains traces of its presence. Parallels with French will be obvious, but the discussion will be limited in this paper to phenomena in Norman, Gallo, and Lorrain which regulate the phonology of /r/.

**1. Norman assibilation**

Island Norman, and specifically Jersey Norman (= Jèrriais), has retained the traces of a process of assibilation which used to affect a much larger area in Oïl dialects (Bloch 1927, Pope 1973, Spence 1957). The process by which /r/ assibilated to /z/, starting from south-central France in the 13th century, in full vigor in the Parisian region in the 16th century, arguably not reaching the Islands until the 17th century, is well-documented, and hardly ever discussed without a mention of the few lexical traces that can still be found in standard French (*chaise* < CATHEDRA, *bésicles* < \*BERICULAS). In Island Norman, it is more common, possibly through the influence of English, for /r/ to surface as a slit fricative [ʃ] rather than a groove fricative [z], although the latter variant is also heard (Le Maistre 1966: 512). To the extent that in Jèrriais, [ʃ] is a non-sibilant slit fricative with flat tongue, a wide-airflow channel and a point of articulation which is not necessarily interdental, but often dental as is the case with British [ʃ], the term assibilation is a misnomer. But it is the traditional term, and it will be retained here. Examples of Jèrriais /r/ > [ʃ] assibilation in

weak position are given in (2) and (3), where, in addition to English glosses, standard French glosses (which frequently constitute cognates) are provided.<sup>1</sup>

- |     |         |                      |         |                   |
|-----|---------|----------------------|---------|-------------------|
| (2) | [dmœðε] | 'demeurer / to live' | [dyðε]  | 'durer / to last' |
|     | [dʒεðε] | 'jarret / ham, hock' | [fyðε]  | 'furet / ferret'  |
|     | [hεðã]  | 'hareng / herring'   | [maðε:] | 'marée / tide'    |
|     | [miðœ:] | 'miroir / mirror'    | [œ:ðœ:] | 'heureux / happy' |
|     | [pwððε] | 'poireau / leek'     | [paðε]  | 'paroi / wall'    |
- (3) [ε:dʒεrðε] 'se perdre / to lose one's way'

Typically, assibilation does not occur in strong position, i.e., word-initially (4a), in coda-position word-internally (4b)<sup>2</sup> or in a supported position (4c). In those examples, we hear the same (usually apical) [r] that is heard in other, non-assibilating, forms of Island Norman.

- (4) a. [de rɔ̃ʃ] 'des ronces / brambles'  
 [i rɛstɛ la] 'il restait là / he stayed there'
- b. [hɛrne:] 'harnais / harness'  
 [dɛrni] 'dernier / last'  
 [ɔrdʒi] 'orgueil / pride'  
 [burd] 'bourdon / bumble bee'  
 [ɛrʃ] 'herse / harrow'
- c. [ivrɔ̃n] 'ivrogne / drunkard'  
 [a:tr] 'âtre / hearth'  
 [dzastr] 'désastre / disaster'  
 [ε:privi] 'épervier / plover'

In final position, /r/ deletes, like any latent consonant, as in (5a), but is retained in (5b) as a stable consonant (superscript "REG." denotes regional French forms).

<sup>1</sup> Liddicoat (1994:93) notes that this creates a merger with some forms of /z/ which have also moved to an interdental articulation: [duðjɛm] *douzième* 'twelfth' vs. [dœzjɛm] *deuxième* 'second', [dʒɛrneði] *Guernese*, [dviðε] *deviser* 'to speak', [krœ:ðε] *creuser* 'to dig', [kwɔðɑʒ] *courage* 'courage', [kwɔ:ðy] *cousu* 'sewn', [rɔ:ði] *rosier* 'rosebush'. However, whereas the fronting of /z/ → [ð] is sporadic and lexically-determined, the assibilation of [r] is a systematic, phonetic process.

<sup>2</sup> Before a sonorant, deletion is obligatory when /r/ is in the stressed syllable; deletion then triggers compensatory lengthening: [mɛ:l] *merle* 'blackbird', [ko:n] *corne* 'horn', [ɛpɛ:n] *épargne* 'spare'. In unstressed syllables, deletion is less common and it may or may not trigger compensation: [bɛ:ni] *bernique* 'nothing doing', [bɛ:nar] *Bernard* 'Bernard', but [ɔlwɔʒ] *horloge* 'clock', and [dʒɛrni] 'to warn'.

(5)	a.	[ne]	'noir / black'	[fe]	'fer / iron'
		[ʒœ]	'jour / day'	[sy]	'sur / on'
		[mɛ]	'mer / sea'		
	b.	[amur]	'amour / love'	[bar]	'bar / bass'
		[bœr]	'beurre / butter'	[ber]	'berceau / cradle'
		[dʒɛr]	'guerre / war'	[ɛ:r]	'air / air'
		[fɔr]	'fort / strong'	[gɑr]	'jars / gander'
		[kar]	'quart / quarter'	[ka:r]	'carre <sup>REG.</sup> / corner'
		[mɔr]	'mort / death'	[kwɔr]	'courre (OFr.) / to run'
		[mar]	'marc / pomace'	[mar]	'mars / March'
		[mær]	'marque / marker'	[nɔr]	'nord / north'
		[ser]	'Sercq / Sark'	[se:r]	'serre / greenhouse'
		[fɛr]	'cerf / stag'	[tʃœr]	'querre (OFr.) / to fetch'

Historically, the stability of the final /r/'s in (5b) is explained by the stylistically marked character of the word, geminate blockage (e.g., in the cognates for *beurre*, *guerre*, *serre*, *carre*, *courre*, *querre*), or the presence of an /t/C cluster (where C is latent), as, for instance, in the words for *cradle*, *March*, *death*, *stag*. This correlates synchronically with the presence of alternations such as the ones given in (6).

(6)	[ber]	'berceau / cradle'	[berʃi]	'bercer / to rock'
	[fɔr]	'fort / strong' (masc.)	[fɔrt]	'forte / strong' (fem.)
	[mɛr]	'marque / marker'	[mɛrk]	'marque / mark'
	[mɔr]	'mort / dead' (masc.)	[mɔrt]	'morte / dead' (fem.)
	[ser]	'Sercq / Sark'	[sertʃi]	'sercquiais / of Sark'

The domain of assibilation is such that the process did not apply to the compound forms [nɔrɛ:] 'northeast' and [nɔrwe:] 'northwest'.

The fricative [ð] is encountered in final position, precisely in those words where it could be argued to be in non-absolute final position, as shown in (7).

(7)	[bjɛsœ:ð]	'blessure / wound'	[brɛð]	'braire / to bray'
	[drjɛð]	'derrière / behind'	[dið]	'dire / to say'
	[ɛ:lið]	'élire / to elect'	[ɛð]	'aire <sup>REG.</sup> / floor area'
	[fɛð]	'faire / to do'	[fwɔð]	'fourre <sup>REG.</sup> / manure'
	[jeð]	'lire / to read'	[kɔdið]	'conduire / to drive'
	[krupjɛð]	'croupière / crupper'	[mað]	'mare / pond'
	[mœ:ð]	'mûre / mulberry'	[œð]	'heure / hour'
	[pɛð]	'père / father'	[tʃɔð]	'cuire / to cook'

As illustrated in (8), this creates three-way oppositions.

- |     |       |                   |       |                               |
|-----|-------|-------------------|-------|-------------------------------|
| (8) | [mɛ]  | ‘mer / sea’       | [vɛ:] | ‘voir / to see’               |
|     | [mɛr] | ‘marque / marker’ | [vɛr] | ‘vert / green’                |
|     | [mɛð] | ‘mère / mother’   | [vɛð] | ‘voire <sup>REG.</sup> / yes’ |

These are items which are homophonous in some varieties of Island Norman, for instance in Sercquiais, as shown in (9).

- |     |                 |                   |                   |
|-----|-----------------|-------------------|-------------------|
| (9) | <i>Jèrriais</i> | <i>Sercquiais</i> |                   |
|     | [mɛ]            | [mwer]            | ‘mer / sea’       |
|     | [mɛr]           | [mɛr]             | ‘marque / marker’ |
|     | [mɛð]           | [mwer]            | ‘mère / mother’   |

As shown in (10), morphophonemic alternations expectedly show a zero/[ð] contrast in the masculine and feminine forms of words. But just as expectedly, the liaison C of a pre-vocalic masculine is not [ð], but [r]. The domain of assibilation being the word, /r/ surfaces as [r] in [lœ ner a:tr] ‘l’âtre noir/the black fire-place’.

- |      |         |           |   |
|------|---------|-----------|---|
| (10) | [ne]    | [neð]     | ‘noir - noire / black’                      |
|      | [dy]    | [dyð]     | ‘dur - dure / hard, harsh’                  |
|      | [ʃɔrfi] | [ʃɔrfjɛð] | ‘sorcier - sorcière / sorcerer - sorceress’ |

In fact, the addition of words which are truly vowel-final, i.e., which have a vowel in absolute final position, would create a four-way opposition, as exemplified in (11).

- (11) *Word-final contrasts*
- |     |               |       |                   |       |                        |
|-----|---------------|-------|-------------------|-------|------------------------|
| (a) | a vowel:      | [mɛ]  | ‘moi / me’        | [ne]  | ‘neige / snow’         |
| (b) | a latent [r]: | [mɛ]  | ‘mer / sea’       | [ne]  | ‘noir/black’ (masc.)   |
| (c) | a stable [r]: | [mɛr] | ‘marque / marker’ | [nɛr] | ‘nerf / nerve’         |
| (d) | a stable [ð]: | [mɛð] | ‘mère / mother’   | [nɛð] | ‘noire / black’ (fem.) |

In the face of this kind of evidence, it is always possible to maintain that /ð/ is a phoneme, and that it just so happens that, for historical reasons, its distribution is limited, i.e., it cannot occur in the contexts specified in (4), i.e., in strong position. However, the hypothesis defended in this paper is that [mɛð] is monosyllabic only phonetically, and that, consequently, /ð/ is the allophone that surfaces whenever /r/ is intervocalic at the prosodic level. This is congruent with speakers’ attitudes: speakers will easily state that they think of [mɛð] as bisyllabic and will refer to [ð] as their “funny ‘r’”. These observations,

however, do not rule out the possibility of orthographic or cognate interference (from French or from other Norman varieties).

Much more pertinent is the internal evidence. There are several features of Jersey phonology which point to an alternative analysis. Cases where [r] shows up as [ø] even in contact with a consonant are shown in (12b) and (12c) below. This does not happen in (12a) because assibilation is not an edge phenomenon.

- (12) a. [il ø rlevø]      'ils ont relevé / they have raised'  
           [lœ rpa:]        'le repas / the meal'  
           [fo:dra rsyme]    'il faudra resemer / we'll have to resow'
- b. [fyøte]        'fureter / to ferret' (compare with [fyøε] in [3a])  
       c. [lavøi]        'laverie / wash house'

The same arguments that relate the presence of [ø] in [fyøte] and [lavøi] to the presence of a foot should transfer to word-final position, i.e., the only cases where lenition is found in the "wrong environment" (e.g., a non-intervocalic environment) are cases which involve a hidden schwa, and a word-internal foot (Montreuil 1989): schwa after [ø] in [fyøte], schwa before [ø] in [lavøi]. If the same foot is posited word-finally, the phonology of [ø] makes perfect sense. Not only the process, but the domain as well: lenition (LEN) affects intervocalic segments word-internally, which explains (12a).

In terms of Constraints and Repair Strategies, if we retain Bullock's \* $\emptyset^{F/Bin}$  constraint and if we view LEN as restricted to intervocalic position, then [møø] is the optimal output to repair an ill-formed /mer + Empty Nucleus. It does not violate \* $\emptyset^{F/Bin}$  and it does not violate LEN.

An interesting parallel can be drawn to the distribution of [r] (specifically, and more generally latent consonants) in Gallo, the family of Western dialects spoken in Roman Brittany. There is no allophone of [r] involved here, so the argument is built in a more static way simply from the distribution of [r]. Gallo shares with Norman the two features described earlier under (5), namely that absolute final [r] deletes, creating masculine forms which surface as vowel-final (13), while final [r] does surface in words like (14) (Chauveau 1984: 160-161).

- |      |              |               |                             |
|------|--------------|---------------|-----------------------------|
| (13) | <i>Gallo</i> | <i>French</i> |                             |
|      | [dy]         | [dyr]         | 'dur / hard' (masc.)        |
|      | [mèju]       | [mɛjœr]       | 'meilleur / better' (masc.) |
|      | [ʃè]         | [ʃer]         | 'cher / dear' (masc.)       |
|      | [nɛ]         | [nwar]        | 'noir / black' (masc.)      |

- (14) [e $\text{p}\text{e}\text{r}$ ]      [e $\text{k}\text{s}\text{p}\text{e}\text{r}$ ]      'vif / quick, smart' (masc.) (cf. Fr. *expert*)

Vowel-final forms in (13) alternate with a feminine [r] (15), while [r]-final forms (14) alternate with a feminine in [rC] (16).

- |      |                                 |   |          |
|------|---------------------------------|---|----------|
| (15) | <i>masculine</i>                | <i>feminine</i>                         |          |
|      | [d $\text{y}$ ]                 | [d $\text{y}\text{r}$ ]                 | 'hard'   |
|      | [m $\text{e}\text{j}\text{u}$ ] | [m $\text{e}\text{j}\text{u}\text{r}$ ] | 'better' |
|      | [j $\text{e}$ ]                 | [j $\text{e}\text{r}$ ]                 | 'dear'   |
|      | [n $\text{e}$ ]                 | [n $\text{e}\text{r}$ ]                 | 'black'  |

- (16) [e $\text{p}\text{e}\text{r}$ ]      [e $\text{p}\text{e}\text{r}\text{t}$ ]      'vif / quick, smart'

This situation derives from the fact that the dialect consistently opposes short masculine forms to longer feminine forms (see [17]). Standard French displays the same type of oppositions with less consistency, since it has a number of phonetic forms which are identical for masculine and feminine (e.g., [ʃik] *chic/chic* 'elegant', [sœl] *seul/seule* 'alone', [d $\text{y}\text{r}$ ] *dur/dure* 'hard').

- |      |                         |                                 |                          |
|------|-------------------------|---------------------------------|--------------------------|
| (17) | [k $\text{j}\text{e}$ ] | [k $\text{j}\text{e}\text{r}$ ] | 'clair - claire / clear' |
|      | [n $\text{e}$ ]         | [n $\text{e}\text{t}$ ]         | 'net - nette / neat'     |
|      | [nœ]                    | [nœv]                           | 'neuf - neuve / new'     |
|      | [s $\text{e}$ ]         | [s $\text{e}\text{f}$ ]         | 'sec - sèche / dry'      |
|      | [fr $\text{e}$ ]        | [fr $\text{e}\text{d}$ ]        | 'froid - froide / cold'  |

The phonetic generalizations which characterize the distribution in (13)-(17) are trivial: V-final forms are masculine, [rC]-final forms are feminine, but [r]-final forms can be either (15 vs. 16). The phonological generalization is more interesting. In order to surface, /r/ can never be absolute-final: in (16), it is followed by a latent C, and in (15), it is followed by a latent nucleus. As shown in (18), this amounts to saying that Gallo, while phonetically intermediate between French and Catalan, is phonologically identical to Catalan. The difference between Catalan and Gallo in this instance is merely phonetic: Catalan still actually pronounces the final nucleus in the feminine.

- |      |         |                         |                                 |
|------|---------|-------------------------|---------------------------------|
| (18) |         | <i>masculine</i>        | <i>feminine</i>                 |
|      | French  | [d $\text{y}\text{r}$ ] | [d $\text{y}\text{r}$ ]         |
|      | Gallo   | [d $\text{y}$ ]         | [d $\text{y}\text{r}$ ]         |
|      | Catalan | [d $\text{y}$ ]         | [d $\text{y}\text{r}\text{ə}$ ] |

If this is correct, it constitutes indirect but clear evidence for final trochees with a full syllable followed by a deficient syllable.

## 2. Lorrain affrication and palatalization

Lorraine (as well as Southern Ardennes and parts of Franche-Comté) displays a special type of /r/. Usually dubbed the Lorrain /r/, it is impressionistically described in traditional grammars as 'dry', 'short', 'guttural', 'harsh' (Bruneau 1913:348-349) and is responsible for a variety of unusual alternations and forms in contemporary Lorrain and Comtois.

Consider the Southern Ardennais form [puʃe], which corresponds to French [purso] *pourceau* 'piglet'. Standard French is the conservative dialect in this instance, since the documented historical change involved a stage at which Lorrain displayed the same internal clusters as Standard French does. The historical sequence is not controversial and involves three stages: (i) Palatalization of [r], (ii) Coronal Obstruent Raising (and Affrication), (iii) Deletion of [r] before coronal. On the historical change from [rs] to [ʃ], Bruneau comments: "L'[s] du groupe [rs] a (sic) passé à [ʃ] sous l'influence de l'[r] dit lorrain. Puis l'[r] placé à la fin de la syllabe a disparu devant la chuintante" (1913:398).<sup>3</sup> Wüest concurs:

Il semble donc que nous ayons affaire à deux changements consécutifs. D'abord, le [r] s'est palatalisé. C'est un changement allophonique dont les limites ont dû fluctuer au cours des siècles. Ensuite, ce [r] palatal s'est effacé devant une consonne apicale, sans ou avec palatalisation compensatoire. C'est un changement phonologique et irréversible. Le premier changement a vraisemblablement conditionné le second. (1979:301)<sup>4</sup>

However, Wüest fails to state why and in what context this raising takes place, and he has to conclude that "la palatalisation du /r/ reste mystérieuse" (p. 301).

Contejean (1982) cites the following forms from Montbéliard (Lorraine).

(19)	[geʃɔt]	'garcette / girl'	[vɔʃe]	'verser / to pour'
(20)	[medʒi]	'mardi / Tuesday'	[lɔdʒe]	'larder / to lard'
	[fedʒe]	'fardeau / burden'	[kudʒɔ]	'cordon / cord'
	[moteʒ]	'moutarde / mustard'	[ludʒe]	'lourdaud / oaf'
	[podʒene]	'pardonner / to forgive'	[edʒi]	'hardi / bold'

<sup>3</sup> "The [s] of the [rs] cluster became [ʃ] under the influence of the so-called "lorrain [r]". The [r] itself, since it is syllable-final, disappeared before the palatal fricative."

<sup>4</sup> It appears that we are dealing with two consecutive changes. First [r] palatalized. This is an allophonic change whose boundaries must have fluctuated through the centuries. Next, palatal [r] deleted before an apical consonant, with or without compensatory palatalization. This is a phonological, irreversible change. Most likely, the first change conditioned the second one.

- |      |          |                      |          |                      |
|------|----------|----------------------|----------|----------------------|
| (21) | [petʃy]  | 'pertuis / peephole' | [petʃi]  | 'partir / to leave'  |
|      | [metʃe]  | 'marteau / hammer'   | [fotʃyn] | 'fortune / fortune'  |
|      | [ketʃœn] | 'rideau / curtain'   | [kɔtʃje] | 'quartier / quarter' |

In (19), the guttural [r] raises a following [s] to [ʃ]; in (20) and (21), it turns the apical [t] and [d] into palatal affricates. After the raising process has applied, [r] must delete.<sup>5</sup> Coda /r/ is very volatile in Eastern Gallo-Romance, as it frequently weakens to various /h/-type sounds or deletes altogether, especially word-finally. It is common for /r/-deletion (R-DEL) to occur independently of palatalization.

R-DEL occurs frequently in word-final position, as shown in (22). As could be expected, this deletion is often accompanied by compensatory lengthening, most notably in stressed position.

- |      |                       |                                |        |                     |
|------|-----------------------|--------------------------------|--------|---------------------|
| (22) | <i>absolute final</i> | <i>before latent consonant</i> |        |                     |
|      | [po]                  | 'par / by'                     | [ve]   | 'vert / green'      |
|      | [ʃy]                  | 'sur / on'                     | [lɛ]   | 'lard / lard'       |
|      | [evwa]                | 'avoir / to have'              | [jine] | 'Léonard / Leonard' |
|      | [uvrje]               | 'ouvrier / worker'             | [kwɔ]  | 'court / short'     |
|      | [ãfe]                 | 'enfer / hell'                 | [fo]   | 'fort / strong'     |
|      | [hyve]                | 'hiver / winter'               | [to]   | 'tort / wrong'      |

The forms in (23) show word-internal deletion without palatalization before the coronal sonorants [l] and [n].

- |      |         |                       |         |                     |
|------|---------|-----------------------|---------|---------------------|
| (23) | [pale]  | 'parler / to speak'   | [bon]   | 'borgne / one-eyed' |
|      | [tʃel]  | 'Charles / Charles'   | [bwɛn]  | 'borne / milestone' |
|      | [ylɛ]   | 'hurler / to scream'  | [bwɛnɛ] | 'Bernard / Bernard' |
|      | [kwɛnɛ] | 'cornet / paper cone' | [fwɛno] | 'petit four / oven' |

In Montbéliard, however, the independence of R-DEL is more limited because although word-final R-DEL is common, word-internal coda /r/ does not delete (see [24]) unless it precedes a coronal segment.

- |      |          |                    |          |                      |
|------|----------|--------------------|----------|----------------------|
| (24) | [erb]    | 'arbre / tree'     | [furm]   | 'forme / shape'      |
|      | [tʃɛrpi] | 'charpie / shreds' | [herb]   | 'herbe / grass'      |
|      | [sɛrvɛ]  | 'cerveau / brain'  | [nʃɛrʒɛ] | 'narguer / to flout' |
|      | [kurb]   | 'corbeau / crow'   | [bɛrb]   | 'barbe / beard'      |

<sup>5</sup> Metathesis does not feed Coronal Raising nor /r/-deletion before coronal: [bœrtœne] 'bretonner / to speak Breton', [pœrte] 'prêter / to loan', [bœrlā] 'brelan / three of a kind', [fœrle] 'flamber, OFr: freler / to burn', [tœrli] 'treillis / trellis'.

A full discussion of the interaction between R-DEL and Coronal Obstruent Raising, and its phonetics, history, geography, and implications for segmental theory and feature geometry can be found in Montreuil (in prep.). The question that directly relates to the concerns of this paper is whether or not these two processes affect in the same fashion consonants that are in absolute-final position and non-absolute-final position. The answer is clear: many word-final /r/'s do surface. Historically, "protective" schwas were still very active at the time R-DEL applied; in the words given in (25), these schwas ensured that /r/ still functioned as an onset. Historically, R-DEL precedes Final-Schwa deletion.<sup>6</sup> This parallels the situation in Gallo.

(25)	[ɛfɛr]	'affaire / deal'	[bryr]	'bruire / to rustle'
	[frɛr]	'frère / brother'	[dʒār]	'gendre / son-in-law'
	[ɛpār]	'apprendre / to learn'	[yr]	'heure / hour'
	[mor]	'moudre / to grind'	[mœr]	'mûre / berry'
	[fwadʒɛr]	'fougère / fern'	[bɛr]	'palissade / fence'

As illustrated in (26), coronal Raising applies in non-absolute final position, exactly like assibilation in Norman.

(26)	a.	[buʃ]	'bourse / purse'
		[ɛʃ]	'herse / harrow'
		[foʃ]	'force / strength'
		[puʃ kø]	'parce que / because'
	b.	[fotʃ]	'forte / strong' (fem.)
		[katʃ]	'quarte <sup>REG.</sup> / quart'
		[sotʃ]	'sorte / sort'
	c.	[vɔdʒ]	'verte'; cf. 'verde (OFr.) / green' (fem.)
		[vadʒ]	'garde / guard'
	d.	[fo] - [fotʃ]	'fort - forte / strong' (masc.-fem.)'
		[ve] - [vetʃ]	'vert - verte / green' (masc.-fem.)'
		[kwɔ] - [kwɔtʃ]	'court - courte / short' (masc.-fem.)'
		[kwɔ] - [kwɔtʃo]	'court - courtaud / short' (dim.)

The Lorrain case thus combines characteristics already seen separately in Norman and in Gallo. Both in terms of the distribution of [r] itself as well as in terms of what happens to [r] in certain contexts, the same parameters seem to

<sup>6</sup> R-DEL precedes several other rules, but can also be interfered with. For instance, final /r/ after /u/ actually vocalizes, creating a diphthong which then undergoes stress-shift. Thus, /tur/ ⇒ [tu<sup>ɛ</sup>] ⇒ [twé] 'tour / tower'.

apply: non-absolute final consonants (i.e., consonants before latent nuclei) are as much a reality as non-absolute final vowels (i.e., vowels before latent consonants), which is another way of saying: binary feet are still there.

### 3. *Conclusion*

Many principles and mechanisms have been proposed in the literature which would accommodate final deficient syllables as a matter of course (Government Phonology, CV-only Phonology, catalectic versions of Moraic Phonology, and others). My goal in this paper has not been to evaluate theories; rather, I have attempted to document cases where trochees can be posited to account for some word-final phenomena, even though the weak member of the trochee is not itself manifested. There have been no confusion of diachrony and synchrony in our approach: rules that are clearly diachronic, like Lorrain Raising, result in a particular distribution of segments. That distribution needs a synchronic account. The claim of this paper is that vestigial trochees provide the best synchronic account. If iambs, or no feet at all, were posited word-finally, the phonology of /r/ would disintegrate, and massive relexification would prevent the representation of morpheme relationships. The proposal made here is to be registered along similar ideas concerning the evanescence of prosodic structure: a claim that a mora which loses its phonetic content (or its association to such) may linger on is based on the properties of adjacent segments, for instance the length of vowels. Similarly, prosodic material like a final syllable which loses its segmental content is claimed to still be present if it continues to control the distribution of final segments. That is precisely the situation which Oil dialects still find themselves in.

Standard French has evolved further than the dialects discussed here. The latency of final consonants in Standard French has broken into morphological generalizations, lexical idiosyncrasies and in no ways displays the regularity that we still find in many Oil dialects (compare again Standard French and Gallo). As much as the absence of final schwa, the fragmented distribution of final segments in Standard French is what lends credence to the existence of the \* $\Phi^{F/B}$ in constraint.

### REFERENCES

- Bloch, Oscar. 1927. "L'assibilation d'R dans les parlers gallo-romans". *Revue des Langues Romanes* 3,92-156.
- Bruneau, Charles. 1913. *Étude phonétique des patois d'Ardenne*. Paris: Champion.

- Bullock, Barbara. 1995a. "The uneven trochee in French". *Rivista di Linguistica* 7.273-292.
- \_\_\_\_\_. 1995b. "Prosodic constraints and morphological alignment in French". *Lingua* 96.95-117.
- Chauveau, Jean-Paul. 1984. *Le Gallo: une présentation*. Studi 27, vol. 2. Brest: Section de celtique, Faculté des Lettres de Brest, Université de Bretagne occidentale.
- Contejean, Charles. 1982. *Glossaire du patois de Montbéliard*. Montbéliard: Société d'émulation de Montbéliard.
- Le Maistre, Frank. 1966. *Dictionnaire jersiais-français*. Jersey: Don Balleine.
- Liddicoat, Anthony. 1994. *A Grammar of the Norman French of the Channel Islands*. Berlin: Mouton de Gruyter.
- Montreuil, Jean-Pierre. 1989. "On assimilation through schwa". In *Studies in Romance Linguistics*, ed. by Carl Kirschner & Janet DeCesaris, 261-272. Amsterdam: John Benjamins.
- \_\_\_\_\_. 1994. "On Prosodization". In *French Generative Phonology: Retrospectives and Perspectives*, ed. by Chantal Lyche, 221-238. Salford: University of Salford/Association for French Language Studies and European Studies Research Institute.
- \_\_\_\_\_. In preparation. "Coronal raising in Lorrain".
- Pope, Mildred. 1973 (1934). *From Latin to Modern French*. 2nd edition. Manchester: Manchester University Press.
- Selkirk, Elizabeth. 1978. "The French Foot: On the status of the mute 'e'". *Studies in French Linguistics* 1.141-150.
- Spence, Nicol C. W. 1957. "L'assibilation de l'r dans les parlers jersiais". *Revue de Linguistique Romane* 21.270-288.
- Tranel, Bernard. 1981. *Concreteness in Generative Phonology: Evidence from French*. Berkeley: University of California Press.
- Wüest, Jakob. 1979. *La dialectalisation de la Gallo-Romania. Problèmes phonologiques*. Basel: Editions Francke Bern.



## DEFINITE / ZERO ALTERNATIONS IN PORTUGUESE

### TOWARDS A UNIFICATION OF TOPIC CONSTRUCTIONS\*

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#### 0. Introduction

Portuguese is the only (major) Romance language with “English-style topicalization” of a definite direct object, i.e., where the clause-internal site where the topic is construed contains a gap, annotated in (1) as *ec*.<sup>1</sup>

- (1) a. *Esse livro, o Luís comprou ec para a Maria.*  
b. \* *Ese libro, Luis ha comprado ec para María.*  
c. \* *Ce livre, Louis a acheté ec pour Marie.*  
‘That book, (the) Louis bought ec for Maria.’

On the other hand, all Romance languages display so-called *Clitic Left Dislocation* (CLLD), where the DP topic is resumed by an accusative “definite” clitic pronoun (for discussion, see Duarte 1987, Cinque 1990).<sup>2</sup>

- (2) a. *Esse livro, o Luís comprou-o para a Maria.*  
b. *Ese libro, Luís lo ha comprado para María.*  
c. *Ce livre, Louis l' a acheté pour Marie.*  
‘That book, Louis bought it for Maria.’

(1a) and (2a) are basically equivalent in Portuguese, semantically and discourse-wise. In both, the initial DP corresponds to old, presupposed infor-

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\*I would like to thank Juan Uriagereka for general and Galician discussion. All errors are my own.

<sup>1</sup> For discussion of this construction and its movement properties in English and in Portuguese, respectively, see Chomsky (1977) and Duarte (1987).

<sup>2</sup> The details of cliticization are unimportant. For discussion, see among others Martins (1994) and references therein.

mation, serving as a kind of “point of reference” for the predication conveyed by the *associated clause* that follows it.<sup>3</sup> The questions in (3) arise naturally.

- (3) i. What is the nature of the variation between (1a) and (2a) in Portuguese?
- ii. From an empirical perspective, does it correlate with other differences between Portuguese and the other Romance languages or is it rather an isolated phenomenon?
- iii. Theoretically, is this difference accidental, or is it rooted in some more fundamental difference between Portuguese and the other Romance languages?
- iv. In the latter case, can we hope for a *minimal* characterization of the difference, respecting the principles of parametric variation of the *Principles and Parameters* model?<sup>4</sup>

In the remainder of this paper I will address these questions. I will start by showing that there are additional cases in Portuguese of a similar alternation between a definite accusative clitic pronoun and a gap, which are lacking in the other Romance languages (Section 1). Then, I will examine an additional paradigmatic case involving the category of determiner rather than that of “pronoun” (Section 2), proposing in Section 3 that Portuguese, but not Spanish, has a null determiner with the semantic properties of the overt definite determiner. In Section 4, I invoke Postal’s (1969) theory of pronouns as implemented in Raposo (1973) to extend the analysis of Section 3 to the phenomena illustrated in Section 1, finally concluding in Section 5 that (3iv) has a positive answer. For lack of space, I confine myself to a comparison

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<sup>3</sup> Note that (1a) is *not* a case of Focus Fronting, where the initial DP conveys focal assertion, as in the Spanish example in (i).

(i) *ESOS LIBROS ha leído Juan.*  
 THOSE BOOKS has read John

Here, the initial focus is necessarily associated with a gap in direct object position. In any case, Portuguese lacks the construction illustrated in (i) with a non-quantified DP. The present paper is *not* about such constructions, which I henceforth ignore.

<sup>4</sup> I.e., basically the idea that parameters “are restricted to formal features of functional categories” (Chomsky 1995:6).

between Portuguese and Spanish, except for a few observations about Galician; the contrasts described, however, hold for the other Romance languages.<sup>5</sup>

## 1. *Other Definite / Zero pronominal alternations in Portuguese*

### 1.1 *Null Objects*

Consider null objects, as discussed in Raposo (1986), following work by Huang (1984). If an element of the universe of discourse is conversationally or contextually salient, it can be left unexpressed in the object position of a predicative sentence that says something about it. Thus, suppose that *John* is salient in this sense; then I can say (4) in Portuguese but not in Spanish.

- (4) a. *Encontrei \_\_\_ ontem no cinema.*  
 b. \* *Encontré \_\_\_ ayer en el cine.*  
 'I met \_\_\_ yesterday at the movies.'

In both languages such a pragmatic topic can be expressed clause-internally by way of a resumptive definite clitic pronoun, as in (5).

- (5) a. *Encontrei-o ontem no cinema.*  
 b. *Lo encontré ayer en el cine.*  
 'I met him yesterday at the movies.'

### 1.2 *Anaphora in Coordination Structures*

Another case of this alternation in Portuguese is that of direct object anaphora in coordination structures. In the second conjunct of such structures, a direct object anaphorically dependent on a parallel direct object in the first conjunct may be expressed in Portuguese either by a definite clitic pronoun, as in (6a), or by a gap, as in (6b).

- (6) a. *Mostrei [aquele quadro] à Maria, e a Cristina mais tarde mostrou-o à Alexandra.*  
 '(I) showed [that painting] to Maria, and Cristina later showed it to Alexandra.'

<sup>5</sup> This is to the best of my knowledge, and with possible dialectal exceptions. See e.g. Camacho et al. (to appear) for an examination of Andean Spanish, where they find alternations identical to the ones obtaining in Portuguese. I hope to offer a more comprehensive picture of the phenomenon in work in preparation.

- b. *Mostrei [aquele quadro] à Maria, e a Cristina mais tarde mostrou*  
 \_\_\_ *à Alexandra.*  
 '(I) showed [that painting] to Maria, and Cristina later showed  
 \_\_\_ to Alexandra.'

Note that the presence of an indirect object in the second conjunct of (6b) disallows an analysis in terms of VP Deletion, assuming some sort of Larsonian shell for that VP. Again, Spanish necessarily resorts to a definite clitic as in (7a); a gap in object position in the second conjunct is ruled out, as in (7b) (the meanings are as for (6a-b), respectively).

- (7) a. *Le mostré [aquele cuadro] a María, y Cristina más tarde se lo*  
*mostró a Alejandra.*  
 b. \* *Le mostré [aquele cuadro] a María, y Cristina más tarde le*  
*mostró \_\_\_ a Alejandra.*

### 1.3 Answers to yes-no questions

Answers to yes-no questions are another domain where a zero/definite pronoun alternation exists in Portuguese, but not in Spanish. Here, the determination of the relevant facts is slightly more complicated, because of other grammatical factors that play a role in these forms. First, note that the unmarked *short* answer to a yes-no question in Portuguese consists of a simple repetition of the inflected verb of the question, as in (8b), thus with no expression of the direct object. This is impossible in Spanish (which resorts rather to the adverbial *sí* 'yes'), as shown in (9b) (for discussion, see Laka 1990 and especially Martins 1994).

- (8) a. *Viste o João?*  
 'Did you see John?'  
 b. *Vi.*  
 '(I) saw.'
- (9) a. *¿Viste a Juan?*  
 b. \* *Vi.*

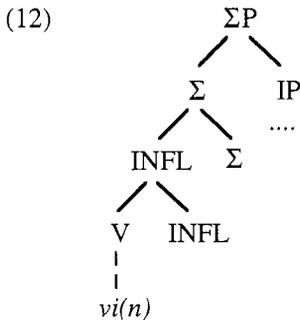
This type of short answer in Portuguese, however, does not share the properties of the paradigmatic cases that I have presented so far. First, the direct object gap in (8b) does not alternate with a definite clitic pronoun, as shown by the ungrammaticality of (10) in Portuguese as a short answer to (8a).

- (10) \* *Vi-ø.*  
'(I) saw him.'

Second, similar facts concerning short answers obtain in Galician, as shown in (11b-c) as answers to (11a) (same meaning as for [8]-[10]).

- (11) a. *Viches a Xan?*  
b. *Vin.*  
c. \* *Vin-ø.*

In Galician, however, the equivalents of "English-style topicalization" (1a), of null objects (4a), and of null anaphora across conjuncts (6b), are all impossible, suggesting that whatever is licensing (8b) and (11b) in Portuguese and Galician, respectively, is an independent grammatical factor. Martins (1994) suggests precisely such a factor. She claims that what licenses short answers such as (8b) and (11b) is the fact that in affirmative (non-*wh*) environments, the verb in Portuguese and in Galician, but not in Spanish, raises into a "strong" functional head higher than Infl, which, following Laka (1990), she calls  $\Sigma$  (see [12]).



This raising in turn licenses what she calls VP Deletion in Portuguese and Galician, which we might call, more aptly, IP Ellipsis.

Martins (1994:373) notes, however, that Galician is different from Portuguese in slightly less short *negative* answers to yes-no questions where both the adverbial *não/non* 'not' and the verb occur. Here, Galician departs from Portuguese in not allowing a gap corresponding to the direct object, and requiring a definite clitic pronoun, as shown in (13b-c) as negative answers to (13a) (examples from Martins).

- (13) a. *Comiche-lo bolo?*  
           ‘Did you eat the cake?’  
       b. \* *Non, non comín.*  
           ‘No, I didn’t eat.’  
       c. *Non, n’o comín.*  
           ‘No, I didn’t eat it.’

Not unexpectedly, the corresponding paradigm in Portuguese reverts to the properties of our original paradigms, that is, Portuguese allows an alternation between a negative answer with a pronoun and one with a gap. Contrast in particular (14c) with the ungrammatical (10) (same meanings as for [13]).

- (14) a. *Comeste o bolo?*  
       b. *Não, não comi.*  
       c. *Não, não o comi.*

As shown in (15), Spanish aligns with Galician here, highlighting the fact that we are back to the type of paradigm discussed before (similar meanings as for [13]-[14]).

- (15) a. *¿Comiste el pastel?*  
       b. \* *No, no comí.*  
       c. *No, no lo comí.*

In terms of Martins’ analysis of simple answers like (8b) and (11b) invoking V-to- $\Sigma$ , we might suggest that such raising is not necessary, and (in minimalist terms) *a fortiori* not possible in simple negative contexts such as (13b-c) and (14b-c). If so, VP Deletion (or IP ellipsis) is not licensed, and Galician (13b) is ruled out. In Portuguese, the corresponding (14b) is grammatical because it is licensed by the same (independent) factor which is at work in the previous cases of direct object gaps.

## 2. *Bare complements to verbs of affective attitude*

I now present a slightly different paradigm of a similar alternation between a definite element and a gap, the difference being that the alternation does not involve a pronoun, but rather a determiner. This alternation is manifest in generic direct objects of “verbs of affective attitude”. I borrow this label from the study of generic objects in Spanish and English by Laca (1990). These are verbs such as *love, hate, fear, prefer*, etc. that in English always select a

generic reading for a bare nominal in object position (versus an existential reading, which, as is well known, is possible for bare nominals in other contexts or in the object position of other verbs). Some examples are given in (16).

- (16) a. *Mary detests [carrots].*  
 b. *I hate [coffee].*  
 c. *John prefers [prose to poetry].*

Now, it is well known that generic nominals in object position in the Romance languages are typically and almost without exception introduced by the definite article. Thus, in Spanish the equivalent of (16) is (17) rather than (18).

- (17) a. *María detesta [las zanahorias].*  
 María detests the carrots.  
 b. *Odio [el café].*  
 I-hate the coffee.  
 c. *Juan prefiere [la prosa a la poesía]*  
 Juan prefers the prose to the poetry..
- (18) a. \* *María detesta [zanahorias].*  
 b. \* *Odio [café].*  
 c. \* *Juan prefiere [prosa a poesía].*

The exception alluded to above is Portuguese, which again allows for a definite/zero alternation, as illustrated in (19)-(20).<sup>6</sup>

- (19) a. *A Maria detesta [as cenouras].*  
 b. *Odeio [o café].*  
 c. *O João prefere [a prosa à poesia].*
- (20) a. *A Maria detesta [cenouras].*  
 b. *Odeio [café].*  
 c. *O João prefere [prosa a poesia].*

As a preliminary to an analysis of this alternation invoking the category of Determiner, I will show that the direct objects in (20) are independent arguments of the verb, rather than being part of a complex predicate formed by noun incorporation, as in (21).

<sup>6</sup> The form *à* 'to-the' in (19c) is the contraction of the preposition *a* 'to' with the definite article *a* 'the-fem'.

- (21) a. *detestar-cenouras* 'to-detest-carrots'  
 b. *odiar-café* 'to-hate-coffee'  
 c. *preferir-prosa-a-poesia* 'to-prefer-prose-to-poetry'

If (20) involved complex predicates of the form in (21), we would not expect these direct objects to be able to appear in displaced positions.<sup>7</sup> But note that they may be topics in "English-style topicalization", as in (22).

- (22) a. *Cenouras, a Maria detesta.*  
 Carrots, Mary detests.  
 b. *Café, odeio.*  
 Coffee, I-hate.  
 c. *Prosa, o João prefere a poesia.*  
 Prose, John prefers to poetry.

Independently of our conception of topicalization, either as a discourse phenomenon or a phenomenon of sentence grammar, the possibility of (22) seems incompatible with a treatment of the direct objects of (20) as part of complex predicates as in (21). Furthermore, the alleged complex predicate in (21c) would have to be a phrase which is not a nominal constituent, *prosa-a-poesia* 'prose to poetry', as shown by the fact that it cannot topicalize, (compare [23] with [22c]).

- (23) \* *Prosa a poesia, o João prefere.*  
 'Prose to poetry, John prefers.'

### 3. A null definite determiner in Portuguese

Having thus established that the direct objects in (20) are independent arguments, I now follow ideas of Stowell (1989) and Longobardi (1994) concerning the categorial nature of arguments. The basic idea is that a "nominal" argument is necessarily a DP. One implication of this assumption, borrowed with a slight change from Longobardi (1994:620), is (24).

- (24) A "nominal expression" is an argument only if it is headed by a category D.

<sup>7</sup> For example, if complex predicates such as (21) were formed by a process of noun incorporation, and assuming that "excorporation" is ruled out in such cases (if not always; see Baker 1988, Kayne 1991).

This in turn implies that (20) is of the form (25), with a null determiner (I exemplify with (20a) only).

(25) *A Maria detesta* [DP D *cenouras*].

Without going into the details of the semantics of such a null determiner, let me suggest briefly that it is a null counterpart to the overt definite determiner.<sup>8</sup> Let us thus use the notation of (26) to refer to it, suggesting its “definite” nature.<sup>9</sup>

(26) D<sub>def</sub>

A more accurate representation of (20a) is thus (27).

(27) *A Maria detesta* [DP D<sub>def</sub> *cenouras*].

Now, since (18) is ungrammatical in Spanish (and in the other Romance languages), we are led to the conclusion that the lexicon of Spanish (and of other Romance languages) lacks the functional element D<sub>def</sub>.

Note next that both Spanish and Portuguese have “bare nominals” in the object position of episodic verbs such as *fumar* ‘to smoke’, *beber* ‘to drink’, as in (28)-(29). But here, whether the sentence is itself episodic, as in (28), or generic, as in (29), the interpretation of the bare nominal is invariably existential (for discussion, see Laca 1990 and Krifka et al. 1995).<sup>10</sup>

<sup>8</sup> One of the reasons being precisely the fact that it may head a generic nominal in contexts that disallow an indefinite determiner; cf. the impossibility of (i) with a generic reading:

- (i) *A Maria odeia um tigre.*  
‘Mary hates a tiger.’

For the rationale of attributing a feature [definite] to the null D of (25), see Krifka et al. (1995), especially pp. 63ff. If we accept the theories of Vergnaud & Zubizarreta (1992) and especially Longobardi (1994), we might take the determiner postulated here to be an expletive one.

<sup>9</sup> D<sub>def</sub> is strictly subcategorized by predicates of subjective attitude. Other predicates that independently subcategorize for generic nominals do not allow D<sub>def</sub>. An example is *inventar* ‘to invent’, which requires the overt definite article (example adapted from Krifka et al. 1995).

- (i) a. *Shockley inventou o transistor.*  
‘Shockley invented the transistor.’  
b. \* *Shockley inventou transistor/transistores.*  
‘Shockley invented transistor/transistors.’

<sup>10</sup> As (i)-(ii) show, these bare nominals can be “modified” by overt existential quantifiers (examples from Spanish and Portuguese, respectively).

- (28) a. *María fumó [cigarros] ayer durante la cena.*  
 b. *A Maria fumou [cigarros] ontem ao jantar.*  
 'Mary smoked cigarettes yesterday during dinner.'
- (29) a. *María fuma [cigarros] todas las noches.*  
 b. *A Maria fuma [cigarros] todas as noites.*  
 'Mary smokes cigarettes every night.'

Following a reasoning similar to the one used above, which led to the postulation of  $D_{\text{def}}$ , we may likewise postulate for (28)-(29) a null counterpart to the plural indefinite determiner, which I refer to here as in (30).

- (30)  $D_{\text{indef}}$

Contrary to  $D_{\text{def}}$ ,  $D_{\text{indef}}$  exists in the lexicons of both Spanish and Portuguese, as attested by the possibility of (28a-b) and (29a-b). A partial representation of the sentences in (28)-(29) is thus (31).

- (31) *María fumó/fuma* [DP  $D_{\text{indef}}$  *cigarros*]

A more explicit representation of the generic sentences of (29) is (32), where "Gen" represents a generic operator postulated in some approaches for generic or "characterizing" sentences (for general discussion, see Heim 1982, Diesing 1992, Krifka et al. 1995).<sup>11</sup>

- (32)  $\text{Gen}_y$  [*María* [ $\Gamma$  [ $I_y$  + *fuma*] [DP  $D_{\text{indef}}$  *cigarros*]]]

Suppose now that  $D$  is the syntactic position that corresponds to a variable at LF. It has been proposed in the literature that indefinite nominals introduce a variable at LF that may be unselectively bound by a given number of operators, including the invisible Gen operator; otherwise it is saturated by "existential

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- (i) a. *María fumó [muchos [cigarros]] ayer.*  
 b. *A Maria fumou [muitos [cigarros]] ontem.*  
 'Mary smoked many cigarettes yesterday.'
- (ii) a. *María fuma [pocos [cigarros]].*  
 b. *A Maria fuma [poucos [cigarros]].*  
 'Mary smokes few cigarettes.'

<sup>11</sup> See Krifka et al. (1995) for the crucial distinction between semantically generic *nominals* and generic *sentences*. In (32),  $y$  is a situation variable. The representation is intended to suggest that the situation variable is in Infl, although nothing hinges on this matter.

closure” (see references above). It might then be claimed that the structure underlying, e.g., (20a) (repeated here as [33a]), is (33b), with  $D_{\text{indef}}$  unselectively bound by Gen, rather than (33c) (which includes [27]), with  $D_{\text{def}}$  itself as the locus of the generic reading of the bare nominal.<sup>12</sup>

- (33) a. *A Maria detesta [cenouras].*  
 b.  $\text{Gen}_{x,y} [a \text{ Maria } [I' [I_y + \text{detesta}] [\text{DP } D_{\text{indef},x} \text{ cenouras}]]]$   
 c.  $\text{Gen}_y [a \text{ Maria } [I' [I_y + \text{detesta}] [\text{DP } D_{\text{def}} \text{ cenouras}]]]$

The analysis in (33b), however, has two problems. First, it is not clear why the variable introduced by  $D_{\text{indef}}$  in (32) is *not* similarly bound by the Gen operator. The fact is that a generic reading is impossible for the direct object of (29); that object is always existentially bound.<sup>13</sup>

Second, if we “coerce” an episodic interpretation in sentences with verbs of affective attitude *and* a bare object, the generic interpretation of the bare object is maintained, as in (34).<sup>14</sup>

- (34) *Ontem ao jantar a Maria odiou [cenouras] por algum tempo.*  
 ‘Yesterday at dinner Mary hated carrots for some time.’

(34) does not mean that Maria hated just a few carrots (say, the ones that she ate but not the ones that were left on the serving plate); rather, the flavor is that of universal quantification, just like in (20a). In other words, whether a sentence with a verb of affective attitude has a generic or an episodic interpretation, the interpretation of its bare direct object is *always* generic. But if the source of genericity for the direct object in (33a) were the Gen operator, as is claimed by representation (33b), then one would expect that removing this operator, as in (34), would entail as well the loss of genericity for the direct object, contrary to fact.<sup>15</sup> This strongly suggests that the generic reading of such nominals is *not* a by-product of unselective binding of  $D_{\text{indef}}$  by Gen.

<sup>12</sup> In (32) this variable (not explicitly represented) would be bound by “existential closure”. Note that the sentences of (20) are characterizing sentences in the sense of Krifka et al. (1995), i.e. they are generic. We thus assign to their representation in (33b-c) a left-hand Gen operator. For the plausibility of invoking a situation variable with lexical stative verbs such as *hate*, see again Krifka et al. (1995).

<sup>13</sup> I.e., the interpretation is not that Mary smokes all the contextually relevant cigarettes, but just a few of those.

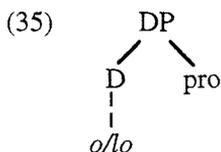
<sup>14</sup> For a discussion of “coercion”, see Krifka et al. (1995:33).

<sup>15</sup> If that were the case, one would expect an existential reading for this nominal.

Rather, it points to the conclusion that the correct representation for (33a) is (33c); in other words, the element responsible for the generic interpretation of the direct objects of (20)/(33a) in Portuguese is indeed the postulated  $D_{\text{def}}$ .<sup>16</sup> In turn, as already mentioned, we strengthen our conclusion that  $D_{\text{def}}$  does not exist in the other Romance languages, which necessarily resort to the overt definite determiner in this context.

#### 4. *Pronouns as determiners*

How can this result help us understand the other zero/definite alternations in Portuguese, which invoke the category of pronoun rather than that of determiner? Suppose that we adopt Postal's (1969) theory of pronouns, according to which pronouns are determiners. As has been noted by many, starting with Raposo (1973), this theory is quite attractive for Romance clitic pronouns, especially the accusative *lo/o*, similar in form to the definite determiner in most Romance languages. According to this view, clitics are thus Ds heading a DP with a null *pro* complement, as in (35).<sup>17</sup>



Underlying the second conjunct of (6a), repeated here as (36a), we thus have the partial structure in (36b).

- (36) a. *Mostrei [aquele quadro] à Maria, e a Cristina mais tarde mostrou-o à Alexandra.*  
 '(I) showed [that painting] to Maria, and Cristina later showed it to Alexandra.'

<sup>16</sup> For a similar conclusion, see Krifka et al. (1995:71), where they conclude as well that the generic reading of bare objects of verbs of affective attitude is not induced by a Gen operator.

<sup>17</sup> See Raposo (1973), Corver & Delfitto (1993), and Uriagereka (1995), who in turn attributes the "rebirth" of this idea for the Romance languages in the *Principles and Parameters framework* to unpublished work by Esther Torrego.

- b. ...[vp *mostrou* [DP *o pro*] à *Alexandra*].

Given its definite properties, it is not surprising that  $D_{\text{def}}$  can also be used as an anchor for anaphora, like its overt counterpart, so that the structure associated with (6b), repeated here as (37a), is (37b), parallel to (36b).

- (37) a. *Mostrei [aquele quadro] à Maria, e a Cristina mais tarde mostrou*  
           \_\_\_\_\_ *à Alexandra.*  
           ‘(I) showed [that painting] to Maria, and Cristina later showed  
           \_\_\_\_\_ to Alexandra’
- b. ...[vp *mostrou* [ $D_{\text{def}}$  *pro*] à *Alexandra*].

Since only Portuguese has  $D_{\text{def}}$  in its lexicon, there will be no equivalent of (37) in the other Romance languages.

I will now propose a similar analysis for topicalization (see [1]-[2] above). In Raposo (1996), I assume that the general form of DP-topic constructions is as in (38).

- (38)  $DP_{\text{topic}}$  [clause ...  $DP_{\text{...}}$ ]

In (38) the first DP (the topic) is “external” to the clause in a sense well-defined in that work, and the clause-internal DP is a “pronominal” DP anaphorically linked with the topic by Predication, and thus necessarily with an “open” position of a pronominal nature.<sup>18</sup> This open position is the *pro* of (35); in turn, the determiner heading the projection must be an independently adequate “anchor” for anaphora (as in the cases of anaphora across conjuncts in [6]). The overt definite article is clearly such an anchor, as shown by (6a). Underlying CLLD (2a) (repeated here as [39a]), then, is a (partial) structure like (39b).

- (39) a. *Esse livro, o Luís comprou-o para a Maria.*  
           ‘That book, Louis bought it for Maria.’
- b. *Esse livro, [o Luís comprou [DP *o pro*] para a Maria]*

Given that the covert  $D_{\text{def}}$  of Portuguese is an adequate anchor for anaphora as well (see [6b]), we thus expect it to be able to underlie a topic construction, just like the overt determiner. The expectation is fulfilled, as shown by the

<sup>18</sup> The proposal in Raposo (1996) is that the topic and its associated clause are two independent syntactic objects not merged in the syntax at all, and linked only by discourse rules.

existence of (1a) in the language, repeated here as (40a), with partial structure as in (40b), parallel to (39b).

- (40) a. *Esse livro, o Luís comprou ec para a Maria.*  
 ‘That book, (the) Louis bought ec for Maria.’
- b. *Esse livro, [o Luís comprou [DP D<sub>def</sub> pro] para a Maria]*

### 5. Conclusion

We thus have a parametric account of the existence of definite/zero alternations in Portuguese, versus their absence in the other Romance languages, including the case of “English-style topicalization” (1). The lexicon of Portuguese, but not that of the other languages, has  $D_{\text{def}}$ , a null determiner semantically close to the overt definite one, but lacking a phonological matrix. This is clearly a functional category, as required by the theory of parametric variation. Furthermore, this minimal difference involves the lexicons of the languages under discussion, rather than the core computational system, which is cross-linguistically invariant. In other words, it is a well-behaved “parametric difference” in the spirit of the *Principles and Parameters* theory of language structure.

I have left untouched a series of issues concerning the movement properties of topicalization constructions. “English-style topicalization” obeys all the diagnostic properties for wh-like movement internally to the associated clause (it is sensitive to strong islands, and it licenses a parasitic gap; see Duarte 1987, Raposo 1996), whereas CLLD (at least of a DP) does not seem to involve movement (it doesn’t show sensitivity to islands, and it does not license a parasitic gap; see Raposo 1996). Although I will not address these issues here, a brief look at (39b) and (40b) may give us an indication of how to pursue the matter. Assume Rizzi’s (1986) theory of *pro*, where this element is subject to a licensing/identification requirement by an  $X^0$  category, perhaps necessarily a functional category. We may now speculate that an overt determiner is an adequate licenser/identifier of *pro*, whereas an empty determiner is not, forcing movement of *pro* in (40b) (i.e., in “English-style topicalization”) into the checking domain of an adequate licenser. This gives rise to island phenomena, parasitic gap phenomena, and so forth. If such an account is on the right track, a whole new series of questions arise: for example, which functional category is *pro* moving into for licensing. I will address these issues in future work.

## REFERENCES

- Baker, Mark C. 1988. *Incorporation: A Theory of Grammatical Function Changing*. Chicago: The University of Chicago Press.
- Camacho, José, Liliana Paredes & Liliana Sánchez. To appear. "Null objects in bilingual Andean Spanish". Proceedings of the 21st Annual Boston University Conference on Language Development.
- Chomsky, Noam. 1977. "On Wh-movement". *Formal Syntax*, ed. by Peter Culicover, Thomas Wasow & Adrian Akmajian, 71-132. New York: Academic Press.
- \_\_\_\_\_. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Cinque, Guglielmo. 1990. *Types of A'-Dependencies*. Cambridge, Mass.: MIT Press.
- Corver, Norbert & Denis Delfitto. 1993. "Feature asymmetry and the nature of pronoun movement". Publications of O.T.S., Utrecht University.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, Mass.: MIT Press.
- Duarte, Maria Inês. 1987. *A construção de topicalização na gramática do português: regência, ligação e condições sobre movimento*. Ph.D. dissertation, Universidade de Lisboa.
- Heim, Irena. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. dissertation, University of Massachusetts, Amherst.
- Huang, James C. T. 1984. "On the distribution and reference of empty pronouns". *Linguistic Inquiry* 15.531-574.
- Kayne, Richard S. 1991. "Romance clitics, verb movement, and PRO". *Linguistic Inquiry* 22.647-686.
- Krifka, Manfred, Francis Jeffry Pelletier, Gregory N. Carlson, Alice ter Meulen, Gennaro Chierchia & Godehard Link. 1995. "Genericity: An introduction". *The Generic Book*, ed. by Gregory N. Carlson & Francis Jeffry Pelletier, 1-124. Chicago: The University of Chicago Press.
- Laca, Brenda. 1990. "Generic objects: Some more pieces of the puzzle". *Lingua* 81.25-46.
- Laka, Itziar. 1990. *Negation in Syntax: On the Nature of Functional Categories and Projections*. Ph.D. dissertation, MIT.
- Longobardi, Giuseppe. 1994. "Reference and proper names". *Linguistic Inquiry* 25.609-665.
- Martins, Ana Maria. 1994. *Clíticos na História do Português*. Ph.D. dissertation, Universidade de Lisboa.
- Postal, Paul. 1969. "On so-called 'pronouns' in English". In *Modern Studies in English: Readings in Transformational Grammar*, ed. by David Reibel & Sanford A. Schane, 201-224. Englewood Cliffs, NJ: Prentice Hall.
- Raposo, Eduardo. 1973. "Sobre a forma *o* em português". *Boletim de Filologia* 22.361-415.

- \_\_\_\_\_. 1986. "On the null object in European Portuguese". *Studies in Romance Linguistics*, ed. by Osvaldo Jaeggli & Carmen Silva-Corvalán, 373-390. Dordrecht: Foris.
- \_\_\_\_\_. 1996. "Toward a unification of topic constructions". Ms., University of California, Santa Barbara.
- Rizzi, Luigi. 1986. "Null objects in Italian and the theory of *pro*". *Linguistic Inquiry* 17.501-558.
- Stowell, Tim. 1989. "Subjects, specifiers and X-bar theory". In *Alternative Conceptions of Phrase Structure*, ed. by Mark Baltin & Anthony Kroch, 232-262. Chicago: The University of Chicago Press.
- Uriagereka, Juan. 1995. "Aspects of the syntax of clitic placement in Western Romance". *Linguistic Inquiry* 26.79-123.
- Vergnaud, Jean-Roger & María Luisa Zubizarreta. 1992. "The definite determiner and the inalienable constructions in French and in English". *Linguistic Inquiry* 23.595-652.

# ON OBJECT-CLITIC PLACEMENT IN ITALIAN CHILD LANGUAGE

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## 0. *Introduction*

In this paper I report the results of an experimental study of the acquisition of object clitic placement in Italian. As a starting point I formulate a developmental hypothesis. This is an extension of a hypothesis by Hyams (1994, 1996), who argues that the well-known phenomenon of Root Infinitives in many child languages is due to the fact that finiteness, or temporal specificity, is optionally specified in early grammar. My hypothesis is stated in (1) and concerns nominal specificity.

- (1) *Developmental hypothesis*  
Specificity is not always grammatically marked in the grammar  
of 2-year old children

In order to test this hypothesis, I investigated a syntactic process in Italian child language which involves specificity, namely object clitic placement. But before I turn to the child data, I will first illustrate and analyze this phenomenon in adult Italian.

## 1. *Object clitics in adult Italian*

Clitics can be characterized as pronominal elements that cannot be stressed, and that have a different syntactic distribution from strong pronouns and full argument DPs (see Kayne 1975, Berendsen 1986, Zwart 1990, Koopman & Sportiche 1991, among others). The examples in (2) illustrate object clitics in Italian.

- (2) a. *Anna mangia le mele/\*le*  
Anna eats the apples/them

- b. *Anna* *le/\*le mele* *mangia*  
 Anna them/the apples eats
- c. *Anna* *ha mangiato* *le mele/\*le*  
 Anna has eaten-masc.sg. the apples/\*them
- d. *Anna* *le/\*le mele* *ha mangiate*  
 Anna them-fem.pl./the apples has eaten-fem.pl.

As (2b) shows, the full object DP *le mele* ‘the apples’ cannot occupy the same position as the direct object clitic *le* ‘them’. Notice furthermore that Italian object clitics trigger number and gender agreement on the past participle, as is shown by the plural feminine ending *-e* on the past participle *mangiate* ‘eaten’ in (2d).

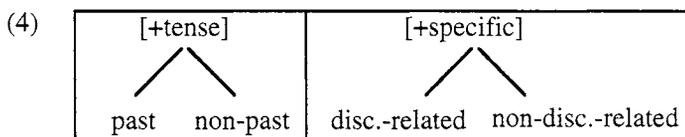
To account for the distribution of the object clitics in sentences such as (2), I propose an analysis based on Sportiche (1992), who unifies the syntactic process of object clitic placement in Romance with object scrambling in Germanic. Analogous to the WH-Criterion and the NEG-Criterion Sportiche formulates a “Clitic Criterion”, stated in (3).

(3) *Clitic Criterion* (Sportiche 1992):

At LF:

- (i) A clitic must be in a Spec-Head relationship with a [+specific] XP
- (ii) A [+specific] XP must be in a Spec-Head relationship with a clitic

As for the feature of specificity, I propose that it has two values: discourse-related or non-discourse-related. This way of formulating specificity is analogous to the feature specification of, for example, Tense, which can take on two values, namely past and non-past (present). This is illustrated in (4).



Thus, just as the tense of a clause can be non-past or past, i.e., linked to discourse time or be prior to it, the specificity of a DP can be linked to discourse or not. A discourse-related DP (such as *the book*, *her* requires an antecedent in the preceding linguistic discourse, whereas a non-discourse-related DP (such as *the sun*) does not. I will refer to the distinction between discourse-related

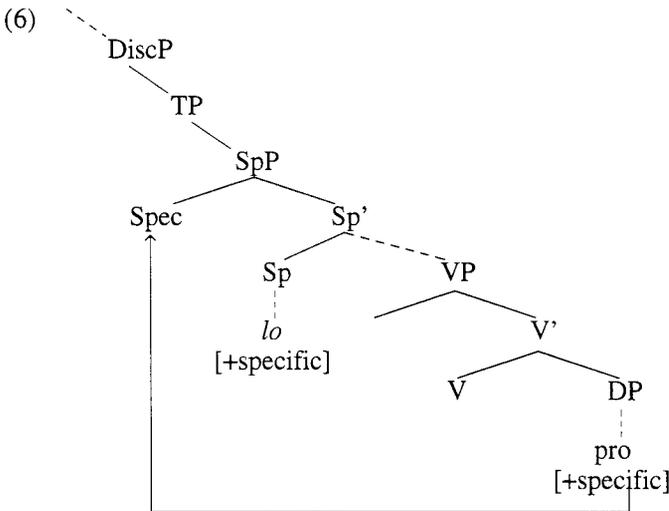
and non-discourse-related specificity as “marking specificity”. That is, I claim that a noun is marked for specificity if and only if a distinction is made between discourse-related and non-discourse-related specificity. If this distinction is not made, the specificity feature is absent altogether. The idea to distinguish two types of specificity stems from my research on object scrambling in Dutch. For an elaborate discussion of this issue, I refer the reader to Schaeffer (1997).

I adopt Sportiche’s general Spec-Head licensing mechanism and propose that specific objects which are not discourse-related are licensed in a functional projection named Specificity Phrase (SpP) and that licensing of specific objects which are discourse-related takes place in a functional phrase called Discourse Phrase (DiscP). This Phrase Structure is illustrated in (5).

(5) *Extension of Sportiche’s theory and phrase structure*

[AgrSP [DiscP (high adverb) [TP [SpP [NegP [AgrOP (low adverb) [VP [V] [OP]]]]]]]]

In (6) I illustrate how the Clitic Criterion applies to the syntactic process of object clitic placement.



The clitic, which is inherently [+specific], is base-generated in the head of SpP just below TP, and an empty object DP, namely small *pro*, moves from its base-generated sister-of-V position to [Spec, SpP]. Because of its pronominal

character, *pro* is inherently [+specific], and thus both the [+specific] feature of the clitic and of *pro* are licensed under Spec-Head agreement within SpP. Similarly, scrambling of specific objects in German and Dutch involves movement of an overt object DP to [Spec, SpP] (and [Spec, DiscP], if the object is discourse-related), where its [+specific] feature is licensed under Spec-Head agreement with an empty [+specific] clitic in the head of SpP.

Note that both object clitics and *pro*, being pronominal in character, must have an antecedent in the previous linguistic discourse, and are therefore by definition discourse-related. I propose that the finite verb incorporates the clitic and moves through the head of DiscP to AgrS. Furthermore, *pro* moves on to [Spec, DiscP], where it licenses the clitic's discourse-relatedness feature under Spec-Head agreement and vice versa.

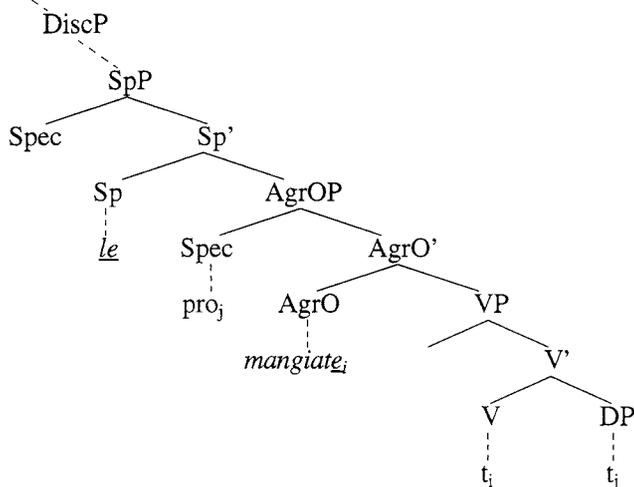
## 2. *Predictions regarding Italian child language*

How does all this relate to Italian child language? Taken together, the hypothesis that specificity is optionally marked in early grammar and the unified theory of object scrambling and object clitic placement as just proposed, yield several predictions. First, I predict that initially, Italian children will not always phonetically realize direct object clitics. Namely, if specificity on the *pro* object is not marked, *pro* will not move to [Spec, SpP] and [Spec, DiscP] and thus the specificity feature on the object clitic will not be licensed. Therefore, the clitic cannot be spelled out.

Another set of predictions involves participle agreement in Italian. Before turning to these predictions, I outline my assumptions concerning participles in the adult language. Masculine plural and feminine object clitics trigger agreement with the past participle in adult Italian. This object agreement on the past participle is rendered as follows in my analysis (see Kayne 1989, 1991, Sportiche 1992). The past participle moves from its base-generated V-position to AgrO. Furthermore, as we have assumed all along, *pro* moves from complement-of-V position to [Spec, SpP] and [Spec, DiscP] via [Spec, AgrOP], where it triggers agreement with the past participle. This is illustrated in (7) (p. 217).

In my analysis, an overt clitic means that specificity is marked. In that case *pro* moves up to [Spec, SpP] and [Spec, DiscP] via *AgrOP* where it triggers agreement on the past participle in AgrO. Thus, I predict that in *passato prossimo* with an overt direct object clitic, agreement on the past participle should always be correct in child Italian.

(7) CP (irrelevant projections and nodes omitted)



A related prediction is that participle agreement will not arise in the absence of an overt clitic. For example, we do not expect a response such as *ha pettinata* 'has combed' referring to a (contextually present) female doll, but which is not grammatically represented by a clitic. This prediction follows from the fact that in constructions without an overt object clitic, the *pro* object does not raise, because its specificity is not marked. Therefore, it does not move through [Spec, AgrOP] and cannot trigger agreement on the past participle in AgrO. The past participle should then show up with the default *-o* ending. Thus, I make predictions with respect to the realization of object clitics and regarding past participle agreement. These predictions are summarized in (8).

(8) *Prediction I*

Initially, object clitic placement does not always take place in obligatory contexts in Italian child language.

*Prediction II*

- A. In *passato prossimo* constructions with an overt object clitic, agreement on the past participle is always correct in Italian child language;
- B. In *passato prossimo* constructions without an overt object clitic, the past participle shows no agreement in Italian child language.

### 3. *Methods*

In order to test my predictions, I carried out an elicited production task with 35 Italian speaking children between the ages of 2;1 and 5;11 and with 15 Italian adults. Detailed information about the subjects is given in (9).

#### (9) *Subject description*

Age group	Age	Mean age	# of girls	# of boys	Total #
2	2;1-2;6	2;5	2	3	5
3	3;1-3;11	3;5	4	7	11
4	4;1-4;10	4;6	4	6	10
5	5;0-5;11	5;6	3	6	9
Total children			13	22	35
Adults	>19		7	8	15

I tested placement of the object clitic in several constructions, such as present tense and *passato prossimo* constructions. More details about the experimental conditions are provided in (10); an example of a scenario is given in (11).

#### (10) *Conditions, types and tokens*

Clitic	Present tense	Restructuring verbs	Passato prossimo	
			with agreement	w/o agreement
Single	3	3	5	1
Double	3	3	2	1

#### (11) Scenario with simple present tense, single object clitic

Exp.: *Guarda. Qui abbiamo Pluto, e la sirenetta, e un pettine. Guarda, che bei capelli biondi che ha la sirenetta! Sono un po' in disordine. Perciò, Pluto pettina la sirenetta.*  
 'Look. Here we have Pluto, and the Little Mermaid, and a comb. Look, how beautiful and blond the Little Mermaid's hair is! It's a bit messed up, though. So, Pluto is combing the Little Mermaid's hair.'

Raja: *Io so cosa succede! Pluto lava la sirenetta!*  
 'I know what's happening! The monkey is washing the doll!'

Child: *No!*  
 'No!'

- Raja: *Perchè? Pluto non lava la sirenetta?*  
'Why? Isn't Pluto washing the Little Mermaid?'
- Exp.: *Allora, dillo tu a Raja: cosa fa Pluto alla sirenetta?*  
'OK, now you tell Raja what Pluto is really doing to the Little Mermaid.'
- Child: *La pettina.*  
'He's combing her.'

#### 4. Results and discussion

The results regarding the realization of object clitics show that my first prediction is borne out: 2-year old Italian children realize direct object clitics optionally in obligatory contexts, as is shown by the proportions in Table 1.

Age	Overt clitic	Omitted clitic	Full direct object
2	22% (22)	64% (63)	14% (14)
3	62% (179)	15% (43)	23% (68)
4	89% (237)	0% (0)	11% (28)
5	91% (227)	0% (0)	9% (23)
Adults	100% (439)	0% (0)	0% (0)

Table 1: Overall proportions of overt direct object clitics, omitted direct object clitics and full direct objects (instead of a direct object clitic)

Table 1 indicates that across sentence types, Italian 2-year olds produce overt object clitics only 22% of the time as compared to the 100% adult rate, a difference that is statistically significant at a level of  $p < .01$ . The 3-year olds display a big quantitative leap producing overt object clitics 62% of the time. The difference in performance between the 3-year old Italian children and the Italian adults does not reach statistical significance. Some examples of responses without direct object clitics are given in (12). For reasons of clarity, the input sentence is provided as well.

- (12) a. Raja: *Mamma orsa ha picchiato le rane!*  
mommy bear has smacked the frogs  
'Mommy bear smacked the frogs!'
- Child: *No, ha lavato!* (M 2;1)  
no has washed  
'No, she washed'
- b. Raja: *Il coniglio lava il pupazzo!*  
the rabbit washes the puppet  
'The rabbit is washing the puppet!'

Child: *No, pettina!* (A 2;5)  
 no combs  
 'No, she is combing'

As mentioned before, the omission of direct object clitics follows immediately from my hypothesis that specificity is optionally marked in early grammar. Namely, if the empty object *pro* does not have a specificity feature, it will not move up to [Spec, SpP]. Consequently, the specificity of the clitic in the head of SpP cannot be licensed and therefore the clitic cannot be spelled out. In order to avoid an objectless sentence, the child sometimes produces a full DP object.

The results of my experiment also strongly confirm my predictions regarding past participle agreement. Table 2 shows that the Italian children never make agreement errors with overt clitics: in *passato prossimo* constructions with an overt object clitic, agreement on the past participle is always correct.

Age	Agreement		
	Correct		Error
2	100%	(8)	0%
3	100%	(57)	0%
4	100%	(77)	0%
5	100%	(72)	0%
Adults	100%	(130)	0%

Table 2:

*Proportions of overt direct object clitics with correct agreement and agreement errors in passato prossimo*

Correct past participle agreement in the data of the 2-year old children is illustrated in (13).

(13) Exp: *Cos' ha fatto Minnie con la pera?*  
 what has done Minnie with the pear  
 'What did Minnie do with the pear?'

Child: *L'ha mangiata.* (G 2;6)  
 her-has eaten-fem.sg.  
 'She ate it.'

The results in Table 3 show that prediction IIB is also largely borne out, that in the absence of an overt clitic, there is no agreement, i.e., children do not mark agreement with a contextually given (but not grammaticized) object.

Age	Agreement	
	yes	no
2	20% (2)	80% (8)
3	100% (1)	0% (0)
4	- (0)	- (0)
5	- (0)	- (0)
Adults	- (0)	- (0)

Table 3:  
*Proportions of omitted direct object clitics with and without agreement in passato prossimo*

Table 3 shows that in *passato prossimo* constructions without an overt clitic, but with a contextually given masculine plural or feminine object, the 2-year old Italian children have the unmarked *-o* affix on the past participle 80% of the time. This is illustrated in (14).

(14) Exp: *Cos' ha fatto Topolino ai pupazzi?*  
 what has done Mickey Mouse to the puppets  
 'What did Mickey Mouse do to the puppets?'

Child: *Ha lavato.* (M 2;1)  
 has washed  
 'He washed.'

The 3-year olds produced only one relevant *passato prossimo* response, that is, one construction which occurred without a direct object clitic in a context of a masculine plural or feminine object. Unexpectedly, this one occurrence does show participle agreement in the absence of an overt object clitic. However, since it concerns only one instance, this is a negligible result.

Thus, both predictions regarding past participle agreement in Italian child language are borne out: in the case of an overt object clitic, Italian 2-year olds' participles agree with the object clitic; if the clitic is missing, past participle agreement is absent.

An obvious question at this point is why 2-year old children do not always mark specificity in cases where adults would. For reasons of space I cannot go into this issue in detail, but I propose that this is due to the lack of a pragmatic rule, namely the "Discourse Rule", formulated in (15).

(15) *Discourse Rule*

The preceding linguistic discourse and the knowledge of the interlocutor *must* be taken into account.

If the child does not do this, it means that s/he does not distinguish between discourse-relatedness and non-discourse-relatedness. According to my defini-

tion in Section 1, this implies that s/he does not mark specificity. For a more detailed discussion, I refer the reader to Schaeffer (1997).

A further observation is that I found no past participle agreement with full overt objects. That is, examples such as (16), which are generally ungrammatical in standard Italian, were not produced by the children in my study.

- (16) *La signora ha chiusa la porta.*  
 the lady has closed-fem. the door-fem.  
 'The lady closed the door.'

Table 4 shows that in my experiment none of the *passato prossimo* constructions with a full direct object produced by the Italian children, none shows agreement between the past participle and its object.

Age	Passato prossimo with full direct object	
	correct	incorrect
2	100% (8)	0% (0)
3	100% (27)	0% (0)
4	100% (7)	0% (0)
5	100% (5)	0% (0)
Adults	0% (0)	0% (0)

Table 4:  
*Proportions of passato prossimo constructions with a full direct object and (non-) agreement on the past participle*

Even the 2-year olds gave "non-agreement" on the past participle in sentences with a full direct object 100% of the time. Thus, my data do not support the claim made by Borer & Wexler (1992), following Antinucci & Miller (1976) and Volterra (1976), that there is an early stage in Italian grammar which shows obligatory agreement between a past participle and its full direct object.

Another prediction following purely from my adult analysis (and not from my developmental hypothesis) concerns the position of direct object clitics. Assuming that it is generally true for natural languages that rightward movement does not exist (Kayne 1994), it is plausible to hypothesize that children do not place elements lower than the position in which they are base-generated. In other words, the word-order errors children make should be related to failure to move the relevant element from its base-generated position to a structurally higher position. Therefore, I make the prediction in (17) for Italian child language.

(17) *Prediction III*

Object clitics never occur in a position lower than their base-generated position (head of SpP); for instance, they never occur in canonical object position.

My experimental data provides strong evidence in favour of this prediction. Table 5 shows that Italian children *never* place direct object clitics incorrectly.

Age	Passato prossimo with full direct object	
	correct	incorrect
2	100% (22)	0% (0)
3	100% (179)	0% (0)
4	100% (237)	0% (0)
5	100% (227)	0% (0)
Adults	100% (439)	0% (0)

Table 5:  
*Overall proportions of overt direct object clitics in correct and incorrect position*

This supports the claim that object clitics are base-generated in the head of SpP (see Jaeggli 1982, Borer 1984, Sportiche 1992) and do not start out in the canonical complement-of-V object position. In the latter view, the object clitic itself (rather than *pro*) moves from complement-of-V position to AgrO and possibly to a higher functional projection (see Kayne 1989, 1991, among others). If this approach to object clitic placement were correct, we would expect 'unmoved' object clitics — i.e., object clitics in a position lower than the adult position — in child language.

## 5. Conclusion

I have demonstrated that 2-year old Italian children optionally mark specificity, resulting in optional object clitic placement, but that at the age of 3 children are roughly adult-like in this respect. I have also shown that overt object clitics trigger past participle agreement, even in the grammar of 2-year old Italian children, but that participle agreement does not occur in sentences without an object clitic. This confirms my analysis that the direct object *pro* only moves, or scrambles, if it is marked for specificity, and thus my hypothesis that initially, specificity is optionally marked. I argued that the optionality of specificity marking is due to the lack of the pragmatic Discourse Rule, rather than to an immature syntactic component. Furthermore, contrary to Borer & Wexler's findings, my results indicated that the Italian children I tested never displayed past participle agreement with a full direct object. Finally, I have shown that Italian 2-year olds never place direct object clitics in a canonical

object position, supporting the proposal that clitics are base-generated in the head of a higher functional projection.

### REFERENCES

- Antinucci, Francesco & Ruth Miller. 1976. "How children talk about what happened". *Journal of Child Language* 3.156-189.
- Berendsen, Egon. 1986. *The Phonology of Cliticization*. Dordrecht: Foris.
- Borer, Hagit. 1984. *Parametric Syntax*. Dordrecht: Foris.
- Borer, Hagit & Kenneth Wexler. 1992. "Biunique relations and the maturation of grammatical principles". *Natural Language and Linguistic Theory* 10. 147-189.
- Hyams, Nina. 1994. "The underspecification of functional categories in early grammar". Paper presented at the Great Britain Child Language Seminar, Bangor, Wales.
- \_\_\_\_\_. 1996. "The underspecification of functional categories in early grammar". In *Generative Approaches to First and Second Language Acquisition*, ed. by Harald Clahsen, 91-128. Amsterdam: John Benjamins.
- Jaeggli, Osvaldo. 1982. *Topics in Romance Syntax*. Dordrecht: Foris.
- Kayne, Richard. 1975. *French Syntax: The Transformational Cycle*. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1989. "Facets of Romance past participle agreement". In *Dialect Variation and the Theory of Grammar*, ed. by Paola Benincá, 85-103. Dordrecht: Foris.
- \_\_\_\_\_. 1991. "Romance clitics, verb movement and PRO". *Linguistic Inquiry* 22.647-686.
- \_\_\_\_\_. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Koopman, Hilda & Dominique Sportiche. 1991. "The position of subjects". *Lingua* 85.211-258.
- Schaeffer, Jeannette C. 1997. *Direct Object Scrambling in Dutch and Italian Child Language*. Ph.D. dissertation, University of California, Los Angeles.
- Sportiche, Dominique. 1992. "Clitic constructions". Ms., University of California, Los Angeles.
- Volterra, Virginia. 1976. "A few remarks on the use of the past participle in child language". *Italian Linguistics* 2.149-157.
- Zwart, C. Jan Wouter. 1990. "Clitics in Dutch: Evidence for the position of INFL". Paper presented at the Giselle conference, Girona, Spain.

# ON BORROWING AS A MECHANISM OF SYNTACTIC CHANGE\*

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## 0. *Introduction*

Among the fundamental processes or mechanisms involved in language change, “actualization” and “restriction”, i.e., the cause of change and the possible types of change (Weinreich et al. 1968), have remained most elusive and controversial, especially in regard to the role played by language contact and bilingualism. With respect to syntactic change, arguments range from claims of direct crosslinguistic transfer or borrowing of “any linguistic feature” (Campbell 1987, 1993; Harris & Campbell 1995:149; Thomason & Kaufman 1988:14), to the views of Weinreich, Meillet, Jakobson, and Sapir (cited in Weinreich 1974:25), who suggest that a grammatical system may incorporate foreign (structural) elements only if they are somehow compatible or congruent with the structure of the borrowing language (see also Andersen 1983, Bickerton 1981, Munteanu 1996, Myers-Scotton 1993, Otheguy 1995, and Prince 1992, among others).

My goal in this paper is to present arguments and evidence from a number of contact situations in support of the latter view, i.e., that the transfer of features from one language to another is not a matter of unconstrained behavior or chance. Although borrowing may be a mechanism leading to eventual syntactic change, this type of change is not the outcome of direct borrowing of

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syntactic structures or rules from one language into another. Rather, as I shall show here, what is borrowed across languages is not syntax but lexicon and pragmatics. I will also demonstrate that this type of borrowing is constrained by the structure of the recipient language, and by general cognitive principles that have been found to operate in the acquisition of natural languages. In addition, the sociolinguistic circumstances of contact need to be taken into consideration. Thus, although it may not be possible to predict that a specific change will occur, it may be possible to delimit, on the basis of general principles, the nature of the changes and constraints that may occur, given certain specific sociolinguistic contexts. Specifically, then, mine is an argument against the existence of syntactic *borrowing* and not against syntactic change resulting from lexical borrowing or from the transfer of discourse or pragmatic constraints from another language.

Examinations of syntactic borrowing face the difficulty that neither syntax nor borrowing have been defined uniformly. A given phenomenon may be considered to be syntactic by some, but others may view it as lexical/semantic (e.g., verb subcategorization, selectional restrictions) or morphological (e.g., clitic pronoun usage, gender agreement). What is syntax, then, and how does its definition affect our view of syntactic borrowing? Let me illustrate with one example: in response to a question posed by Geoffrey Nathan regarding syntactic borrowing from Gaelic in Gaelic-influenced English, Prince states:<sup>1</sup>

By form I mean pure *syntactic form*, without regard to word choice. Certainly the form of “I am after buying a car” is not novel in English! (Cp. early (not that early) “He is on hunting”, or Modern English “This is about doing linguistics”, “I’m against watching TV”). Moreover, the Gaelic-influenced English sentence you give (“I’m after buying a car”) does *not* have the form of the Gaelic sentence you claim it is a calque of. (Prince 1995)

According to Prince, if it had been a direct syntactic calque of Gaelic, the English version ought to have been: \**“Am I after at buying of a car”*. Prince may accept the fact that the Gaelic-English construction “I am after buying a car” introduces a novel way of conveying terminative aspect (something like “I have just bought a car”), but she would not accept that the “pure syntactic form” has been borrowed.

In their study of syntactic change, Harris & Campbell (1995:9) allow for “formally quite similar constructions” to count as borrowings. It is likely, then, that they would consider “I am after buying a car” an instance of syntactic

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<sup>1</sup> The quote is adapted to conventional orthography.

borrowing, especially if they espouse the view that form and meaning are inseparable, as their work implies.

A different definition of syntax has been given by García: "Syntax constitutes a crystallization of use. In this use, linguistic forms that are appropriate to the message that the speaker wants to convey are 'put together', juxtaposed, collocated" (1995:53).<sup>2</sup> This is a concept of syntax as responsive to language use. If novel ways of putting words together, usually constituting semantic extensions or reductions, come into a language through borrowings, these may eventually become fixed ("crystallized") in syntax, in the sense that they become mechanical and habitual in a speech community (cf. Otheguy 1995). In this view, then, syntactic borrowing does not appear to be possible.

Harris & Campbell (1995) have proposed a theory of syntactic change in which only three mechanisms are said to be responsible for modifications of syntactic patterns: reanalysis, extension, and borrowing. Their definition of borrowing clearly refers to "incorporation" of a syntactic pattern, since they use this term "to mean a mechanism of change in which a replication of the syntactic pattern is incorporated into the borrowing language through the influence of a host pattern found in a contact language" (1995:51). Language contact is not a mechanism, but "a situation in which the speakers of a language are familiar in some way with another" (p. 51). Language contact "is often a catalyst to change through reanalysis or extension" (p. 51).

If borrowing is defined narrowly as "incorporation" or "acts of syntactic reception" (Campbell & Muntzel 1989:190), and syntax is also defined narrowly as "pure form" (Prince 1995), then assertions such as the one made by Harris & Campbell to the effect that "there can no longer be any serious doubt concerning the existence or the possible extent of syntactic borrowing" (1995:33) need to be tempered. I will show below that it is the borrowing of lexical items and "pragmatic uses" that constitutes the principal mechanism of syntactic change: lexical items, subcategorizations, discourse constraints and pragmatic uses borrowed or modelled after the source language may gradually permeate an individual's grammar and gradually spread across individuals, resulting eventually in crystallized fixed patterns characteristic of the language used by a community of speakers.

In addition, non-linguistic factors must be taken into account when explaining why some changes occur and not others, or why one or several of the languages involved may undergo change. I refer here to the time-depth of the

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<sup>2</sup> My translation of: "La sintaxis constituye una cristalización del uso. En ese uso se 'juntan', se yuxtaponen, se colocan formas lingüísticas apropiadas al mensaje que desea transmitir el hablante".

contact, to the extent and degree of bilingual usage, to the conditions of language transmission, and to whether the relationship among the languages is symmetric or not, a factor that in turn underlies attitudes, domains of use, frequency of use, etc., all significant in determining the linguistic outcome of contact.

One further important factor needs to be pointed out. In a situation of extensive and intensive bilingualism, bilinguals are called upon to communicate often in one language or the other in rapid succession in response to different interlocutors, different social domains or other factors. The need to lessen the cognitive effort that this task demands may explain in part the typical processes of regularization, the loss of infrequently used constructions, and the conscious or unconscious preferential use of superficially parallel structures in the languages involved, a phenomenon that leads to convergence and is widely attested in the literature (Campbell 1987; Dorian 1989; Landa 1995; Martineau 1988; Nadkarni 1975; Prince 1992; Silva-Corvalán 1994b, among others).<sup>3</sup>

Cognitive and linguistic considerations, then, may allow us to predict (i) the nature of at least some of the types of change that may or may not occur, and (ii) the constraints on their occurrence. Under conditions of intensive and extensive bilingualism, it seems logical to expect that frequently used patterns in the socially dominant language will motivate an increase in the frequency of use of parallel structures in the subordinate language, and that frequently used patterns within this language will also tend to become extended. This implies a certain degree of simplification and loss of structures in the subordinate language and a gradual move towards crosslinguistic convergence.<sup>4</sup> In earlier work (Silva-Corvalán 1993, 1994a, 1994b), I demonstrated this type of influence from English in the Spanish spoken in Los Angeles (L.A.). There, indirect influence is evident in the preferential use of parallel structures, and in the

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<sup>3</sup> These phenomena support a view of borrowing as constrained by general cognitive principles that have been found to operate as well in the acquisition of natural languages. Slobin (1982:137; 1985) has proposed that children are equipped with universal learning dispositions or strategies which they apply in the acquisition of the formal structures of language. He has formalized these strategies in a number of "operating principles" (Slobin 1985:1158-1244) which highlight the importance of regularity, frequency, perceptual prominence and redundancy of language rules and linguistic elements in the process of first-language acquisition. Discovery and acquisition of grammatical categories are facilitated by overt and unambiguous marking of these categories.

<sup>4</sup> Derwing & Baker state that one of the trends identified in the most recent studies of morphological development is "the rehabilitation of frequency as a viable, even central, factor in explaining the course of development (albeit in interaction with many other factors), after a brief period of agnosticism engendered by Brown's very pessimistic assessment" (1986:334). Along a similar line, Snow affirms that there is evidence that "the language learning mechanism is frequency-sensitive" (1986:89).

gradual loss of discourse-pragmatic constraints not present in English. But in L.A. Spanish there is no obvious evidence of direct borrowing of syntactic patterns from English.<sup>5</sup>

## 1. *The Los Angeles study*

### 1.1 *Expressed and null subjects and placement of expressed subjects*

In this section I briefly review some of the results of my previous research on L.A. Spanish, in particular those concerning null elements and word order. In Silva-Corvalán (1994b) I examined the possibility that Spanish could *borrow* rules of obligatory subject expression and categorical preverbal placement of subjects. Qualitative and quantitative analyses, however, indicate a trend towards fewer expressed subjects in groups 2 and 3 (see note 5), which I interpret as a sign of gradual loss of pragmatic functions associated with the expression of subjects.

Changes in the order of major arguments have been proposed to occur as the result of direct interlanguage influence (see Harris & Campbell 1995:136-141 for an extended list of claimed instances of this type of direct influence). English-dominant bilinguals in L.A. do show higher percentages of preverbal subjects, indicating preference for the obligatory SV English order, as illustrated in (1a) below; the preferred order in general Spanish (Gen. Sp.) is given in (1b). But even obligatory placement of subjects in preverbal position under English influence, for example, would not constitute syntactic borrowing since Spanish subjects may be placed pre- or post-verbally depending on discourse-pragmatic conditions.

- (1) a. *Yo llegué a las 4 y luego ELLOS LLEGARON.* (L.A. Sp.: SV)  
 b. *Yo llegué a las 4 y luego LLEGARON ELLOS.* (Gen. Sp.: VS)  
 'I arrived at 4 o'clock and then THEY ARRIVED.' (English: SV)

The attested increase of preverbal subjects may be interpreted to be the consequence of processes of loss of semantic-pragmatic constraints on preverbal subject placement. Indeed, the fact that L.A. Spanish evidences a lower frequency of subject expression and a higher frequency of preverbal subjects (SV order) is contradictory with a hypothesis of direct syntactic influence from

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<sup>5</sup> This earlier work was based on data obtained from three groups of speakers: those in group 1 were born in Mexico and immigrated to the USA after the age of 11; speakers in groups 2 and 3 were born in the USA, but their parents and grandparents were born in Mexico, respectively. As expected, bilinguals in groups 2 and 3 simplify or overgeneralize grammatical rules but do not borrow elements which cause "radical changes", i.e., changes that are not compatible with the structure of Spanish, a concept that I define later in this paper.

English, even if syntax were to be defined as form plus meaning/discourse function. More adequate explanations are found instead by positing the loss of semantic-pragmatic constraints.

### 1.2 Null complementizer/relative pronoun *que* 'that'

Consider now examples (2) and (3), both with a zero complementizer.

- (2) *Yo creo Ø inventaron el nombre.*  
'I believe Ø they invented the name.' (A20,f19,2,ELA46)<sup>6</sup>
- (3) *Mi mamá no quiere que hago eso. Ella piensa Ø si, si no voy full-time no voy a terminar.*  
'My mom doesn't want me to do that. She thinks Ø if, if I don't go full-time I won't finish.' (S38,f19,3,ELA66)

Elsewhere I have shown (Silva-Corvalán 1993) that these constructions do not constitute direct transfer from English of the possibility of a zero complementizer in relative and complement clauses. As shown in (4) and (5), zero complementizers are not attested in relative clauses, nor in complements of verbs of saying in L.A. Spanish. The phenomenon is, therefore, limited to complement clauses of request and estimative verbs like *creer* 'to believe' ([2] above), *pensar* 'to think' ([3] above), *saber* 'to know', etc.

- (4) \* *El nombre Ø (ellos) inventaron era extraño.* (unattested)  
'The name Ø they invented was strange.'
- (5) \* *Juan dice Ø él (Juan) no tiene tiempo.* (unattested)  
'John says Ø he (Juan) doesn't have time.'

But in the context of examples (2) and (3), the non-expression of *que* 'that' is not a case of *incorporation* of a rule, since omission of *que* is allowed in formal or written registers of General Spanish (Subirats-Rüggeberg 1987). In addition, null *que* is attested in the informal oral mode of some varieties of Eastern Mexican Spanish, which may explain this trait in group 1 immigrants. Its extension to or retention in conversational Spanish may have been favored, in Mexico, by the fact that some indigenous languages do not require a free subordinator in complement clauses (Hekking & Muysken 1995:111-114), and, in L.A., by contact with English.

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<sup>6</sup> The information given in parentheses at the end of the examples from the L.A. data corresponds to the speaker's name initial and number, sex, age, group (1, 2, or 3), and tape (ELA no.) where the example occurs.

English may have had a similar indirect influence on *que* in Canadian French, where deletion is attested fairly frequently in complement clauses of such verbs as *penser* 'to think', *dire* 'to say', *savoir* 'to know', *croire* 'to believe' (Martineau 1993), but also occurs, with lower frequencies, in circumstantial and relative clauses, as shown in examples (7) and (8), taken from Martineau (1988).<sup>7</sup>

- (6) *Je pense que / Ø c'est ça.*  
'I think that / Ø it's that.'
- (7) *C'est ça que / Ø je dis.*  
'That's what I say.'
- (8) *C'est parce que / Ø tu veux.*  
'It's because you want.'

Complementizer deletion in Canadian French most probably results from the retention and gradual generalization of a construction which is reported as frequent in historical grammars until the period of Classical French (Foulet 1977:333). Note, furthermore, that deletion has also been retained in modern varieties of popular French in France (Martineau 1993:81).

In L.A. Spanish and in Canadian French, then, deletion of *que* has firm roots in the parent non-English contact dialects. The restriction in L.A. Spanish to a type of complement clause where other Spanish registers also allow null *que* argues in favor of constraints on syntactic change due to contact: in its early stages, change is evident in the more frequent use of a parallel structure. This, in time, may open the door to further changes and restructuring which would be constrained by the structure of the language itself.

### 1.3 *Lexico-syntactic calques*

One must admit that further doors to change are open by what I call "lexico-syntactic calques". In these cases, an English word is matched up with a Spanish word which incorporates semantic elements and subcategorization and selectional restrictions from English.

Consider examples (9) and (10).

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<sup>7</sup> Deletion of the complementizer has also been reported for Italian by Wanner (1981), a fact that strengthens the notion that this is a "natural" phenomenon in more than one Romance language.

- (9) a. *Y tu carro que compraste, ¿CÓMO te gusta?*  
(H22,m21,2,ELA54)  
lit.: and your car that (you) bought, HOW to-you pleases?  
Gen. Sp.: *Y el carro que compraste, ¿te gusta?*  
lit.: and the car that (you) bought, to-you pleases?  
'And the car you bought, do you like it?.'
- b. *Mi carro me encanta.* (R24,m20,2,ELA54)  
'I love my car.'  
\**Me gusta amplio.* (infelicitous answer)  
\*'I like it spacious'
- (10) Gen. Sp.: a. *¿Cómo te gusta el café?*  
'How do you like coffee?'
- b. *Me gusta cargado.*  
'I like it strong.'

(10) shows that the syntactic structure *cómo X gustar Y* exists in Spanish and has not been borrowed. What has been borrowed is an additional meaning element for *cómo* 'to what extent', which allows it to be used in questions of the type in (9).

An often quoted example of this type of lexico-syntactic calque concerns the verb *gustar* 'to like'. In Spanish, *gustar* is subcategorized for a subject with the semantic role of "theme" or "patient" and an indirect object (introduced by the preposition *a* and with an obligatory coreferential verbal clitic *le/les*) which has the semantic role of "experiencer". The opposite syntactic-semantic relationship holds in Modern English, as shown in (11).

- |   |  |  |
|---|--|--|
| (11) <i>A nadie<sub>i</sub> le<sub>j</sub> gusta eso<sub>q</sub></i>      |  | i = Ind. Obj. = experiencer<br>q = Subject = theme |
| lit.: to no one <sub>i</sub> him/her <sub>j</sub> likes that <sub>q</sub> |  |  |
| 'No one <sub>i</sub> likes that <sub>q</sub> .'                           |  | i = Subj. = experiencer<br>q = Dir. Obj. = theme   |

Possibly due to the frequent use of the English pattern, speakers in groups 2 and 3 show evidence of a change in that direction. There is variation, however, as seen in examples (12) to (14) below: although the experiencer is coded in the nominative, in these and other examples the nominative may be coreferential with a dative clitic, while the theme may appear as an indirect object. This variation is reminiscent of the path followed by the reanalysis of Old English *lician* 'to like', a gradual change that took place from late Old English through the sixteenth century.

- (12) *Se llama la Sra. X, pero naden [sic] le gusta — a ella.*<sup>8</sup> (V21,f18,2,ELA16)  
 lit.: 'se' calls the Mrs. X, but no one to-him likes — to her.  
 Gen. Sp.: *Se llama la Sra. X, pero a nadie le gusta ella.*  
 lit.: 'se' calls the Mrs. X, but to no one to-him likes she  
 'Her name is Mrs. X, but no one likes her.'
- (13) *Los cocodrilos les gustaron a matar.* (R24,m20,2,ELA50)  
 lit.: the crocodiles to-them liked-3pl. to kill.  
 Gen. Sp.: *A los cocodrilos les gustaba-3sg. matar.*  
 'Crocodiles liked to kill.'
- (14) *Yo gusto eso.* (N40,f21,3,ELA48)  
 lit.: I like-1sg. that.  
 Gen. Sp.: *A mí me gusta-3sg. eso.*  
 'I like that.'

In our corpus of L.A. Spanish, the only instances of exact calquing (i.e., nominative experiencer, accusative theme), are produced by two speakers with extremely reduced proficiency in Spanish ([14] above illustrates).

In reference to the comparable type of change that affected *like* in Middle English, Lightfoot (1991:169) has observed that it could not be spurred by the imitation of properties of another language. Indeed, one could argue that examples like (12) to (14) constitute a natural process of generalization of a pattern that exists in Spanish with *gustar* as well as other verbs: nominative experiencer, accusative theme, as shown in (15) and (16).

- (15) *¿Gusta Ud. un café?*  
 lit.: like you-nom. a coffee?  
 'Would you like a cup of coffee?'
- (16) *Ella ama la música / quiere a su gato / gozó esa experiencia.*  
 'She loves music / loves her cat / enjoyed that experience.'

But even though in Spanish there exists a potential model for the change in the syntactic coding of the thematic roles, the fact that examples of the type in (12) to (14) are attested only in English contact areas argues forcibly in favor of this language as a trigger. This casts doubts, therefore, on Lightfoot's (1991:169) general claim.

<sup>8</sup> The speaker pauses briefly after *gusta*. Otherwise, it would have been impossible to tell whether an indirect object marker *a* had been produced in this example.

Alterations of verb subcategorization occur in groups 2 and 3, but are not frequent in either group. Example (17) illustrates a modification in the subcategorization of *entrar* ‘to enter’, ‘to join (a group)’, which appears in a transitive structure, [V + NP], while in General Spanish *entrar* with the meaning of motion is intransitive and subcategorizes a Prepositional Phrase, [V + PP]. I have no evidence that this extension allows this verb to occur with a clitic, as in *lo entras por la izquierda* ‘you enter it from the left’, but the transitive structure opens up this possibility.

- (17) *y entras Ø el washroom* (S38,f19,3,ELA31)  
 lit.: and enter-2sg. the washroom  
 Gen. Sp.: *y entras a/en el washroom*  
 ‘and you enter the washroom’  
 ? *lo entras por la izquierda* (unattested)  
 ‘you enter it from the left’

Once again, the modification illustrated in (17) is not “radical” in the “pure form” sense, since *entrar* may also be transitive, as in *entra la silla* ‘take the chair inside’. But in this case the internal NP is the theme and *entrar* conveys the sense of ‘to take/carry X inside’, while in (17) the NP is the goal. This, then, is a verb with alternate patterns associated with different senses of the word. It represents, therefore, a possible area of influence from a dominant language. My hypothesis predicts that by contrast a similar motion verb, *salir* ‘to leave, to go out’, which does not allow an NP-internal argument in Spanish, would not be affected by the corresponding English verb, i.e., I predict that an example like (18) would not become a variant in L.A. Spanish.

- (18) \* *Salió Ø la casa a las 8.* (unattested)  
 ‘He left the house at 8 o’clock.’

The data also provide some illustration of what I call “local lexical consequence” resulting from reproducing the preposition that collocates with a corresponding English verb. Consider (19), where the preposition in *to have respect for someone*, translated as *para*, substitutes for *a* in *tener-le respeto a alguien*.

- (19) *Nosotros les teníamos respeto para ellos y todo eso.*  
 (R17,f21,2,ELA3)  
 lit.: we them had respect for them and all that  
 Gen. Sp.: *Nosotros les teníamos respeto (a ellos) y todo eso.*  
 ‘We had respect for them and all that.’

The use of *para* instead of *a* should block the clitic in (19), since *para*-PPs do not allow a coreferential clitic, as seen in (20). But the effect of the substitution is only local, restricted to its phrase, and the clitic is not blocked. The seed has been planted for a possible lexico-syntactic modification which could involve allowing clitics coreferential with the NP in *para*-PPs. This would constitute a “radical change”, which, I propose, cannot take place under the sociolinguistic conditions that obtain in L.A. (Silva-Corvalán 1994b: Chaps. 1 and 7).

- (20)  $\emptyset$  *tengo unos libros para ellos.*  
 \* *les tengo unos libros para ellos.* (unattested)  
 ‘I have some books for them.’

To summarize, then, L.A. Spanish evidences the following types of changes under indirect English influence:

- i) Increased frequency of parallel structures, involving:
  - a) gradual loss of discourse-pragmatic constraints (e.g., affecting word order, expression of subjects);
  - b) gradual loss of register/stylistic constraints (complementizer deletion?);
  - c) gradual alteration of lexical subcategorizations and selectional restrictions (e.g., *cómo* ‘how’, *gustar* ‘like’).
- ii) Substitution of formally similar prepositions, with “local” lexical consequences (e.g., *para* ‘for’ instead of *a* ‘to, for’).

In none of these cases do the changes involve the borrowing of syntax.<sup>9</sup>

## 2. *Beyond Los Angeles*

Let us now consider some examples from other contact situations. Spanish has had over four centuries of contact with indigenous American languages which have borrowed from the Spanish lexicon extensively, including so-called “unborrowable” function words (Brody 1995).

Campbell (1987), a staunch defender of the existence of syntactic borrowing, presents the case of Pipil, a Uto-Aztecan language spoken (by a few hundred people) in El Salvador. Pipil borrowed coordinate conjunctions from

<sup>9</sup> Richard Janda (personal communication) points out to me that in Construction Grammar (à la Fillmore, Kay, Lakoff, O’Connor, etc.), the opposition syntax/lexicon is viewed as a continuum, such that to say that some phenomenon is lexical does not exclude its being also syntactic. Within such model of grammar, the changes illustrated in this article might perhaps be considered more or less lexical/syntactic.

Spanish. Proto-Nahua and Pipil had juxtaposition for conjoined clauses; however, Campbell explains (p. 255) that “a postposition meaning ‘with’ may be reconstructible for conjoined nominals”, as shown in (21).

- (21) *Juan (i-)wan María.*  
 John (her-)with Mary  
 ‘John and/with Mary.’

In addition, Pipil may have had a particle *aw* ‘and’, attested in Classical Nahuatl, which was “an adverbial construction serving the discourse function of introducing sentences connected in the discourse” (p. 256). Thus, Campbell himself acknowledges that what Pipil possibly did was to extend the concept of “coordination of sentences in discourse” to “coordination of independent clauses into a single sentence”,<sup>10</sup> using the native conjunction *wan* ‘and’. In addition, Pipil had the subordinate conjunctions *ka:n* ‘where’, *ke:man* ‘when’, and *ke:n* ‘how’, so when this language borrowed a number of subordinate conjunctions from Spanish, including *asta* ‘until’, *pero* ‘but’, *porqué* ‘because’, etc., it is evident that the borrowing was lexical rather than syntactic.

Brody (1995) and Hekking & Muysken (1995) examine a number of indigenous languages from Mexico to Ecuador and independently argue that these languages borrowed conjunctions with primarily discourse meanings. The conjunctions “nearly always occur along with an indigenous element that fulfills a similar function” (Brody 1995:140). In some cases, the borrowings ended up replacing some of the native particles.<sup>11</sup>

Hekking & Muysken (1995) further observe that Otomi, for instance, borrows many more prepositions and conjunctions from Spanish than does Quechua, and they surmise that this difference is most likely due to their dissimilar typologies. For Quechua, they affirm that only *que* ‘that’ appears to have “a clearly defined grammatical role” (p. 112), while the rest of the borrowings seem to function as “discourse markers”. Note, however, that *que* occurs redundantly with the indigenous subordinator *-spa*, making *que* repetitive and grammatically unclear. Consider their example (4), reproduced here as (22).

<sup>10</sup> It is unclear to me how different this is from sentence coordination in discourse.

<sup>11</sup> The conjunctions borrowed include *y luego* ‘and then’, *como* ‘like’, *pues* ‘because, well...’, *porque* ‘because’, *pero* ‘but’, *que* ‘that’, *si* ‘if’ and *sino que* ‘but’ in some of the languages.

- (22) *chanta atoj-taj-ri willasku-spa que pega-mu-sqa ...*  
 thus fox-EMPH-RF say-SUB that hit-CIS-NAR<sup>12</sup>  
 'Así el zorro diciendo que iba a pegar ...'  
 'Thus the fox saying that he was going to hit ...'

The Quechua construction marks 'to say' with the suffixed Quechua subordinator *-spa*; *que* is redundant and precedes a clause that maintains Quechua structure in all other respects. Given a situation of this sort, one may predict, based on the principles of regularity and transparency, that the subordinate language will tend to substitute the free, invariant, and unambiguous marker for the bound and multifunctional Quechua form.

Further support for my view may be found in studies of Spanish-Guarani contact. For instance, double negation with negative subjects in Paraguayan Spanish (see [23b]), previously ascribed to direct influence from Guarani (Granda 1979:279), has more recently been explained as the result of the retention of a structure which existed in 16th-century Spanish (Granda 1991). The retention has been favored by Guarani, where it exists as a standard construction (see [23a]).

- (23) a. Guarani: *Mba'eve nda-'ei.*  
 nothing not-said  
 'I said nothing.'
- b. Paraguayan Spanish: *Nada no dije.*  
 nothing not said  
 'I said nothing.'
- c. Standard Spanish: *Nada dije / No dije nada.*  
 nothing said / not said nothing  
 'I said nothing.'

Schwegler (1996a) examines in depth the literature concerned with the possible influence of African languages on Spanish and contributes his own analysis of Palenquero, a Spanish-based creole spoken in the Caribbean region of Colombia. In this study, Schwegler concentrates on a single syntactic feature of possible African influence, double negation of the type *i NU ta ablá inglés NU* 'I do not speak English'. Similar predicate negation structures are also characteristic of spoken Brazilian Portuguese (24) and of some varieties of (Black) Caribbean Spanish (25), all of which were once in extensive contact with African languages (Schwegler 1991a, 1991b, 1996b).

<sup>12</sup> EMPH = emphatic; RF = referential; SUB = adverbial subordinator; CIS = cislocative ("like here"); NAR = narrative tense.

- (24) a. *Fala inglés?*  
 'Do you  
 speak English?'                      b. *Não, não falo não.*  
 No not speak not  
 'I don't speak it.'
- (25) a. *¿Habla inglés?*  
 'Do you  
 speak English?'                      b. *No hablo no.* (Dominican Sp.)  
 not speak not  
 'I don't speak it.'

The exact origin of double negation remains to be determined (Schwegler 1996b). Be that as it may, I would like to suggest that the construction in (25b) may have had its origin in Spanish itself. Note that examples of the type in (26), with a reinforcing postverbal negative element creating a "double negative" predicate, are quite frequent in colloquial Spanish.

- (26) a. *¿Sabes dónde está Juan?*  
 'Do you know where John is?'                      b. *No sé na'.*  
 not know nothing  
 'I don't know nothing.'

If my suggestion is valid, then African influence on the development of examples of the type of (25a) may be postulated only as an indirect favoring factor.

Negation in present-day Palenquero is complex. Schwegler (1991b) gives ample evidence of the stable use of three types of negative structures: preverbal, postverbal, and double negation. Postverbal negation clearly has a non-Spanish origin in this creole, but this radically different structure, illustrated in (27) (Schwegler's example 81) only occasionally permeates the local variety of Spanish.

- (27) *Víctor quiere eso NO.*  
 Víctor want this not  
 'Victor doesn't want this.'

Schwegler suggests that "[postverbal negation] may be the result of a carryover of similar strategies from colonial Black S[panish], and not simply cross-interference of a more recent vintage" (1991b:198). This statement leads me to infer a creole origin for postverbal negation, and its occasional use in some varieties of Spanish as a sort of archaism, either fossilized or on its way to disappear as part of decreolization.

The old contact situation involving Spanish and Basque offers as well supporting evidence for our general thesis. Despite intense cultural and linguistic pressures for over 500 years, Basque has remained typologically very different from Spanish. Basque Spanish does, however, evidence some phenomena that may be ascribed to Basque influence. For instance, Basque Spanish allows zero direct objects with definite referents, a context where most varieties of

Spanish require a clitic pronoun or another form of explicit reference, as shown in (28).

- (28) a. *No encuentro el libro de Alarcos.*  
 b. *Yo tengo uno; si quieres te Ø presto.* (Basque Span.)  
     *Yo tengo uno; si quieres te lo presto.* (General Span.)  
 a. 'I can't find Alarcos' book.'  
 b. 'I have one; I can lend Ø to you if you want.'  
     'I have one; I can lend it to you if you want.'

The observation that zero objects occur in Basque had motivated researchers to consider examples like (28) as evidence of transfer from Basque to Spanish. Landa (1995), however, shows that examples of this type may be more appropriately analyzed as cases of loss of semantic-pragmatic constraints valid in General Spanish, which only allows zero objects with non-specific referents, as shown in (29).

- (29) a. *¿Compraste pan?*                      b. *Sí, Ø compré.* (General Spanish)  
 a. 'Did you buy bread?'                    b. 'Yes, I did.'

Interestingly, Landa (1995) notes that zero objects do not occur in the French of the Basque region. She suggests that this is so because French does not have the option of zero objects in examples of the type in (29).<sup>13</sup>

In any case, Landa's study is relevant to the notion of "radical change". Borrowing does not result in a radical change in the language affected. The change that occurs is compatible with the structure of the borrowing language because it does not disturb an already existing surface string or syntactic variant of this language. If it did, then the change would be "radical"; but radical changes appear to be extremely rare, if not non-existent, in natural societal bilingualism. By contrast, semantic and discourse-pragmatic features are commonly borrowed.

Let me illustrate further with another case from Pipil, which is said to have borrowed a comparative construction directly from Spanish (Campbell 1987). Consider (30) and (31) (Campbell, p. 255).

- (30) *Mu-manuh mas bibo.*  
     your-brother more smart  
     'Your brother (is) smarter.'

<sup>13</sup> However, Arteaga (this volume) shows that specific null objects may occur in modern spoken French.

- (31) *Ne siwa:-t mas galá:na ke taha*  
 the woman-ABSOL more pretty than you  
 'That woman is prettier than you.'

(30) and (31) give evidence of the use of *más ... ke* 'more ... than' comparatives in Pipil, which Campbell views as syntactic borrowing from Spanish. By contrast, I consider it a case of lexical borrowing, since it is highly likely that Pipil had this type of comparative structure before contact with Spanish, given that it existed in Classical Nahuatl (CN), as shown in (32).

- (32) CN: X ok achi (QUANT) ADJECTIVE in (SUBORD) Y  
 Sp.: X más-(QUANT) ADJECTIVE que (SUBORD) Y<sup>14</sup>

Note that the structure in Classical Nahuatl is superficially congruent with Spanish. Furthermore, it is interesting to observe that the adjectives in the examples given by Campbell are also of Spanish origin (*bibo* 'smart' and *galá:na* 'pretty'). This suggests that these comparative phrases may have been borrowed as fixed expressions, which were in time reanalyzed as a productive mechanism for comparison, parallel to one that possibly existed in Pipil. The borrowing brought into the language an additional lexical (as opposed to affixal) comparative expression, as predicted by general principles which govern externally motivated syntactic change.

### 3. Discussion and conclusion

Justifiably, then, one may conclude that so-called "grammatical borrowings" are in fact lexical borrowings: conjunctions, subordinators, and prepositions that did not affect the syntax of the borrowing language when they were borrowed. Note the concurrence between Brody's, Campbell's, and Hekking & Muysken's data: in all these situations the subordinating borrowed conjunctions occur redundantly with the indigenous element. Furthermore, Hekking & Muysken add that the structural differences between Otomi and Quechua appear to explain more appropriately than historical, demographic, and social factors the different ways in which these languages adopt and adapt function-word loans. This strongly supports my proposal that borrowing is constrained by the structure of the languages involved, and contradicts the claim that "anything goes" (Campbell & Muntzel 1989; Thomason & Kaufman 1988). There is, then, evidence for lexical borrowing, some of which may have syntactic consequences. There is also gradual loss of discourse-pragmatic restrictions as well as incorporation of new uses of existing structures, all of which

<sup>14</sup> QUANT = Quantifier; SUBORD = Subordinator.

produce a slight foreign quality, comparable to what happens at the phonetic level.

A further comparison could be established with phonetics-phonology by suggesting that at the level of syntax, a "structural space" or "structural weakness" à la Weinreich would correspond to a "pragmatic space", as follows: A structure X in a secondary language S contains a pragmatic space when the superficially corresponding structure Y in a dominant/primary language F does not have the equivalent discourse-pragmatic functions. In such a situation, structure X in language S is "susceptible to foreign influence" (i.e., likely to lose or add a pragmatic function under the influence of Y in F).

Thurgood (1996), who studies the restructuring of tones and registers in Chamic languages in contact with Mon-Khmer, reaches similar conclusions. He asserts that the developments in Chamic have been sparked by contact, and that although internal "pressures" and "imbalances" have not played a significant role, the structures of language itself have clearly constrained the restructuring process. To reach a level of explanation, the external fact of language contact must be invoked, but the changes allowed have been constrained by the language system. Thus, according to Thurgood, "the historical developments in Chamic demonstrate the role that external influences have played in providing direction to natural paths of internal change" (1996:29).

Along the same line, studies of change which focus specifically on the natural attrition of a minority language have not reported, to my knowledge, "acts of syntactic reception" (see Dorian 1980, 1989; Fuller 1995, 1996), and the same can be said of analyses of simultaneous bilingual acquisition (Levine 1995; Meisel 1986, 1994; Houwer 1990). For instance, obligatory word order patterns of Dutch, German, and Yiddish (verb-second main clauses and verb-final subordinate clauses) are acquired early and are not affected by contact with English (variable S-V inversion after topicalized constituents, on the other hand, tends to not occur when expected).

No one familiar with my work would doubt, I hope, my conviction that social and linguistic facts are closely interrelated. Social factors are responsible for much of the shape of grammars, as well as for much of language change. But if social factors may condition different language acquisition patterns, the acquired knowledge restricts the types of contact-related change that may affect the languages throughout an individual's life. This should explain why the syntactic changes allowed under conditions of "normal transmission" (Thomason & Kaufman 1988:10-12) must be congruent with the structure of the recipient language.

Many of the studies that have argued for grammatical borrowing in contact situations (e.g., Campbell 1993, Nadkarni 1975, Gumperz & Wilson 1977, Thomason 1986) have focused mainly on the outcome of centuries-long language contact and lack the critical data to examine the early stages of change. Be that as it may, most of the changes presented correspond to reductions or generalizations, rather than to the incorporation of foreign structures. Let me reassert, however, that mine is not an argument against the existence of externally caused changes. On the contrary, it is impossible to deny the impact that intensive language contact may have, especially on a subordinate language. What I have attempted to show is that every change allowed is constrained by the structure of the affected language.

The effect of this linguistic filter, as it were, may have been what motivated Thomason's statement that "the innovated structure and the source-language structure need *not* be identical ... non-identical interference features are common" (1986:245). We may ask ourselves why "non-identical interference features are common". The answer, it seems to me, lies precisely in the fact that what is borrowed is *not* a syntactic structure, but the semantics or the pragmatics of a construction, which is then linked to a close structural parallel in the borrowing language. I would like to make the stronger claim that the paired structures need to share at least one element of meaning or one pragmatic function (cf. Prince 1992).

The studies I have discussed provide ample proof that, despite the occurrence of radical "nonce-borrowing" in the speech of bilinguals (see Weinreich 1974), only those that are compatible with the structure of the borrowing language (i.e., those that correspond to an already existing syntactic variant at any given stage) will be adopted, disseminated and passed on to new generations. This conclusion agrees with the sociolinguistic model of language change which proposes a linguistic selection filter that weeds out variants that violate the structure of the language in question.

Historical sociolinguistics leaves no doubt that the origin of most changes is located in the variation inherent in languages, and that change takes place when one of the variants gains momentum, as it were. Sociolinguists have thus focussed mainly on the study of the "transition" question (i.e., how a change proceeds in the linguistic and social systems), but the sources of innovation have tended to elude them. This actuation problem is resolved when the functional or pragmatic origin of the variants is identified in a contact language. Contact situations, then, suggest a model of change as in Figure 1 (cf. Cedergren 1984). Figure 1 (p. 243) indicates that a contact language may be a source of innovation, and that nonce-borrowings go through a linguistic filter

which allows only structurally compatible borrowings to become discourse semantic or pragmatic variants likely to spread in the language. Social and cognitive factors constitute the “diffusion filter”, which determines the speed and degree of diffusion of the variants involved.

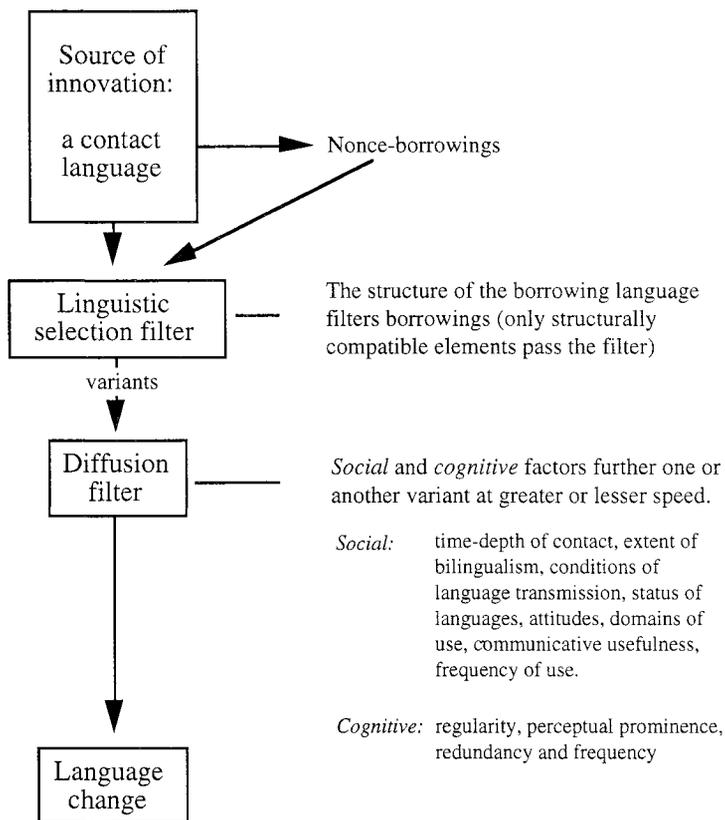


Figure 1. A model of contact-induced language change

### REFERENCES

- Andersen, Roger. 1983. “Transfer to somewhere”. In *Language Transfer in Language Learning*, ed. by Susan Gass & Larry Selinker, 177-201. Rowley: Newbury House.
- Arteaga, Deborah. This volume. “On null objects in Old French”.

- Bickerton, Derek. 1981. *Roots of Language*. Ann Arbor: Karoma.
- Brody, Jill. 1995. "Lending the 'unborrowable': Spanish discourse markers in indigenous American languages". In *Spanish in Four Continents: Studies in Bilingualism and Language Contact*, ed. by Carmen Silva-Corvalán, 132-147. Washington, D.C.: Georgetown University Press.
- Campbell, Lyle. 1987. "Syntactic change in Pipil". *International Journal of American Linguistics* 53.253-280.
- \_\_\_\_\_. 1993. "On proposed universals of grammatical borrowing". In *Historical Linguistics 1989*, ed. by Henk Aertsen & Robert Jeffers, 91-109. Amsterdam: John Benjamins.
- Campbell, Lyle & Martha C. Muntzel. 1989. "The structural consequences of language death". In *Investigating Obsolescence*, ed. by Nancy C. Dorian, 181-196. Cambridge: Cambridge University Press.
- Cedergren, Henrietta. 1984. "Panama revisited: Sound change in real time". Paper presented at New Ways of Analyzing Variation XIII, University of Pennsylvania.
- Derwing, Bruce L. & William J. Baker. 1986. "Assessing morphological development". In *Language Acquisition*, ed. by Paul Fletcher & Michael Garman, 326-338. Cambridge: Cambridge University Press.
- Dorian, Nancy. 1980. "Maintenance and loss of same-meaning structures in language death". *Word* 31.39-45.
- \_\_\_\_\_, ed. 1989. *Investigating Obsolescence*. Cambridge: Cambridge University Press.
- Foulet, Lucien. 1977 (1919). *Petite syntaxe de l'ancien français*. Paris: Librairie Honoré Champion.
- Fuller, Janet M. 1995. "Language acquisition patterns and structural convergence: From codeswitching to language change". Paper presented at the Boston University Conference on Language Development, November 1995.
- \_\_\_\_\_. 1996. "When cultural maintenance means linguistic convergence: Pennsylvania German evidence for the Matrix Language Turnover Hypothesis". *Language in Society* 25.493-514.
- García, Erica. 1995. "Frecuencia (relativa) de uso como síntoma de estrategias etnopragmáticas". In *Lenguas en contacto en Hispanoamérica*, ed. by Klaus Zimmermann, 51-72. Frankfurt: Vervuert.
- Granda, Germán de. 1979. "Calcos sintácticos del guaraní en el español del Paraguay". *Nueva Revista de Filología Hispánica* 28.267-286.
- \_\_\_\_\_. 1991. *El español en tres mundos. Retenciones y contactos lingüísticos en América y África*. Valladolid: Universidad de Valladolid.
- Gumperz, John & Robert Wilson. 1977. "Convergence and creolization". In *Pidginization and Creolization of Languages*, ed. by Dell Hymes, 151-167. Cambridge: Cambridge University Press.
- Harris, Alice & Lyle Campbell. 1995. *Historical Syntax in Cross-linguistic Perspective*. Cambridge: Cambridge University Press.
- Hekking, Ewald & Pieter Muysken. 1995. "Otomí y Quechua: una comparación de los elementos gramaticales prestados del español". In *Lenguas en*

- contacto en Hispanoamérica*, ed. by Klaus Zimmermann, 101-118. Frankfurt: Vervuert.
- Houwer, Annick de. 1990. *The Acquisition of two Languages from Birth: A Case Study*. Cambridge: Cambridge University Press.
- Landa, Alazne. 1995. *Conditions on Null Objects in Basque Spanish and their Relation to Leísmo and Clitic Doubling*. Ph.D. dissertation, University of Southern California.
- Levine, Glenn S. 1995. "Elderly second-generation speakers of Yiddish: Toward a model of L1 loss, incomplete L1 acquisition, competence and control". Paper read at the Conference on Language Attrition and Language Loss, University of New Mexico, Albuquerque, June 1995.
- Lightfoot, David. 1991. *How to Set Parameters: Arguments from Language Change*. Cambridge, Mass.: MIT Press.
- Martineau, France. 1988. "Variable deletion of *que* in the spoken French of Ottawa-Hull". In *Advances in Romance Linguistics*, ed. by Jean Pierre Montreuil & David Birdsong, 275-287. Dordrecht: Foris.
- \_\_\_\_\_. 1993. "Rection forte et rection faible des verbes: l'ellipse de *que* en français du Québec et de l'Ontario". *Francophonies d'Amérique* 3.79-90.
- Meisel, Jürgen. 1986. "Word order and case marking in early child language. Evidence from simultaneous acquisition of two first languages: French and German". *Linguistics* 24.123-85.
- \_\_\_\_\_. 1994. "Getting FAT: Finiteness, agreement and tense in early grammars". In *Bilingual First Language Acquisition: French and German Grammatical Development*, ed. by Jürgen Meisel, 89-129. Amsterdam: John Benjamins.
- Munteanu, Dan. 1996. *El papiamento, lengua criolla hispánica*. Madrid: Gredos.
- Myers-Scotton, Carol. 1993. *Duelling Languages: Grammatical Structure in Codeswitching*. Oxford: Clarendon.
- Nadkarni, Mangesh V. 1975. "Bilingualism and syntactic change in Konkani". *Language* 51.672-83.
- Otheguy, Ricardo. 1995. "When contact speakers talk, linguistic theory listens". In *Meaning as Explanation: Advances in Linguistic Sign Theory*, ed. by Ellen Contini-Morava & Barbara Sussman, 213-242. Berlin: Mouton de Gruyter.
- Prince, Ellen. 1992. "On syntax in discourse, in language contact situations". In *Text and context: Cross-disciplinary Perspectives on Language Study*, ed. by Claire Kramsch & Sally McConnell-Ginet, 98-112. Boston: D.C. Heath.
- \_\_\_\_\_. 1995. Notes on syntactic borrowing, Funknet e-mail list, March 2.
- Schwegler, Armin. 1991a. "Predicate negation in contemporary Brazilian Portuguese — A linguistic change in progress". *Orbis* 34.187-214.
- \_\_\_\_\_. 1991b. "Negation in Palenquero: Synchrony". *Journal of Pidgin and Creole Languages* 6.165-214.

- \_\_\_\_\_. 1996a. "Lenguas criollas en Hispanoamérica y la contribución africana al español de América". *Signo y Seña* 6:295-346.
- \_\_\_\_\_. 1996b. "La doble negación dominicana y la génesis del español caribeño". *Hispanic Linguistics* 8:247-315.
- Silva-Corvalán, Carmen. 1993. "On the permeability of grammars: Evidence from Spanish and English contact". In *Linguistic Perspectives on the Romance Languages*, ed. by William Ashby, Marianne Mithun, Giorgio Perissinotto & Eduardo Raposo, 19-43. Amsterdam: John Benjamins.
- \_\_\_\_\_. 1994a. "The gradual loss of mood distinctions in Los Angeles Spanish". *Language Variation and Change* 6:255-272.
- \_\_\_\_\_. 1994b. *Language Contact and Change: Spanish in Los Angeles*. Oxford: Clarendon.
- Slobin, Dan. 1982. "Universal and particular in the acquisition of language". In *Language Acquisition: The State of the Art*, ed. by Eric Wanner & Leila R. Gleitman, 128-170. Cambridge: Cambridge University Press.
- \_\_\_\_\_. 1985. In *The Crosslinguistic Study of Language Acquisition. Vol. 1: The Data. Vol. 2: Theoretical Issues*. Hillsdale, N.J.: Erlbaum.
- Snow, Catherine E. 1986. "Conversations with children". In *Language Acquisition*, ed. by Paul Fletcher & Michael Garman, 69-89. Cambridge: Cambridge University Press.
- Subirats-Rüggeberg, Carlos. 1987. *Sentential Complementation in Spanish*. Amsterdam: John Benjamins.
- Thomason, Sarah G. 1986. "On establishing external causes of language change". In *Second Eastern States Conference on Linguistics*, ed. by Soonja Choi, Dan Devitt, Wynn Janis, Terry McCoy & Zheng-sheng Zhang, 243-251. Columbus, OH: Department of Linguistics, Ohio State University.
- Thomason, Sarah G. & Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.
- Thurgood, Graham. 1996. "Language contact and the direction of internal drift: The development of tones and registers in Chamic". *Language* 72:1-31.
- Wanner, Dieter. 1981. "Surface complementizer deletion: Italian *che-Ø*". *Journal of Italian Linguistics* 6:47-82.
- Weinreich, Uriel. 1974 (1953). *Languages in Contact*. The Hague: Mouton.
- Weinreich, Uriel, William Labov & Marvin Herzog. 1968. "Empirical foundations for a theory of language change". In *Directions for Historical Linguistics*, ed. by Winfred P. Lehmann & Yakov Malkiel, 95-195. Austin: University of Texas Press.

# SUBJECT POSITIONS AND THE ROLES OF CP\*

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## 0. Introduction

I propose that the specifiers of an external TP projection, a CP-like projection, may host subject NPs under certain conditions. I will present evidence that specific NPs can co-appear with expletive subjects in pro-drop languages, supporting the independent checking of the EPP feature and the Case-assigning feature of T.<sup>2</sup> Additionally, I also offer theoretical arguments that certain well-known word-order phenomena of some Romance languages

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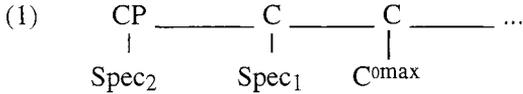
<sup>2</sup> The corpus of data used in this paper comes from Northwestern Iberian Languages (henceforth NILs): Galegan or Galician (Gal.); Leonese (Leon.), with its major dialects, Asturian Bables in Spain and Mirandese in Portugal; Portuguese (Port.), specifically non-standard European Portuguese (EP); and Spanish (Sp.), with special attention to Dominican Spanish (DomSp.) and its Cibaefio dialect.

Throughout this article, I will combine historical and dialectal data to reconstruct the expletive phenomena, since some of their main characteristics are either no longer productive or are attenuated enough in varied and significant ways. Expletive pronouns are present within NILs from the 16th century onwards. Currently, some of these constructions are dialectal in Galegan, European Portuguese and Leonese. A very restricted use is found in literary Spanish, although they are fairly productive in Dominican Spanish, both as an archaism and in developing new usages.

Abbreviations used in this article include:

EPP	Extended Projection Principle	NILs	Northwestern Iberian Languages
EXP	Expletive	QM	Question/Interrogative Marker
IEC	Interrogative Expletive Construction	RAE	Real Academia de la Lengua Española
MSs	Multiple Spec (Configurations)	SEC	Single Expletive Construction
MSC	Multiple Subject Construction	TEC	Transitive Expletive Construction
NI	Northwestern Iberia		

are attributable to a single parameter: the overt licensing of the Multiple Spec Configuration in (1).



A consequence of my analysis is that the status of null-subject languages with expletive subjects must be re-examined. If the presence of expletives is related to the impossibility of null subject, as is widely assumed in the literature, it is necessary to explain what allows the unexpected cooccurrence of these two elements and, upon doing so, to check whether our model of grammar might provide a mechanism for such a derivation.

I will conclude that expletives within the Northwestern Iberian domain surface as a consequence of the checking of a strong feature of the C-stage of the derivation, here roughly identified with the left-most segment of the root derivation. Additionally, the different types of expletives discussed below are presented as an enrichment of the pro-drop parameter rather than as a weakening of it. I propose that the (single) explanation for all types of expletive subject derivations involves a unified type of constructions baptized here as the *Complementizer Expletive Construction*.

### 1. *Expletives in pro-drop languages*

Within generative grammar, four properties have traditionally been associated with null-subject languages: (i) the possibility of phonologically empty referential subject pronouns, (ii) the possibility of Free Inversion, (iii) the apparent absence of complementizer-trace effects, and (iv) the impossibility of overt expletive pronouns.

This last property is the relevant one for what follows since although the study of expletive pronouns is often confined to non-pro-drop languages, expletive pronouns occur without any apparent restriction in a broader array of languages. (2) shows some examples from NILs.

- (2) a. *El cúmu te chamas?*<sup>3</sup> (Sisternian)  
 Exp how you call-2sg.  
 'What is your name?'

<sup>3</sup> Fernández (1960:63). Sisternian is a Leonese dialect.

- b. *Il viñeron teus pais.*<sup>4</sup> (Galegan)  
Exp came-3pl. your parents  
'Your parents came.'
- c. *Ello has de casarte.*<sup>5</sup> (17th.-c. Sp.)  
Exp have-2sg. to get-married  
'You have to get married'
- d. *Ello hay arroz.*<sup>6</sup> (DomSp.)  
Exp there-is rice  
'There is some rice.'
- e. *Ele muitos estudantes vieram à festa.*<sup>7</sup> (Port.)  
Exp many students came-3pl. to-the party  
'Many students came to the party.'

Outside the NIL domain, expletive subjects are also found in other Romance (3) and Germanic pro-drop languages (4).

- (3) a. *Il entroit chevaliers en masse.*<sup>8</sup> (Old French)  
Exp enters knights in great-numbers  
'There enter knights in great numbers.' (sic)
- b. *El crema.*<sup>9</sup> (16th.-c. Catalan)  
Exp burns  
'It's burning hot.'
- c. *Ell va ser com posar oli a un llum.*<sup>10</sup> (Castello-  
Exp is-going to-be like put oil to a fire nese)  
'It is going to be like adding fuel to a fire.'
- d. *O pléut.*<sup>11</sup> (Occitan)  
Exp rains  
'It rains.'
- e. *A pare que Nane vegna qua.*<sup>12</sup> (Basso Polesano)  
Exp seems that John comes here  
'It seems that John comes here.'

4 García de Diego (1978:101).

5 Henríquez Ureña (1939:223, 228).

6 Patín Maceo (1947:76).

7 Raposo (1995).

8 Gamillscheg (1957:520).

9 Spitzer (1941:242).

10 Coromines (1982:266-267). Castellonese is a Southern Catalan dialect.

11 Dauzat (1900:67), Ronjat (1937:534-536).

12 Poletto (1996:285).

- (4) a. *Pað hafa margir jólasveinar borðað* (Icelandic)  
 Exp have-3pl. many Christmas-trolls eaten  
 'Many Christmas trolls have eaten  
*búðing*.<sup>13</sup>  
 pudding  
 pudding.'
- b. *Es essen einige Mäuse Käse in der Küche*.<sup>14</sup> (Germ.)  
 Exp eat-3pl. some mice cheese in the kitchen  
 'There are some mice eating cheese in the kitchen.'
- c. *Es hot imitser gegesn an epl*<sup>15</sup> (Yiddish)  
 Exp has someone eaten an apple  
 'Someone has eaten an apple.'

## 2. *The nature of the problem*

It has traditionally been assumed in the literature that there is a correlation between the presence of expletives and the impossibility of allowing null subjects. This correlation is illustrated in (5).

- (5) a. *\*(Il) arrive deux étrangers*. (French)  
 b. *\*(Er) arriveren twee vreemden*. (Dutch)  
 c. *\*(There) arrive two strangers*. (English)

Chomsky (1995) has reinterpreted this correlation in minimalist terms and has proposed that expletive subjects appear to check overtly a strong feature of T, in order to comply with the Extended Projection principle. However, the existence of examples such as those in (2)-(4) above pose an obvious problem for Chomsky's analysis. This is so because in the domain of null-subject languages, the role of expletives is often assumed by *pro* as illustrated by the Spanish weather, impersonal and existential constructions in (6).

- (6) a. *pro relampaguea*.  
 thunders  
 'It is thundering.'
- b. *pro es cierto que me voy*.  
 is true that me leave-1sg.  
 'It is true that I am leaving.'

<sup>13</sup> Bobaljik & Jonas (1996:209).

<sup>14</sup> Bobaljik & Jonas (1996:209).

<sup>15</sup> Bobaljik & Jonas (1996:209).

- c. *pro hay muchos estudiantes en la fiesta.*  
 there-is many students in the party  
 'There are many students in the party.'

Other roles of expletives are comparable to certain instances of free inversion (Burzio 1986) or extraposition, as shown in (7a) and (7b), respectively.

- (7) a. *Llegan muchos lingüistas.*  
 arrive-3pl. many linguist  
 'There arrive many linguists.'
- b. *Es una vergüenza que Juan no pueda unirse a*  
 is a disgrace that John not can join-SE to  
 'It is a disgrace that John can't join  
*nosotros.*  
 us  
 us.'

Consequently, given the availability of *pro* in null-subject languages, we cannot attribute the spell-out of expletive subjects in (2)-(4) above to the need to check the strong D-feature of T overtly.

The fact that expletive subjects are attested in null-subject languages (and in particular within the domain of NILs) calls for an explanation since it challenges one of the basic assumptions about what a null-subject language may be.

### 3. *Expletive constructions: introduction*

Several expletive constructions can be distinguished in NILs. They range from the most simple expletive construction, which apparently show properties of non-null-subject languages such as English or Modern French, to more complex ones which are virtually confined to the Northwestern Iberian area.<sup>16</sup>

#### 3.1 *Apparent Single Expletive (Subject) Constructions (SEC)*

In this section, I introduce some basic properties of constructions that are apparently similar to those in non-null-subject languages. But as we will see, an important number of dissimilarities will force us to seek another explanation for this first group of expletive constructions.

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<sup>16</sup> It is sometimes impossible to find the same richness of data for every construction in every single NIL. I will assume, however, that a number of facts are common to all of them, or are natural developments from a crosslinguistic and historical point of view. It will be noted whenever this assumption is not observed.

3.2 *Examples of SEC*

The examples in (8) show meteorological or weather condition verbs from EP, Gal., DomSp., 19th-c. Sp. and Leon. (here Asturian, collected in Candamo).

- (8) a. *Êle já orvalha.*<sup>17</sup> (EP)  
 Exp already drizzle  
 'It is already drizzling.'
- b. *El chove.*<sup>18</sup> (Gal.)  
 Exp rains  
 'It is raining.'
- c. *Ello estaba llovisnando un poco.*<sup>19</sup> (DomSp.)  
 Exp was drizzling a little  
 'It was drizzling a little.'
- d. *Ello lloverá sidra, cigarrillos, corbatas,* (19th-c. Sp.)  
 Exp rain-will cider, cigarettes, ties  
 'It will rain cider, cigarettes, ties,  
*un epatante solomillo*<sup>20</sup>  
 a dazzling sirloin  
 a dazzling sirloin.'
- e. *Ello moja mucho.*<sup>21</sup> (Leon.)  
 Exp soaks a lot  
 'It is soaking wet.'

In (9), impersonal constructions that in modern standard varieties use *pro* appear with these surprising pleonastic subjects. The same expletives are spelled out in existential constructions in (10). Again, the whole Northwestern Iberian area is quite homogeneous in distribution with respect to these constructions.

- (9) a. *Êle é certo que muitos se envergonhan de ...*<sup>22</sup> (EP)  
 Exp is true that many SE-shamed of  
 'It is true that many people are ashamed of ...'

<sup>17</sup> Leite de Vasconcelos (1928:221).

<sup>18</sup> Álvarez & al. (1986:169).

<sup>19</sup> Caamaño (1976:114).

<sup>20</sup> Pérez de Ayala, in Henríquez Ureña (1939:223).

<sup>21</sup> Penny (1994:278).

<sup>22</sup> Freire (1954:2037).

- b. *E el non era fermoso percorrer mundo?*<sup>23</sup> (Gal.)  
 QM Exp not was beautiful to-travel world  
 'Wasn't it beautiful to wander the world?'
- c. *Ello es necesario indagar qué vida lleva.*<sup>24</sup> (18th-c. Sp.)  
 Exp is necessary find-out what life leads/lives  
 'It is necessary to find out the type of life s/he is living.'
- d. *Ellu foi que nun llegarun a casasi.*<sup>25</sup> (Leon.)  
 Exp was that not ended-up-3pl. to marry-SE  
 'It (just so) happened that they never ended up getting married.'
- (10) a. *Pois êle haverá castelhanos honrados?*<sup>26</sup> (EP)  
 thus Exp there-will-be Castilians honest  
 'Are there honest Castilians?'
- b. *Il hai cecais outro problema.*<sup>27</sup> (Gal.)  
 Exp there-is perhaps another problem  
 'There is perhaps another problem.'
- c. *Ello hay por medio no sé* (18th-c. Sp.)  
 Exp there-is in the middle not know-1sg.  
 'I don't know  
*qué papel de matrimonio.*<sup>28</sup>  
 what documents of marriage  
 what kind of marriage document is involved therein.'
- d. *Ello hay mujeres bonitas.*<sup>29</sup> (DomSp.)  
 Exp there-is pretty women  
 'There are pretty women.'

Free Inversion data are more scarce, but consistent enough to be mentioned (see [11]).

- (11) a. *Ello llegan guaguas hasta allí.*<sup>30</sup> (DomSp.)  
 Exp arrive-3pl. buses until there  
 'Buses go all the way to there.'

<sup>23</sup> Álvarez & al. (1986:169).

<sup>24</sup> Moratín, in Henríquez Ureña (1939:222).

<sup>25</sup> Díaz González (1986:31).

<sup>26</sup> Jucá (1945:290).

<sup>27</sup> Carballo (1976:288).

<sup>28</sup> *La escuela de los maridos*, III, scene 3; Henríquez Ureña (1939:223).

<sup>29</sup> Patín Maceo (1947:76).

<sup>30</sup> Toribio (1993:46-47).

- b. *El volvió a reina a Madrid?*<sup>31</sup> (19th-c. Gal.)  
 Exp came-back-3sg. the queen to Madrid  
 'Did the queen come back to Madrid?'

### 3.3 Properties of SEC

Some basic properties distinguish NIL expletive constructions from standard properties of non-null-subject languages such as English and Modern French. First, Subject-Verb inversion, which occurs in English and Modern French, is not attested in the literature and/or is rejected by Dominican native speakers (12a) and Portuguese speakers (12c) (Eduardo Raposo, personal communication). Additionally, we have positive evidence of questions with no subject-verb inversion (see [12b] and [12d]).

- (12) a. \* *¿Hay ello arroz?* 'Is there (any) rice?' (Dom.Sp.)  
 there-is Exp rice
- b. *¿Ello hay arroz?*<sup>32</sup> 'Is there (any) rice?'' (Dom.Sp.)  
 Exp there-is rice
- c. \* *Choverá êl hoije?* 'Will it rain today?' (EP, unattested)  
 will-rain Exp today
- d. *El choverá hoije?*<sup>33</sup> 'Will it rain today?' (Port.)  
 Exp rain today

Secondly, overt expletives cannot appear in embedded contexts. This type of asymmetry suggests an active role of the C-stage of the derivation.<sup>34</sup>

<sup>31</sup> Saco e Arce (1868:193).

<sup>32</sup> Patín Maceo (1947:76).

<sup>33</sup> Monteiro Soares de Azevedo (1929:160).

<sup>34</sup> The only exceptions I have found do not challenge our conclusion since they are types of *if*-clauses, as in (i), and, in the case of Spanish, some structures that are still literary standard Spanish (ii).

- (i) *Pois se êle há dores como lâminas de ferro ...*  
 thus if Exp have-3sg. sufferings as laminas of iron  
 'If there are sufferings (as heavy) as iron plates ...'  
 (EP, in Freire 1954:2037)
- (ii) *Pero comoquiera que ello sea ...* (16th-c. Sp., A. de Valdés  
 but however that Exp may be ... [= literary Modern Spanish],  
 'But however it may be ...' Henríquez Ureña 1939:210)

- (13) a. \* *Xa sei que el chove.* (Gal./EP);  
 of-course know-1sg. that Exp rains (unattested/  
 'Of course I know that it rains.' rejected)
- b. \* *Foi que ellu non legarun a casasi* (Leon.)  
 happened that Exp not ended-up-3pl. to marry-SE  
 'It so happened that they ended up not getting married.'

With respect to subject-verb agreement, although third person singular agreement is the default agreement in most of the collected examples, some examples like (11) support a case-subject checking relation independent of the expletive itself, which can be partially identified with the EPP feature.

Another important property of SEC is the lack of non-finite expletive constructions (14). Examples like (14) are thus unattested or not acceptable. This gap indicates that the regular T-conditions for the uninterpretable case (of category N) and/or EPP features are not met.

- (14) a. \* *pra el chover ...* (Gal./EP)  
 for Exp to-rain ...
- b. \* *por ello haber tanto arroz ...* (DomSp.)  
 for Exp to-be so-much rice ...

Another difference involving SEC in NILs is that they behave differently with respect to Raising and Control. Whereas Control is accepted, as shown in (15a), Raising is rejected (15b). On the contrary, when the expletive is Strict Merge, that is, with no movement, as in (15c), the sentence is accepted by Cibaño speakers.

- (15) a. *Ello quiere llover.* (DomSp.)  
 Exp wants to-rain  
 'It looks like it is going to rain.'
- b. \* *Ello parece no haber azúcar*  
 Exp seems not to-have <there to be> sugar  
 'There seems to be no sugar.' (intended meaning)
- c. *Ello parece que no hay azúcar.*  
 Exp seems that not there-is sugar  
 'It looks like there is no sugar.'

The morphology-etymology of the expletives is Nominative, although vocative case and *nominativus pendens* have also been mentioned in the literature. The gender of the expletives is unmistakably neuter. Originally from the Latin pronoun *illud*, the old *ello*, with geminate *l*, evolved into *el(e)* in both

Galegan and Portuguese, *ello* in Spanish (with a palatal lateral), and *ellu* in Leonese (also with a palatal).

The interpretation of the expletive varies according to the grammarians. Among the possible and sometimes bizarre interpretations are the following: “masculine collectives” (Lenz 1940), “adverbs” (Bello 1981, Álvarez & al. 1986, Patín Maceo 1947), “pronominal adverbs” (Saco e Arce 1868), “absolute ablatives” (Gessner 1893), “subject reinforcements” (Verdelho 1982), and “fossilized, emphatic, anticipatory pronouns, dummy heads of the sentence” (Carballo 1976, Freire 1954, Henríquez Ureña 1939, 1940, Jiménez 1975, Raposo 1995, Raposo & Uriagereka 1990, Toribio 1993, Uriagereka 1992, Verdelho 1982, among others). Expletives in NILs appear mainly in conversational style, direct speech, rhetorical speech when no interlocutor is present, dialogs in drama, etc. It seems that expletives have a surface effect linked to the speech moment referring to the given point in space and time, in which case it is expected to have the feature [+specific] tying the event itself.

Since most of the basic properties presented above are not shared by English and Modern French, we can state as a partial conclusion that we are dealing with different types of phenomena.<sup>35</sup> Specifically, the fact that the expletive consistently occupies the left-most part of the derivation must be associated with the surface role it bears.

### 3.4 Multiple Expletive Constructions

Two different structures are presented in this section: the *Multiple Subject Construction* (MSC) and the *Interrogative Expletive Construction* (IEC).

#### 3.4.1 The Multiple Subject Construction

MSCs have the distinctive characteristic that expletive pronouns and overt (or covert) thematic subjects surface together, as shown in (16).

- (16) a. *Ele os lobos andan com fame.*<sup>36</sup> (Port.)  
 Exp the wolves go-3pl. with hunger  
 ‘Wolves are hungry.’
- b. *Ello yo no sé por qué mi padre no me* (17th-c. Sp.)  
 Exp I not know why my father not me  
 ‘I don’t know why I was not called

<sup>35</sup> A crosslinguistic historical explanation of the expletive phenomenon is presented in Silva-Villar (1997).

<sup>36</sup> Leite de Vasconcelos (1928:222).

*llamó la torda o la papagaya.*<sup>37</sup>  
 called-3sg. the thrush or the parrot  
 'either thrush or parrot by my father.'

These constructions are not unknown among other pro-drop Romance languages such as Old French (17a), 16th-c. Catalan (17b), and Germanic languages such as Icelandic (17c), where it is a well-known piece of its idiosyncratic syntax: the Transitive Expletive Construction (TEC).

- (17) a. *Il i fu li qens de Pontiu et ses* (Old French)  
 Exp there was the count of Pontiu and his  
 'There there was the count of P. and his  
*oncles li quens de St. Pol.*<sup>38</sup>  
 uncle the count of St. Pol  
 'uncle the count of St. Pol.' (sic)
- b. *Ell el rey s'en hagué de tornar.*<sup>39</sup> (16th-c. Cat.)  
 Exp the king SE-of-it had-3sg. of come-back  
 'The king had to come back.'
- c. *Pað borðuðu sennilega margir jólasveinar* (Icelandic)  
 Exp ate-3pl. probably many Christmas-trolls  
 'Many Christmas trolls probably ate  
*bjúgun.*<sup>40</sup>  
 the-sausages  
 the sausages.'

Some basic differences between the TEC in Icelandic and the MSC in NILs make the synchronic unification of the two phenomena difficult. For example, the MSC does not have any definiteness restriction, as shown in (18), where thematic subjects can be [+definite]. Moreover, the word order Expletive-Subject-Verb is widely attested among NILs, but disallowed in languages such as Icelandic, whose distributional linear order is shown in (19) (Chomsky 1995).

- (18) a. *Ele o mundo sempre é grande.*<sup>41</sup> (Port.)  
 Exp the world always is big  
 'The world always is big.'

<sup>37</sup> López de Úbeda, *la pícaro Justina*, in Henríquez Ureña (1939:224).

<sup>38</sup> Bakker (1995:4).

<sup>39</sup> Spitzer (1941:272).

<sup>40</sup> Bobaljik & Jonas (1996:196).

<sup>41</sup> Verdelho (1982:72).

- b. *Ele os papeis tambem nunca mais virão*  
Exp the papers also never more will-come-3pl.  
'The papers will also never arrive.'
- c. *Ele aqueles campos estão bem cultivados.*<sup>42</sup>  
Exp those lands are well farmed  
'Those lands are well farmed.'
- d. *Ele aquela mulher é muito bondosa*  
Exp that woman is very kind  
'That woman is very kind.'

- (19) a. \* EXP [SU [T<sup>0</sup><sub>max</sub> XP]] (Chomsky 1995)  
b. EXP T<sup>0</sup><sub>max</sub> SU XP

The MSC has been described in the literature of NILs in different ways: "It is usual to add *ele* to a phrase to announce what is going to be said" (Leite de Vasconcelos 1928:222). Verdelho states that "*ele* occurs to reinforce the subject of some propositions, to anticipate it, whether it is singular and masculine or plural, even feminine (sic)" (1982:72).

The MSCs presented in (18) also apply to cases in which the subject is referential *pro* and the verb is transitive, since regardless of the position of *pro*, the expletive fails to match the phi-features of the verb and the verb fails to agree with the complement (20).

- (20) a. *El ()<sup>43</sup> sabedes () cando chegarán.*<sup>44</sup> (Gal.)  
Exp know-2pl. when will-arrive-3pl.  
'You know when they will arrive.'
- b. *Ello () vamos () a gastar () ...* (18th-19th-c. Sp.)  
Exp go-1pl. to-spend  
'We are going to spend ...  
*veintisiete reales.*<sup>45</sup>  
twenty-seven *reales*  
twenty-seven *reales* (quarters of *peseta*).'

<sup>42</sup> Leite de Vasconcelos (1928:222).

<sup>43</sup> Parentheses indicate alternative positions for *pro*.

<sup>44</sup> Álvarez & al. (1986:291).

<sup>45</sup> Pereda, in Henríquez Ureña (1939:223).

### 3.4.2. *The Interrogative Expletive Construction (IEC)*

Other authors, including Carballo (1976:288-289) and García de Diego, point out a different use of the expletive *el*, namely, “in the interrogatives at their beginning, to call the attention to the question” (García de Diego 1978:101). Fernández points out that “it is used without an accent to introduce a question; used in Asturian and Mirandese [= Leonese]” (1960:63). For Álvarez et al., it is an interrogative marker that “is placed at the beginning of the intonational contour, as an indication for the hearer” (1986:169). Patín Maceo points out that “in the Cibaño (DomSp.) areas (*ello*) is used as an interrogative” (1947:76). The oldest mention is probably by Saco e Arce:

In interrogative sentences, it is common to place the particle *el* or *il* before the verbs, which is nothing other than the third person pronoun, used adverbially, and it is often used at the beginning of *every* question (1868:193, my emphasis).

This citation suggests that in 1868 the structure was widely used by Galegan speakers.

The examples in (21) illustrate yes/no questions and those in (22) *Wh*-questions.

- (21) a. *El sabedes cando chegaran?*<sup>46</sup> (Gal.)  
 Exp know-2pl. when will-arrive-3pl.  
 ‘Do you know when they will arrive?’
- b. *El gustati?*<sup>47</sup> (Leon.)  
 Exp please-3s.-you (clitic)  
 ‘Do you like it?’
- c. *¡Ello hay dulce?*<sup>48</sup> (DomSp.)  
 Exp there-is candy  
 ‘Is there any candy?’
- (22) a. *El qué vos dixeron da xuntanza?*<sup>49</sup> (Gal.)  
 Exp what to-you said-3pl. about (of)-the meeting  
 ‘What did they tell you about the meeting?’

<sup>46</sup> Álvarez & al. (1986:291).

<sup>47</sup> Fernández (1960:73).

<sup>48</sup> Patín Maceo (1947:76).

<sup>49</sup> Álvarez & al. (1986:291).

- b. *I el ónde hei ter eu as maus?*<sup>50</sup> (Gal.)  
 QM Exp where have-1sg. have I the hands  
 lit. 'Where do I have my hands?'  
 'I wonder where my hands are.'
- c. *Ele quantos estudantes vieram à festa?*<sup>51</sup> (Port.)  
 Exp how-many students came to the party  
 'How many students came to the party?'

(22) shows that the A/A-bar status of the traces of the *Wh*-phrase makes no difference in selection; and in (22a), the *Wh*-phrase is a direct object; in (22b), the *Wh*-phrase is an adjunct. In (22c), the *Wh*-phrase is a subject.

An additional problem is the status of *el* as a Question Marker (QM). QMs are well-known among the Romance languages (Bello 1981, Campos 1992, Rohlf's 1970 [1935], RAE 1931:§324b, among others). Galegan and Spanish are no exceptions, as shown by the examples given in (23).

- (23) a. *E ti non saberás de alguén que vaia* (Gal.)  
 QM you not will-know of somebody that goes  
 'Do you know of anybody going  
*mañá a Vigo?*<sup>52</sup>  
 tomorrow to Vigo  
 to Vigo tomorrow?'
- b. *E ves ti ó cine conosco?*<sup>53</sup> (Gal.)  
 QM come-2sg. you to-the movies with us  
 'Are you going to the movies with us?'
- c. *¿Y hiciste la tarea?*<sup>54</sup> (Sp.)  
 QM did-2sg. la tarea  
 Did you finish your homework?'

Although QMs such as *e* in Gal. and *y* in Spanish are not as regular as their Gascon counterparts, the combination of QMs and Expletives in (24) cast serious doubts about the status of the expletive as a QM proper. Thus, I do not discard some kind of complex unit, on the basis that nothing can intervene within the linear relationship QM-Expletive.

<sup>50</sup> Leiras Pulpeiro, in Carballo (1976:289).

<sup>51</sup> Raposo (1995).

<sup>52</sup> Álvarez & al. (1986:290).

<sup>53</sup> Campos (1992:933).

<sup>54</sup> Campos (1992:932).

- (24) a. *I el ónde hei ter eu as maus?* (Gal.)  
 QM Exp where have-1sg. to-have I the hands  
 ‘Where do I have the hands?’
- b. *E el non era feroso percorrer mundo? conta-las*  
 QM Exp not was nice to-travel world to-tell-the  
*nosas historias*  
 our stories
- (25) a. \* *¿E hiciste la tarea?* (Sp.)  
 and did-2sg. the homework  
 ‘¿And did you do the homework?’
- b. *España \*y / e Italia*
- c. *Literatura \*y / e historia*

(25a) shows that the Spanish QM *y* is not the copulative conjunction *y* ‘and’, which should adopt the suppletive form *e* in the proposed question. (25b-c) show standard copulative *y/e* alternations in Spanish.

Finally, and not surprisingly, the MSC and the IEC share their basic properties with the SEC (see Section 3.3). We will use this state of affairs to unify the whole array of expletive constructions.

### 3.5 *The complementizer expletive construction*

The explanations given in the literature for the appearance of pleonastic subjects are based on a combination of V2 effects and other properties of V-movement for Icelandic (Bobaljik & Jonas 1996, Chomsky 1995, Jonas & Bobaljik 1993, Holmberg 1994, Platzack 1983, 1987, Thráinsson 1979, Vikner 1995), and V2 and Free Inversion for Old French (Bakker 1995). These explanations are not easy to adapt to NILs. First, as already mentioned, expletives showed up no earlier than the 16th century, and nobody has claimed, to my knowledge, that Golden Age Spanish is a V2 language. Secondly, if we claim that Portuguese, for example, is a V2 language, as has sometimes been suggested (Benincà 1995, Manzini 1994, Ribeiro 1995), the fact that a variety of expletives appear and become obsolete during that hypothetical V2 period suggests that the phenomenon may be independent from that hypothetical V2 status.

In order to explain the facts, we start by contrasting NILs to Germanic V2 languages. It has been suggested that expletives in particular languages may or must be generated in [Spec, CP] rather than in [Spec, TP] (Vikner 1995 and references therein). We will show that the parallelism between these two

groups of languages with respect to the generation of expletives is more apparent than real.

The parallelism seems justified if we compare (26) and (27). Consider the situation with the expletive in [Spec, CP]. Here there are no differences between German (26a), Yiddish (26b), and Icelandic (26c), on the one hand, and the other Germanic languages, represented by Danish in (26d), on the other.<sup>55</sup> Galegan illustrates the apparent parallelism with the former group. The verb *veu* 'came' is placed in the position of the auxiliary for two reasons: (a) in Galegan (as in Leonese), inflected verbs move to the same position of the auxiliary (this is so because the language lacks compound tenses); (b) the movement of the Galician/Galegan lexical verb to COMP is supported by the reciprocal exclusion of lexical verbs (with expletives and complementizers).

(26) a.	German	<i>es</i>	<i>ist</i>		<i>ein</i>	<i>Junge</i>	<i>gekommen</i>
b.	Yiddish	<i>es</i>	<i>iz</i>	<i>gekumen</i>	<i>a</i>	<i>yingl</i>	
c.	Icelandic	<i>pað</i>	<i>hefur</i>	<i>komið</i>		<i>stákur</i>	
d.	Danish	<i>der</i>	<i>er</i>	<i>kommet</i>	<i>en</i>	<i>dreng</i>	
e.	Galegan	<i>el</i>	<i>veu</i>		<i>un</i>	<i>rapaz</i>	
		there	is	(come)	a	boy	(come)
		'a boy has come'					

The first difference appears when [Spec, CP] contains a *Wh*-phrase. In this case, the expletive cannot be overt in Galegan, German, Yiddish or Icelandic (27a-b-c-e), whereas in Danish (27d) and other Germanic languages, it must be.

(27)							
a.	Germ.	<i>warum</i>	<i>ist</i>	<i>*es/pro</i>		<i>ein</i>	<i>Junge gekommen?</i>
b.	Yid.	<i>far vos</i>	<i>iz</i>	<i>*es/pro</i>	<i>gekumen</i>	<i>a</i>	<i>yingl?</i>
c.	Icel.	<i>af hverju</i>	<i>hefur</i>	<i>*pa /pro</i>	<i>kornið</i>		<i>strákur?</i>
d.	Dan.	<i>hvorfor</i>	<i>er</i>	<i>der/*pro</i>	<i>kommet</i>	<i>en</i>	<i>dreng?</i>
e.	Gal.	<i>por qué</i>	<i>veu</i>	<i>*el/ pro</i>	<i>(veu)</i>	<i>un</i>	<i>rapaz?</i>
		why	is	there	(come)	a	boy (come)
		'Why has a boy come?'					

As the examples (26) and (27) show, the parallelism between Galegan, on the one hand, and German, Yiddish and Icelandic on the other is remarkable. Unfortunately, (27) is an incomplete picture, as (28) shows.

<sup>55</sup> Germanic data are from Vikner (1995:185).

- (28) a. Gal.     (*El*)   *por qué veu \*el/pro (veu) un rapaz?*  
 b. Yid.     (*\*Es*) *far vos iz \*es/pro gekumen a yingl?*  
           there for what is there come a boy  
           ‘Why has there come a boy?’

The Galegan IEC (28a) has no counterpart among any Germanic language. Thus, the different approaches taken to explain these derivations in Germanic languages, namely, the [Spec, CP] approach and the [Spec, IP] approach, cannot be applied to the relevant NILs. Notice that we cannot invoke any kind of chain formation forcing all A-specifiers to be associated, as proposed in Vikner (1995:186) to unify both approaches, since it would imply a violation of Minimize Chain Links: the C-stage of the derivation intervenes in the chain expletive-associate.

Additionally, a final piece of evidence of the asymmetry between NILs and Germanic V2 pro-drop languages comes from embedded contexts. It has been claimed in the literature that Galegan and Portuguese are symmetric V2 languages (Benincà 1995, Manzini 1994, Ribeiro 1995). If this is true, it is not easy to explain why expletives can appear in embedded contexts in Icelandic (29b) and Yiddish (29a), but are unattested among NILs, as illustrated in the Galegan example (29c).

- (29)  
 a. Yid.     *Ikh veys az es/\*pro iz gekumen a yingl*  
 b. Icel.    *Eg veit að það/\*pro hefur komið strákur*  
 c. Gal.     *Eu sei que \*el/pro veu un rapaz*  
           I know that there is/has come a boy  
           ‘I know that a boy has come’

Before looking for an explanation of the expletive phenomena among NILs, it is relevant to discard multiple expletives. If we were dealing with unrelated expletives or particle-like elements, the lack of constructions with multiple expletives (30) would be unexpected. Therefore, we can conclude that we are dealing with a single syntactic phenomenon that makes the different expletives presented so far mutually exclusive.

- (30) a. \* *El el é certo que ... ?* (Gal.)  
           Exp Exp is true that  
           ‘Is it true that ...?’  
 b. \* *El el chove?*  
           Exp Exp rains  
           ‘Does it rain?’

- c. \* *El el o mundo é ...?*  
 Exp Exp the world is  
 'Is the world ...?'

Since [Spec, IP] has been excluded as the expletive position above (cf. [18] and [19]) above, there are two options left, either [Spec, CP] (31a) or a higher (i.e., later) stage of the derivation (31b).

- (31) a. <- C<sup>max</sup> \_\_\_\_\_ T<sup>max</sup> \_\_\_\_\_ ...  
           |            |            |            |  
           Exp   C<sup>0max</sup>            T<sup>0max</sup>
- b. <- X<sup>max</sup> \_\_\_\_\_ C<sup>max</sup> \_\_\_\_\_ T<sup>max</sup> \_\_\_\_\_ ...  
           |            |            |            |            |  
           Exp   X<sup>0max</sup>            C<sup>0max</sup>            T<sup>0max</sup>

If we try to provide a unified solution for all types of expletives, we must exclude both (31a-b), since no source for Case is available in (31b), and, in (31a), [Spec, CP] cannot be occupied by both the expletive and a *Wh*-phrase at the same time. Additionally, the root-embedded asymmetries already presented are a typical characteristic of the active role of C. Finally, if the EPP and the Case-assigning feature can be satisfied independently and by different lexical units, we are forced to provide an extra position beyond T for our derivation. Another option would be to parametrize the checking of the EPP feature. Whatever the solution to the problem may be, *we want a C-like stage but we cannot have it*.

The solution presented here departs from Reinhard (1981) and Culicover (1991), and is crystallized in the Minimalist Program under the label of the *Multiple Specs Configuration* (MSs) (Chomsky 1995 and references therein, Gutiérrez-Rexach & Silva-Villar 1994, Silva-Villar 1996).

Although MSs could fit the derivations in a local economical way, we have to impose some conditions or restrictions on the MS derivations in order to avoid overgenerating. The following conditions are part of a wider and complex set presented in Silva-Villar (1996).

- (a) MSs must have the same distribution.
- (b) The same head must be responsible for the features being checked off.
- (c) Equidistance is followed. In other words, the MSs must be in the same minimal domain (Chomsky 1995).

Since (b) and (c) are directly derived from the properties already presented or have some degree of dependency on (a), in what follows I will concentrate on (a), i.e., the distributional properties of Specs. The examples given in (32) show the initial similar distribution of subjects and expletives. Additionally, the examples in (33) show the same local relation between *Wh*-phrases and expletives.

- (32) a. *Ele sempre é grande.* (Port.)  
 Exp always is big  
 'It is always big.'
- b. *O mundo é grande.*  
 The world is big  
 'The world is big.'
- c. *Ele o mundo é grande*  
 Exp the world is big  
 'The world is big.'
- (33) a. *I ónde hei ter eu as maus?* (Gal.)  
 QM where have-1sg. to-have I the hands  
 'And where do I have my hands?'
- b. *I el hei ter eu as maus (no bolso)?*  
 QM Exp ... (in-the pocket)  
 'And where do I have my hands?' (in-the pocket)
- c. *I el ónde hei ter eu as maus?*  
 QM Exp where ...  
 'And where do I have my hands?'

In spite of these similarities, the distribution is not perfect. As shown by (34)-(35), the position of clitics varies between *el*-questions and *Wh*-questions.

- (34) a. *E gustati?* (Leon./Sp.)  
 Exp pleases-you  
 'Do you like it?'
- b. *El púxôcho él?* (Gal.)  
 Exp put-3s.-you-it he  
 'Did he put you on?'
- (35) a. *¿Qué te gusta?* (Sp.)  
 what you pleases  
 'What do you like?'

- b. *Quén cho puxo?* (Gal.)  
 who you-it put-3s.  
 'Who put it on you?'

However, this difference does not seem to weaken the argument at all since the sentences in (35) are created via *Wh*-movement, through the operation Attract-F. By contrast, the sentences in (34) result from Strict Merge; thus, no movement is involved. Note that these data suggest that the notion of equidistance does not always involve head chains. Additionally, the expletives under study support the view that Strict Merge escapes the restriction disallowing derivations based on non-trivial chains (see Chomsky (1995) and previous work for details). This point is illustrated in (36).

- (36) a.  $\frac{\text{Spec}_2 \quad \text{Spec}_1 \quad [\text{cl-VB}]}{\emptyset \quad \text{Wh} \quad \downarrow} \dots \text{copy-Wh}$
- b.  $\frac{\text{Spec}_2 \quad \text{Spec}_1 \quad [\text{VB-cl}]}{\uparrow \text{Exp} \quad \emptyset} \dots$

The lack of embedded derivations in (32) and (33) does not cast doubt on my proposal either since that deficiency only reflects a familiar gap found between matrix (root) and embedded clauses. Root sentences cannot be subordinated, and some embedded sentences cannot be matrix sentences.

- (37) a. *Dice que dónde lo compró.* (Sp.)  
 said-1sg. that where it bought-3s.  
 'S/he asks where s/he bought it.'
- b. ... (\**que*) *dónde lo compró es un misterio.*  
 ... that where it bought-3sg. is a mystery  
 '... that where she bought it is a mystery.'

A basic assumption here is that different operations, i.e., Strict Merge and Attract-F, can create combined results. Their different feature-checking strategies carried out within the MS configuration can be complementary as a consequence of their Combining Feature Checking. In some sense, we have the opposite of Free Riders, a kind of Obligatory (or Combined) Selection of features. A basic difference with Free Riders is that only a subset of the features checked off by the expletives are uninterpretable since the D feature of

the expletives is not deleted and must remain in the derivation until LF. This is then a typical case of asymmetric feature checking.

#### 4. *Conclusion*

I have claimed that expletives in NILs surface in the structures discussed in this paper as a consequence of a strong feature of C. Verbs move to C to check a feature associated to the matrix (prosodic) domain. Expletives may be the spelling out of the deictically or contextually bound event argument referring to the given point in space and time. Null-subject languages can exhibit C-expletive subjects while keeping their intrinsic null-subject characteristics. The pro-drop parameter is enriched rather than impoverished. Since the strength of C is the agglutinant for all types of expletive constructions, they are unified under the label of *Complementizer Expletive Construction*.

### REFERENCES

- Álvarez Rosario, Henrique Monteagudo & Xosé Luis Regueira. 1986. *Gramática galega*. Vigo: Galaxia.
- Bakker, Cecile de. 1995. "Synchronic and diachronic variation in the French *il*-construction". In *Linguistics in the Netherlands 1995*, ed. by Marcel den Dikken & Kees Hengeveld, 1-12. Amsterdam: John Benjamins.
- Bello, Andrés. 1981 [1847]. *Gramática de la lengua castellana destinada al uso de los americanos*. Tenerife: Instituto Universitario de Lingüística Andrés Bello & Cabildo Insular de Tenerife.
- Benincà, Paola. 1995. "Complement clitics in Medieval Romance: The Tobbler-Mussafia law". In *Clause Structure and Language Change*, ed. by Adrian Battye & Ian Roberts, 325-344. Oxford: Oxford University Press.
- Bobaljik, Jonathan D. & Dianne Jonas. 1996. "Subject positions and the roles of TP". *Linguistic Inquiry* 27.195-236.
- Burzio, Luigi. 1986. *Italian Syntax*. Dordrecht: Foris.
- Caamaño, Vicenta. 1976. *La lengua campesina en la narrativa costumbrista dominicana*. Santo Domingo: Centurión.
- Campos, Héctor. 1992. "Enunciative elements in Gascon". *Linguistics* 30.911-940.
- Carballo, Ricardo. 1976. *Gramática elemental del gallego común*. Vigo: Galaxia.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: the MIT Press.
- Coromines, Joan. 1982. *Diccionari etimològic i complementari de la llengua catalana*. Barcelona: Curial edicions catalanes.
- Culicover, Peter W. 1991. "Topicalization, inversion, and complementizers in English". In *Going Romance and Beyond*. Working Papers of the Onderzoeksinstituut voor Taal en Spraak (= Research Institute for Lan-

- guage and Speech), ed. by Denis Delitto, Martin Everaert, Arnold Evers & Frits Stuurman, 1-43. Utrecht: University of Utrecht.
- Dauzat, Albert. 1900. *Morphologie du patois de Vinzelles. Études linguistiques sur la Basse-Auvergne*. Paris: Librairie Émile Bouillon.
- Díaz González, Olga J. 1986. *El habla de Candamo*. Oviedo: Universidad de Oviedo.
- Fernández, Joseph A. 1960. *El habla de Sisterna*. *Revista de Filología Española*. Anejo 74. Madrid: Consejo Superior de Investigaciones Científicas.
- Freire, Laudelino. 1954. *Grande e novíssimo dicionário de la língua portuguesa*. Rio de Janeiro: Livraria José Olympio Editora.
- Gamillscheg, Ernst. 1957. *Historische französische Syntax*. Tübingen: Max Niemeyer Verlag.
- García de Diego, Vicente. 1978 *Manual de dialectología española*. Madrid: Centro Iberoamericano de Cooperación.
- Gessner, Emil. 1893. "Das spanische Personalpronomen". *Zeitschrift für romanische Philologie* 17.1-54.
- Gutiérrez-Rexach, Javier & Luis Silva-Villar. 1994. "Prosodic and morphological focus in Spanish bare plurals". Paper presented at *Going Romance 1994*. Utrecht (Holland).
- Henríquez Ureña, Pedro. 1939. "Ello". *Revista de Filología Hispánica* 1.209-229.
- \_\_\_\_\_. 1978 [1940]. *El español de Santo Domingo*. Santo Domingo: Editora Taller.
- Holmberg, Anders. 1994. "The pros and cons of agreement in Scandinavian impersonals". In *Paths Towards Universal Grammar. Studies in honor of Richard Kayne*, ed. by Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Raffaella Zanuttini, 217-236. Washington, D.C.: Georgetown University Press.
- Jiménez Sabater, Maximiliano A. 1975. *Más datos sobre el español de la República Dominicana*. Santo Domingo: Ediciones Intec.
- Jonas, Dianne & Jonathan Bobaljik. 1993. "Specs for subjects: the role of TP in Icelandic". *MIT Working Papers in Linguistics* 18. *Papers on Case and Agreement* 1.59-98.
- Jucá, Cândido. 1945. *Gramática histórica do português contemporâneo*. Rio de Janeiro: Epasa.
- Leite de Vasconcelos, José. 1928. *Opusculos*. Coimbra: Imprensa da Universidade.
- Lenz, Adolfo. 1940. *El español en Chile*. Buenos Aires: Universidad de Buenos Aires, Instituto de Filología.
- Manzini, Maria Rita. 1994. "Triggers for verb-second: Germanic and Romance". *The Linguistic Review* 11.299-314.
- Monteiro Soares de Azevedo, Celestino. 1929. "Ervedosa". *Revista Lusitana* 27.86-197.
- Patín Maceo, Manuel. 1947. *Domenicanismos*. Ciudad Trujillo: Librería Dominicana.

- Penny, Ralph J. 1994. "Continuity and innovation in Romance: Metaphony and mass-noun reference in Spain and Italy". *The Modern Language Review* 89.273-281.
- Platzack, Christer. 1983. "Existential sentences in English, Swedish, German and Icelandic". In *Papers from the Seventh Scandinavian Conference of Linguistics*, ed. by Fred Karlsson, 80-100. Helsinki: University of Helsinki.
- \_\_\_\_\_. 1987. "The Scandinavian languages and the null-subject parameter". *Natural Language and Linguistic Theory* 5. 377-401
- Poletto, Cecilia. 1996. "Three Kinds of subject clitics in Basso Polesano and the theory of pro". In *Parameters and Functional Heads*, ed. by Adriana Belletti & Luigi Rizzi, 269-300. Oxford: Oxford University Press.
- RAE = Real Academia Española. 1931. *Gramática de la lengua española*. Madrid: Espasa-Calpe.
- Raposo, Eduardo. 1995. "Clitic position and verb movement in European Portuguese. Ms., University of California, Santa Barbara.
- Raposo, Eduardo & Juan Uriagereka. 1990. "Long distance case assignment". *Linguistic Inquiry* 21.505-537.
- Ribeiro, Ilza. 1995. "Evidence for a verb-second phrase in Old Portuguese". In *Clause Structure and Language Change*, ed. by Adrian Batty & Ian Roberts, 110-139. Oxford: Oxford University Press.
- Reinhard, Tanya, 1981. "A second COMP position". In *Theory of Markness in Generative Grammar*, ed. by Adriana Belletti, Luciana Brandi & Luigi Rizzi, 517-557. Pisa: Scuola Normale Superiore.
- Rohlfs, Gerhard. 1970 [1935]. *Le Gascon. Études de philologie pyrénéenne*. Tübingen: Niemeyer.
- Ronjat, Jules. 1937. *Grammaire historique des parlers provençaux modernes* (vols. 2-3). Montpellier: Société des Langues Romanes.
- Saco e Arce, Juan A. 1868. *Gramática gallega*. Lugo: Soto Freire.
- Silva-Villar, Luis. 1996. *Enclisis in Northwestern Iberian Languages*. Ph. D. dissertation, University of California, Los Angeles.
- \_\_\_\_\_. 1997. "Expletives in pro-drop Germanic and non-Germanic languages". Paper presented at the third Germanic Linguistics Annual Conference, Los Angeles.
- Spitzer, Leo. 1941. "Paralelos catalanes y portugueses de *ello*". *Revista de Filología Hispánica* 3.272.
- Thráinsson, Höskuldur. 1979. *On Complementation in Icelandic*. New York: Garland.
- Tomaselli, Alessandra. 1990. "COMP<sup>0</sup> as a licensing head: an argument based on cliticization". In *Grammar in Progress*, ed. by Joan Mascaró & Marina Nespó, 433-445. Dordrecht: Foris.
- Toribio, Almeida J. 1993. *Parametric Variation in the Licensing of Nominals*. Ph. D. dissertation, Cornell University.
- Uriagereka, Juan. 1992. "An F position in Western Romance". In *Discourse Configurational Languages*, ed. by Katalin Kiss, 153-175. Oxford: Oxford University Press.

- \_\_\_\_\_. 1995. "Aspects of the syntax of clitics placement in Western Romance". *Linguistic Inquiry* 26.79-123.
- \_\_\_\_\_. 1996. "Determiner clitic placement". In *Current Issues in Comparative Grammar*, ed. by Robert Freidin, 257-345. Dordrecht: Kluwer Academic Press.
- Verdelho, Evelina. 1982. "Linguagem regional e linguagem popular no romance regionalista português". *Boletim de Filologia* 27 (fasciculos 1-4).39-154.
- Vikner, Sten. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford: Oxford University Press.

# LICENSING DP-INTERNAL PREDICATION

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## 0. Introduction

Since right-adjuncts are not allowed according to his antisymmetry theory, Kayne (1994) proposes a promotion analysis of relative clauses as developed in Vergnaud (1974): the antecedent of the relative clause originates as one of the arguments within the clause and is moved to [Spec, CP]; the clause is the complement of D°.

- (1)  $D^{\circ}[the_{CP}[picture_i C^{\circ}[that_{IP}[Bill\ saw\ e_i]]]]$

For participial constituents, which are reduced relatives in his view, Kayne proposes a similar analysis.

- (2)  $D^{\circ}[the_{CP}[picture_i C^{\circ} e_i\ sent\ e_i\ to\ John]]$

Adjectives are also analyzed as predicates within a reduced relative clause. However, because of the English word order, this time it is the adjective that moves to [Spec, CP], a position which has always to be filled according to Kayne.

- (3)  $D^{\circ}[the_{CP}[yellow_i C^{\circ} IP[book\ I^{\circ} e_i]]]$

In this paper, we will argue that simple adjectives within DP, i.e. adjectives without any complement or modifier, cannot be analyzed as D-structure predicates. Our arguments will be based on French data, but our conclusions can be extended to English as well.

## 1. French

Kayne analyzes participial constituents and simple adjectives in French the same way as in English. Both are base-generated as predicates within CP, but

whereas the simple adjective moves to [Spec, CP] (4), the participial constituent stays in situ (5). In the latter case, it is the noun that moves to [Spec, CP].

- (4)  $D^{\circ}[le_{CP}[jaune_i, C^{\circ} IP[livre I^{\circ} XP[e_i]]]]$   
 'the yellow book'
- (5)  $D^{\circ}[le_{CP}[livre_i, C^{\circ} IP[e_i I^{\circ} XP[envoyé e_i à Jean]]]]$   
 'the book sent to Jean'

To obtain the postnominal position of the adjective in French, Kayne proposes that in this language the head noun raises from [Spec, IP] via  $C^{\circ}$  to a functional head dominating CP.

- (6)  $D^{\circ}[le_{FP}[FP[livre_i] CP[XP[jaune_j] C^{\circ}[e_i] IP[e_i I^{\circ} e_j]]]]$

The motivation for this different analysis of simple adjectives and participial constituents comes from the fact that the latter can be combined with the demonstrative pronouns *celui*, *celle* 'this one', *ceux*, *celles* 'these' (8), whereas the former cannot (7). According to Kayne, the ungrammaticality of (7) results from the fact that both *celui* and the simple adjective have to move to [Spec, CP]. In (8), *celui* also moves to [Spec, CP], but since the participial constituent can stay in situ, the result is grammatical.

- (7) \*  $D^{\circ}_{CP}[celui_i, C^{\circ} IP[e_i I^{\circ} XP[jaune]]]$   
 'The yellow one'
- (8)  $D^{\circ}_{CP}[celui_i, C^{\circ} IP[e_i I^{\circ} XP[envoyé à Jean]]]$   
 'The one sent to Jean'

In the next section, we show that Kayne's analysis raises several problems.

## 2. Problems

The first problematic point, also mentioned by Kayne himself, is the impossibility for simple adjectives to stay in situ.

Second, Kayne has to assume that sometimes NP moves to [Spec, CP], as in (5), and sometimes AP does, as in (4). The only motivation for moving adjectives to [Spec, CP] seems to be the prenominal position of simple adjectives in English.

Third, there are adjectives that cannot function as predicates: numerals, adjectives such as *seul* 'sole, only', *même* 'same' and *autre* 'other'.

- (9) *Le crayon est \*premier/\*seul/\*même/\*autre.*  
 ‘The pencil is first/only/same/other.’

In the next section, we propose an analysis of simple adjectives which does not raise these problems.

### 3. *Alternative*

We adopt an alternative analysis, illustrated in (10), in which DP-internal simple adjectives are base-generated within the specifier position of functional projections of NP (Cinque 1994), with the noun moving overtly to the head of NumP, as proposed by Valois (1991).

- (10)  $Le_{\text{NumP}}[\text{Num}^\circ[\text{livre}_i \text{FP}[\text{jaune F}^\circ \text{NP}[\text{N}^\circ[\text{e}_i]]]]]$

For participial constructions, however, we adopt Kayne’s reduced relative analysis. This means that there are two base positions for noun modifiers: either under the functional projections of NP or in the predicate position of a reduced relative. Within this analysis, the third problem mentioned in the previous section does not arise: simple adjectives, including those that cannot function as predicates, are all generated in the functional system dominating NP. For the two theoretical problems, see Section 7.

As for the impossible combination of *celui* with a simple adjective, this can also be excluded on the basis of (10), if we assume, following Kayne, that *celui* is generated in the NP position and is selected by an empty  $D^\circ$ . In that case no lexical material is possible between the empty  $D^\circ$  and *celui*.<sup>1</sup>

- (11)  $*D^\circ_{\text{FP}}[\text{jaune F}^\circ \text{NP}[\text{celui}]]$   
 (12)  $*D^\circ_{\text{NumP}}[[\text{celui}_i]_{\text{FP}}[\text{jaune}] \text{e}_i]$

Whereas in Kayne’s analysis of simple adjectives the crucial question was “why can simple adjectives such as *jaune* not stay in predicate position”, in our analysis the crucial question becomes “why can simple adjectives not be generated in predicate position within DP whereas participial constituents can?”

In the following section, we show that besides participial constituents, other constituents in French can be combined with the demonstrative pronoun and can therefore be assumed to be generated in a DP-internal predicate position.

<sup>1</sup> Alternatively, we could assume that *celui* is itself generated within the Functional System and selects an empty NP, so that no lexical material can intervene between *celui* and the empty NP (see Sleeman 1996).

#### 4. *DP-internal predicates*

As Sandfeld (1965) shows, *celui* can be combined with relative clauses (13), past participial constituents (14), present participles (15), *à* + INFINITIVE (16), adjectives ending in the suffix *-able*, *-ible*, or *-uble* (17), adjectives followed by a complement (18), and PPs (19).

- (13) *Celui que tu as lu*  
'the one that you have read'
- (14) *Celui envoyé à Jean*  
'The one sent to Jean'
- (15) *Ceux parlant quatre langues*  
'Those speaking four languages'
- (16) *Toutes celles à commettre*  
'All those to commit'
- (17) *Celles retrouvables*  
'Those that might be found back'
- (18) *Ceux contents de leur sort*  
'Those satisfied with their fate'
- (19) *Ceux sur la table*  
'Those on the table'

We claim that all the constituents following the demonstrative pronoun in (14)–(19) are reduced relatives (see Ronat 1974, Huot 1981, and Siloni 1995 for a similar view): *celui* is raised to [Spec, CP] from an argument position within a clausal constituent, just as in the full relative clause in (13).

#### 5. *Reduced relatives*

We suggested above that all the constituents which can be combined with the demonstrative pronoun are normal or reduced relatives. In Kayne's analysis, all adjectival noun modifiers are (reduced) relatives at the level of deep structure, i.e., CPs selected by D°. The modified noun (or pronoun, in the case of *celui*) originates within the CP and, crucially, is projected as a syntactic argument of the CP predicate.

Whereas we adopt this analysis for those modifiers compatible with the demonstrative pronoun, we claim that simple adjectives such as *jaune* do not project any syntactic argument, so that no clausal constituent can be formed at the level of deep structure. Simple adjectives are therefore not in an argument-predicate relationship with the noun, but are related to the noun in a more direct way, which we will explicate in Section 5.6.

What we show now is that all the modifiers mentioned in (13)-(19) necessarily project syntactic arguments, one of which is the modified noun or pronoun.

### 5.1 *Full relatives and à + INFINITIVE*

In the case of full relatives,  $D^\circ$  takes as its complement a CP containing a verbal head raising to  $I^\circ$  for feature checking. The semantic participants associated with a verbal head at the level of Lexical Conceptual Structure (LCS) are syntactically realized as arguments of the verb. In (20), which is an example of a relative clause, the internal argument *celui* of the verb *lire* ‘to read’ is promoted to [Spec, CP].

- (20)  $D^\circ_{CP}[\textit{celui}_i \textit{que}_{IP}[\textit{tu as lu e}_i]]$   
 ‘the one that you have read’

The *à + INFINITIVE* construction is a reduced relative, in the sense that  $I^\circ$  is empty, although there is an overt complementizer, namely *à* (see Huot 1981). As in full relatives, there is a verbal head projecting syntactic arguments. In (21), the internal argument of the ergative verb *venir* ‘to come’ is externalized to [Spec, IP] and is then further raised to [Spec, CP].

- (21)  $D^\circ_{CP}[\textit{celles}_i \textit{c}^\circ[\textit{à}_{IP}[\textit{e}_i \textit{I}^\circ \textit{venir e}_i]]]$   
 ‘those to come’

### 5.2 *Present and past participles*

Both present and past participles are verbal forms and as such project syntactic arguments. However, there is a clear contrast between verbal participles and their adjectival counterparts. Whereas the present participle in (22) does not agree with the noun and has to realize its internal argument syntactically, the adjectival form (known as “verbal adjective”) in (23) shows adjectival agreement and cannot be followed by a complement. And although both the past participle and its adjectival counterpart agree with the noun, the contrast between (24) and (25) shows that the agent can only be expressed with the first form.

- (22) *Des enfants obéissant à leurs parents*  
 ‘Children obeying their parents’
- (23) *Des enfants obéissants*  
 ‘Obedient children’
- (24) *La porte ouverte par le concierge*  
 ‘The door opened by the door-keeper’

- (25) *La porte ouverte*  
 'The open door'

As for present participles, we claim that all the arguments associated with the verbal head are projected syntactically. In (26), the modified pronoun *ceux* thus originates in the external argument position of the verbal head, and raises via [Spec, IP] to [Spec, CP]. The CP containing the present participle is a reduced relative in the sense that it represents a clausal structure without an overt complementizer, although the verb raises to I° for feature checking.

- (26) D°<sub>CP</sub>[*ceux*<sub>i</sub> C°<sub>IP</sub>[*e<sub>i</sub> obéissant*<sub>j</sub> XP[*e<sub>i</sub> e<sub>j</sub> à leurs parents*]]]

It is generally assumed that past participles do not project an external argument. However, past participles based on ergative verbs and passive past participles, which can both be used as noun modifiers, do project an internal argument. So, in (27) the internal argument *celle* of the verbal head *ouverte* 'opened' first becomes the subject of the clause and is then promoted to [Spec, CP]. In this case, I° is empty.

- (27) D°<sub>CP</sub>[*celle*<sub>i</sub> C°<sub>IP</sub>[*e<sub>i</sub> I°*<sub>XP</sub>[*ouverte e<sub>i</sub> par le concierge*]]]

The adjectival counterparts of these participles are characterized by the fact that no syntactic arguments can be associated with them, as shown in (23) and (25). We claim that these forms have become real adjectives by a lexical rule, which, among others things, completely deletes the argument structure of the verbal base. They are like simple adjectives such as *jaune*, which, when used as noun modifiers, do not project syntactic arguments either, in our view. Since we assumed that simple adjectives, being generated within the functional projections of NP, cannot be combined with the demonstrative pronoun, we predict that the adjectival counterparts of participial forms cannot follow *celui* either. This prediction is borne out, as shown in (28) - (29).

- (28) \* *Ceux obéissants*  
 'Those obedient'

- (29) \* *Celle ouverte*  
 'The one open'

### 5.3 Adjectives ending in -ble

Most adjectives ending in *-ble* are derived from verbs. Leeman (1992) observes, however, that these adjectives fall into two types: the verbal type, which still has some verbal properties, and the adjectival type, which has lost

these properties altogether. As the contrast between (30)-(31) and (32)-(33) shows, only the verbal type can be represented by a verbal pro-form and can have the agent expressed in a *par*-phrase.

- (30) *Cette bouteille est refermable, mais je n'y arrive pas.*  
 'That bottle can be closed again, but I cannot manage to do it.'
- (31) *une substance absorbable par l'intestin*  
 'a substance which can be absorbed by the intestine'
- (32) \* *Ce prix est abordable et l'a d'ailleurs été (le = abordable).*  
 'That price is reasonable and has indeed been so.'
- (33) \* *une concierge aimable par tous*  
 'a door-keeper lovable by all'

These examples show furthermore that the verbal type has the systematic meaning *qui peut être V-é* 'which can be V-ed', whereas the adjectival type has a rather idiosyncratic meaning.

As for the verbal type of *-ble* adjective, we follow Di Sciullo (1993) in assuming that the internal argument of the verbal base is still present under AP (in this respect, these adjectives are very much like past participles). This internal argument is externalized to [Spec, IP] and becomes the subject of the clause. In (34), where the adjective modifies the pronoun *celle*, it is therefore the pronoun that moves from the internal argument position to [Spec, IP] and subsequently to [Spec, CP].

- (34)  $D^{\circ}_{CP}[celle_i C^{\circ}_{IP}[e_i I^{\circ}_{XP}[absorbable e_i par l'intestin]]]$

We propose that the adjectival forms have become simple adjectives in the sense that the argument structure of the verbal base has been completely deleted. Being simple adjectives, they do not combine with the demonstrative pronoun, as predicted.

- (35) \* *Ceux abordables*  
 'Those reasonable'

#### 5.4 Transitive adjectives

By transitive adjectives, we mean adjectives followed by a complement, or, in other words, adjectives taking an internal argument. It seems natural to assume that the projection of an internal argument by the adjectival head implies that the external argument is syntactically projected too, as in the case of transitive verbs. So, transitive adjectives are some sort of relatives, because

they project a clausal structure, namely a predicate with its subject. Since there is neither a complementizer nor Inflection, they are reduced relatives. Transitive adjectives, when used as a modifier of a demonstrative pronoun, thus have to be represented in Kayne's analysis as in (36), with the pronoun originating in the external argument position of the adjective.

- (36)  $D^{\circ}_{CP}[celui_i C^{\circ}_{IP}[e_i I^{\circ}_{XP}[e_i fier\ de\ son\ succès]]]$   
 'The one proud of his success'

### 5.5 Prepositional phrases

As we have shown above, PPs can combine with *celui*. Stowell (1981) claims that PPs project an external argument. Grimshaw & Williams (1993) somewhat restrict this claim by stating that only PPs headed by a semantic preposition do so. If this is true, we predict that the PP complement of an action noun with an event reading, which is headed by a grammatical preposition, cannot follow the demonstrative pronoun, because the PP would not take a subject in this case. Indeed, Sleeman (1996) gives the following ungrammatical example with the event denoting noun *apprentissage*.

- (37) \* *L'apprentissage du grec est plus difficile que celui du latin.*  
 'The learning of Greek is more difficult than that of Latin.'

As for the PP modifying *celui* in (38), which is headed by a semantic preposition, we take it to project the pronoun as its external argument. *Celui* is further raised to [Spec, IP] and then to [Spec, CP], yielding the representation in (38).

- (38)  $D^{\circ}_{CP}[celui_i C^{\circ}_{IP}[e_i I^{\circ}_{XP}[e_i avec\ la\ moustache]]]$   
 'The one with the moustache'

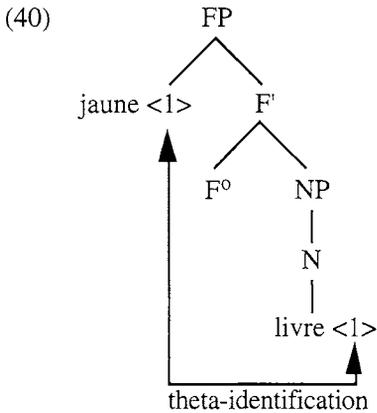
### 5.6 Simple adjectives

In the preceding paragraphs, we argued that all noun modifiers which can follow the demonstrative pronoun have clausal structure, because their semantic participants are mapped into syntactic arguments; they are reduced relatives in the sense of Kayne (1994).

Simple adjectives such as *jaune* are adjectives which do not take any complement. In fact, we propose that they do not project any syntactic argument on their own. As for their base position, we adopted the structure given in (39), where the adjective is in [Spec, FP].

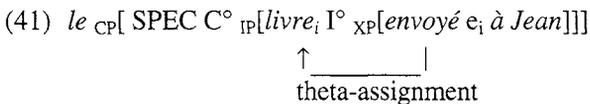
- (39) *le*  $NumP[Num^{\circ}[livre_i FP[jaune F^{\circ}[NP[N^{\circ}[e_i]]]]]]]$

Now, the question is, how can the claim that simple adjectives do not take a subject be reconciled with the idea that adjectives are typically semantic predicates? They denote properties which are to be assigned to entities. In order to solve this conflict, we adopt an idea put forward by Higginbotham (1985), who proposes that the only theta-role associated with simple adjectives can be identified directly with the external theta-role of the noun. Structure (40) represents this.



Clearly, theta-identification does not involve *syntactic* arguments. Higginbotham states that it applies in the syntactic configuration where the adjective governs the noun. This situation obtains in (40). So, the only semantic participant associated with a simple adjective at LCS can remain syntactically unrealized, because theta-identification is available as a more direct, probably lexical, process serving to satisfy the theta-criterion. We can now explain why participles lexicalized as adjectives as well as lexicalized *-ble* adjectives are generated in the functional position given in (40): after deletion of their syntactic arguments, only an LCS-argument is associated with them, which can be licensed directly by means of theta-identification.

In the case of the predicative noun modifiers discussed in Sections 5.1-5.5, where the modified (pro)noun originates as a syntactic argument of the head of XP, theta-assignment applies, as usual.



### 6. Copula constructions

Of course, even simple adjectives can show up in constructions where their LCS argument is projected syntactically, as in (42) and (43).

(42) *Le livre est épais.*  
'The book is thick.'

(43) *Jean trouve cet homme honnête.*  
'John finds that man honest.'

The question is, therefore, why the LCS argument of DP-internal simple adjectives cannot be realized syntactically. Note, however, that in (42) and (43) the main verb selects a small clause, containing the predicate with its subject, as in (44) and (45), respectively.

(44)  $CP_{IP}[VP[v^o[est \text{ } XP_{DP}[le \text{ } livre] \text{ } AP[épais]]]]]$

(45)  $CP_{IP}[VP[Jean \text{ } v^o[trouve \text{ } XP_{DP}[cet \text{ } homme] \text{ } AP[honnête]]]]]$

In copula constructions, the external argument position of the adjective is created by selection.<sup>2</sup> DP-internal predicates, however, do not contain a verb selecting a small clause. This means that the external argument position can only be created by the predicate itself. Therefore, simple adjectives, which do not project syntactic arguments by themselves, are not licensed as predicates within the DP, as opposed to all other noun modifiers discussed above.

### 7. Theoretical consequences

We have argued that in French, simple adjectives cannot be generated as the predicate of a reduced relative, but are generated within the functional projections of NP. This solves the theoretical problems with Kayne's analysis mentioned in Section 2. Since Kayne analyzes simple adjectives as reduced relatives, i.e. as CPs, and since he assumes that [Spec, CP] must always be filled, in his view prenominal adjectives in English have to move to [Spec, CP] in order to yield the correct word order. For French postnominal adjectives, Kayne also assumes that they are moved to [Spec, CP], but this time there is additional noun movement, via  $C^{\circ}$ , to a functional head dominating CP. Kayne argues that participles followed by a complement cannot be moved to [Spec, CP] because of a kind of Head Final Filter. Therefore, participles stay in their predicate position within the reduced relative, but now it is the noun that moves

<sup>2</sup> In fact, in *de* + ADJECTIVE constructions, such as *il y a une place de libre* 'there is one place empty', simple adjectives do take an external argument. We follow Hulk & Verheugd (1994) in assuming that in this case *de* is a functional head selecting a small clause.

to [Spec, CP]. With the analysis we have proposed in this paper, it is not necessary to assume that sometimes the noun moves to [Spec, CP] and sometimes the adjective does. Since, in our opinion, there is no CP but simply an NP in the case of simple adjectives, the adjective does not move to [Spec, CP]. This means that in reduced relatives, it is always the noun that moves to [Spec, CP], creating an antecedent-predicate relation, as in the traditional adjunct analysis of relative clauses.<sup>3</sup>

### 8. Conclusion

We have argued, contra Kayne (1994), that simple adjectives do not project syntactic arguments on their own; being generated in a functional projection of NP, they modify the noun by way of theta-identification.

All other noun modifiers discussed in this paper project argument structure; they are inherently licensed as predicates; externalization of one of their arguments gives a subject/antecedent-predicate configuration. It is in this sense that they are reduced relatives. The predicate and the externalized noun are related by means of theta-marking.

One of the consequences of this approach is a simplification of Kayne's theory. Since there is no reduced relative in the case of simple adjectives, it is not necessary anymore to assume that AP moves to [Spec, CP]. The only constituent that moves to [Spec, CP] is NP.

### REFERENCES

- Cinque, Guglielmo. 1994. "On the evidence for partial N-movement in the Romance DP". In *Paths Towards Universal Grammar. Studies in Honor of Richard S. Kayne*, ed. by Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Raffaella Zanuttini, 85-110. Washington, D.C.: Georgetown University Press.
- Di Sciullo, Anna-Maria. 1993. "The complement domain of a head at morphological form". *Probus* 5.95-125.
- Grimshaw, Jane & Edwin Williams. 1993. "Nominalization and predicative prepositional phrases". In *Semantics and the Lexicon*, ed. by James Pustejovski, 97-105. Dordrecht: Kluwer Academic Press.
- Higginbotham, James. 1985. "On semantics". *Linguistic Inquiry* 16.547-93.

<sup>3</sup> Even if there is noun movement to a functional head dominating CP, as in (i), we assume that NP moves first to [Spec, CP], and that the head then moves further. Note that Kayne assumes that in *le livre jaune* the nominal head moves from IP to C<sup>0</sup> and then raises further.

(i) *Le livre<sub>i</sub> jaune* CP[e<sub>i</sub> C<sup>0</sup> IP[e<sub>i</sub> XP[*envoyé e<sub>i</sub> à Jean*]]]

- Hulk, Aafke & Els Verheugd. 1994. "Opérateurs nuls et accord dans les projections adjectivales". *Revue Québécoise de Linguistique* 23.17-45.
- Huot, Hélène. 1981. *Constructions infinitives du français: le subordonnant "de"*. Geneva: Droz.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Leeman, Danielle. 1992. "Deux classes d'adjectifs en *-ble*". *Langue Française* 96.45-63.
- Ronat, Mitsou. 1974. *Échelles de base et mutations en syntaxe française*. M.A. thesis, Paris-Vincennes.
- Sandfeld, Kristian. 1965 (1928). *Syntaxe du français contemporain 1: les pronoms*. Paris: Honoré Champion.
- Siloni, Tal. 1995. "On participial relatives and complementizer D°: A case study in Hebrew and French". *Natural Language and Linguistic Theory* 13.445-486.
- Sleeman, Petra. 1996. *Licensing Empty Nouns in French*. The Hague: Holland Academic Graphics.
- Stowell, Timothy. 1981. *Origins of Phrase Structure*. Ph.D. dissertation, MIT.
- Valois, Daniel. 1991. *The Internal Syntax of DP*. Ph.D. dissertation, University of California, Los Angeles.
- Vergnaud, Jean Roger. 1974. *French Relative Clauses*. Ph.D. dissertation, MIT.

**FROM BEING TO HAVING**  
QUESTIONS ABOUT ONTOLOGY FROM A  
KAYNE / SZABOLCSI SYNTAX\*

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**0. *Possession in cognition***

The relation between being and having has puzzled humans for millennia. Among grammarians, Benveniste offers an excellent instance of both caution and open mindedness when dealing with the details of this intriguing relation. He tells us:

That *to have* is an auxiliary with the same status as 'to be' is a very strange thing. [*To have*] has the construction of a transitive verb, but it is not ... In fact, *to have* as a lexeme is a rarity in the world; most languages do not have it. (1971:168)

This is more than a curiosity about an auxiliary verb. Think of the relation between the sentences *John has a sister* (, *Mary*) and *Mary is a sister* (of *John's*).

The traditional analysis for this phenomenon (for instance, as insightfully presented in Keenan 1987) is in terms of postulating a relational term *sister*, which has two variable positions, as a matter of lexical fact. Then the intuition is: one of two elements can saturate each variable position. If what we may think of as the *referent* of *sister* is promoted to subject of the sentence, we have

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*Mary is a sister (of John's)*. If instead the other, *possessor* element is promoted to subject position, what we get is *John has a sister (, Mary)*. All that *be* and *have* do is mark each relation.

But if Benveniste is right, *be* and *have* in fact cannot systematically mark each relation, particularly in languages that lack *have*. The immediate question is: what is then the difference between *being a sister* and *having a sister*? How do we know that one of these can only be a property of Mary while the other is a property of John, but may be Mary's as well? Is all of this out there, in reality, or is it somehow a function of the way humans conceptualize the world — and if so, how?

Interestingly, Du Marsais worried about this very issue. The following quote is taken from Chomsky.

Just as we have *I have a book*, [etc.] ... we say ... *I have fever*, ... *envy*, ... *fear*, *a doubt*, ... *pity*, ... *an idea*, etc. But ... *health*, *fever*, *fear*, *doubt*, *envy*, are nothing but metaphysical terms that do not designate anything other than the ways of being considered by the points of view peculiar to the spirit. (Chomsky 1965:199, n. 13)

It is equally telling to see the context where Chomsky invokes his reference to Du Marsais: just after reminding the reader how “certain philosophical positions arise from false grammatical analogies” (p. 199). To support his view, he introduces the following quote from Reid (1785), alluding to *having pain*.

Such phrases are meant ... in a sense that is neither obscure nor false. But the philosopher puts them into his alembic, reduces them to their first principles, draws out of them a sense that was never meant, and so imagines that he has discovered an error of the vulgar. (p. 199)

Chomsky then goes on to suggest that “a theory of ideas” cannot deviate from the “popular meaning”, to use Reid's phrases.

With this perspective in mind, consider the fact that all of the expressions in (1) have a possessive syntax.

- (1) a. *John has a house*
- b. *John has only one arm*
- c. *John has a sister: Mary*
- d. *John has a bad temper*

When we say possessive *syntax*, we must not just mean that these expressions can go with *have*; they can also appear as in (2).

- (2) a. *John with a house*
- b. *John's only arm*
- c. *A sister of John's*
- d. *John is bad tempered*

Certainly a relation, in fact a legal one, exists between John and the house he owns. Likewise, any part of John's may be expressed, with respect to him, in possessive terms. It is tempting to blame this on a more general notion of "inalienability". It is, however, not clear that one's parts are uncontroversially inalienable — or there would be no successful transplants. The notion "inalienable" is even harder to characterize once part/whole relations are abandoned. Family relations seem inalienable, but not obviously — as the child who recently divorced her mother can readily attest. And as we saw, matters get even more confusing with abstract possessions. Children are said to have the tempers of their nasty relatives and the looks of their nice ones. What does this really mean, if these notions are supposed to be inalienable?

It is also tempting to think that just about any relation between two entities can be expressed as a possession. This, however, is false. I relate to you right now, but it makes no sense to say "I have you". Numbers relate to each other, in a sense inalienably; yet what does it mean that "3 has 1.2"?

Against Reid's advice, one could perhaps say there are a handful of core primitive possessive relations, and the rest are accidents of history, games people play, or metaphors. It is, however, surprising to find the same types of accidents, games, or metaphors, culture after culture. Take the examples in (3).

- (3) a. *Juan con una casa*  
       Juan with a house
- b. *Su único brazo*  
        his only arm
- c. *Una hermana suya*  
        a sister his
- d. *Está de mal humor.*  
        is-3sg of bad temper

Basically the same things one is said to have in English, one is said to have in Spanish. Or in other languages, for that matter, as illustrated in (4).

- (4) a. Vai: *Nkun ʔbe.*  
        my head exists  
        'I have a head.'
- b. Turkish: *Bir ev-im var*  
        a house-mine is  
        'I have a house.'

- c. Mongol: *Nadur morin buy*  
 to me a horse is  
 'I have a horse.'
- d. Ewe: *Ga le asi-nye*  
 money is in-my hand  
 'I have money.'

I have chosen the instances in (4) from unrelated languages which exhibit superficial differences with both English and Spanish (for example, they do not involve *have*). Even so, the possessed elements here are hardly surprising. And as Benveniste (1971:171) puts it, at "the other end of the world" (Tunica) there is a class of verbs that must carry prefixes of inalienable possession, and express emotional states (shame, happiness), physical states (hunger, cold), or mental states (knowledge, impressions). No such morphological manifestation exists in Spanish; but observe the examples in (5), which simply reiterate Du Marsais's point.

(5) *Juan tiene...*

EMOTIONAL STATE	PHYSICAL STATE	MENTAL STATE
<i>vergüenza</i> 'shame'	<i>hambre</i> 'hunger'	<i>conocimiento</i> 'knowledge'
<i>alegría</i> 'happiness'	<i>frío</i> 'cold'	<i>impresión</i> 'impression'
...	...	...

If the conceptual agreement between pre-colombian inhabitants of Louisiana and their brutal conquerors is an accident, this can be no other than the human accident.

In sum — and this is what should worry us as grammarians — there is no obvious way we have of defining possession without falling into vicious circularity. What expressions are capable of appearing in the context of *have* and the like? Possessive expressions. What are possessive expressions? Those that appear in contexts involving *have* and the like.

So at the very least inalienable possession appears to be a cognitive notion, seen across cultures with minimal variations; still, what does this mean? Consider an example taken from a famous commercial, the punch-line of which reads as in (6).

(6) *I want the solider that belongs to this beer to step forward!*

The individual in question is no other than John Wayne himself, which raises this question: what might the nature be of that improbable beer that happens to *own* the duke? Is that serious possession or military talk? Perhaps the latter, but the Spanish examples in (7) suggest otherwise.

- (7) a. *El oro tenía forma de anillo.*  
       the gold had form of ring  
       b. *El anillo tenía (9g. de) oro.*  
       the ring had 9gr. of gold
- (8) a. *La ciudad tenía (estructura de) barrios.*  
       the city had structure of neighborhoods  
       b. *Los barrios tenían lo peor de la ciudad.*  
       the neighborhoods had the worst of the city

The point of (7) and (8) is that, to some extent, they manifest an inalienable possessive relation *and its inverse*, with roughly the same syntax. Granted, these examples do not have the perfect symmetry of the John Wayne case in (6), but this may be a relatively low-level fact. Once we abandon the specific expression of possession through *have* or similar elements, we find (9)-(10).

- (9) a. *El peso de un kilo*  
       the weight of one kilo  
       a'. *Un kilo de peso*  
       one kilo of weight  
       b. *Una concentración de 70°*  
       a concentration of 70°  
       b'. *70° de concentración*  
       70° of concentration
- (10) a. *Una organización de subgrupos*  
       an organization of subgroups  
       a'. *Subgrupos de organización*  
       subgroups of organization  
       b. *Un ensamblaje de partes*  
       an assembly of parts  
       b'. *Partes de ensamblaje*  
       parts of assembly

We could, of course, claim that (9) and (10) are not really possessive. It is unclear what that means, though, in the absence of an ontological notion of possession. Syntactically, we can say such things as *the organization had subgroups* or *the subgroups had organization*, as much in Spanish as we can in English; and certainly, there is a characteristic inalienability to all of the notions in (9) and (10). One can retreat, then, to saying that the organizations the subgroups have is not the same organization that has the subgroups — but apart from hair-splitting, this is far from obvious. For the bottom line is: are we more justified in saying *this substance has form* than we are in saying that *this form has substance*? And if these are both grammatical, are we always going to insist on the opaque claim that the form this substance has is not the same as the form that has this substance?

There is a different way to proceed. Suppose we agree that all of the above, form and substance, organization and subgroups, concentration and degrees, and even John Wayne and his temper, his horse, or even his beer, stand in a yet-to-be-determined Relation R, which in fact number 3 and number 1.2, or writers and readers, for some reason do *not* stand in. Crucially for our purposes, however, that Relation R has nothing to do, in itself, with the subject or object positions of a verb *have* or a preposition like *of*. Quite the opposite: an intricate syntax carries the terms of Relation R to *either* subject or object of the relevant syntactic expressions. Are there advantages to making such a claim?

### 1. *Every term can be relational*

First, I find it interesting that we cannot confine relational problems to so-called relational terms like *sister*. The minute we extend our coverage to part-whole possessions, just what is not a part of something else? Other than the lexical entries for God, all terms in our lexicon have to be thought of as relational. This immediately suggests we are missing a generalization that should be placed out of the idiosyncratic lexicon.

Second, consider the intriguing facts in (11) and (12).

- (11) a. *The poor neighborhoods of the city*  
 b. *The city's poor neighborhoods*  
 c. *The city has poor neighborhoods*
- (12) a. *A city of poor neighborhoods*  
 b. \* *The/a poor neighborhoods' city*  
 c. *The poor neighborhoods are the city's*

Note that the part-whole relation (city, neighborhood) is kept constant in all these examples. Traditionally, this was expressed in terms of *neighborhood*

having two variable positions, one referential and one possessive. Now, in (11) and (12) we see *the city* and *the neighborhoods* each promoted to subject position (or concomitantly, associated to the preposition *of*). This is as expected. What is not expected is that (12b) should be out.

One could try to blame that on the fact that, in this instance, the relational term *neighborhoods* is relinquishing reference to the other term, *city*. But this surely can't be a problem — in itself — given the perfect (11b), where reference is to *city*. One might then try to take reference as an indication that, to begin with, we should not have compared the two paradigms; this, of course, would be because (11) invokes reference to *neighborhoods*, whereas (12) does only to *city*. If reference is an intrinsic property of a word, isn't this mixing apples and oranges?

Keep in mind, however, the central fact that in both (11) and (12), the R relation between *city* and *neighborhoods* is constant, crucially regardless of the ultimate reference of *poor neighborhoods of the city* or *city of poor neighborhoods*. If we demand that these two have nothing in common, the implied lexicon is going to be even uglier, for now we need two relational terms, *neighborhoods* and *city*, since each of these can project its own structure and be related to something else. This is worse than before; we needed to say that all terms in the lexicon are relational, but now we have to sortalize Relation R: the way a city relates, *as a whole*, to a neighborhood is different from how it relates, *as a part*, to a state.

And never mind that: the greatest problem still is why on earth (12b) is impossible. I doubt this is a quirk, given that the very same facts hold in Spanish (as well as other languages), as shown in (13)-(14).

- (13) a. *Los barrios pobres de la ciudad*  
the neighborhood poor of the city
- b. *Sus barrios pobres (los de la ciudad)*  
its neighborhoods poor those of the city
- c. *La ciudad tiene barrios pobres*  
the city has neighborhood poor
- (14) a. *Una ciudad de barrios pobres*  
a city of neighborhoods poor
- b. \* *Su ciudad (la de los barrios pobres)*  
their city that of the neighborhood poor
- c. *Los barrios pobres son de la ciudad.*  
the neighborhood poor are of the city

Indeed, the facts are extremely general, as (15)-(16) shows.

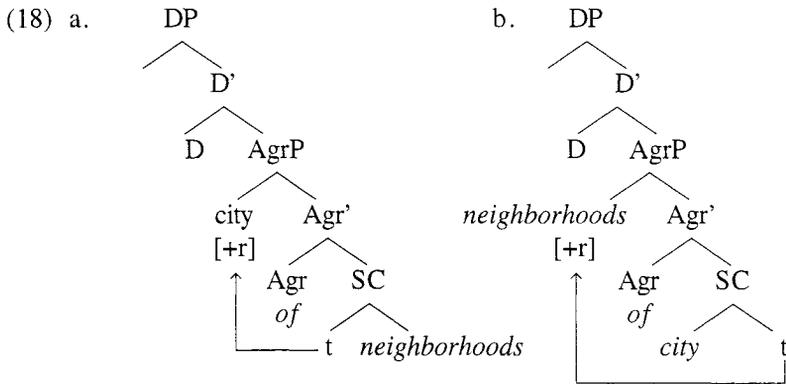
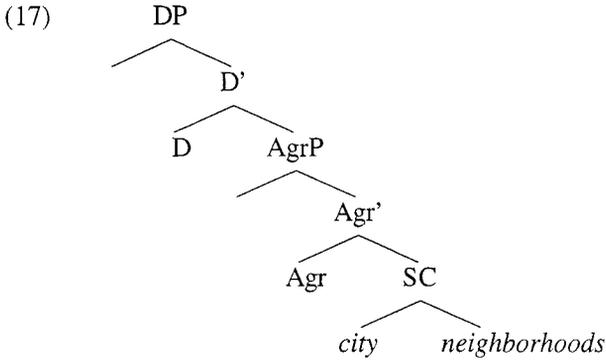
- (15) a. *Los brazos largos de un calamar*  
 the arms long of a squid  
 b. *Sus brazos largos (los del calamar)*  
 its arms long those of-the squid  
 c. *El calamar tiene brazos largos.*  
 the squid has arms long
- (16) a. *Un calamar de brazos largos*  
 a squid of arms long  
 b. \* *Su calamar (el de los brazos largos)*  
 their squid that of the arms long  
 c. *Los brazos largos son del calamar.*  
 the arms long are of-the squid

Again, there are differences of detail between languages. For example, Spanish does not realize non-pronominal noun phrases in pre-nominal position, as does English; and English uses the expression *a long-armed squid*, with noun incorporation, for the corresponding Spanish 'a squid of long arms' (16a). But neither language allows a form such as *\*the long arms's squid* or *\*their squid* (16b), meaning the one with long arms.

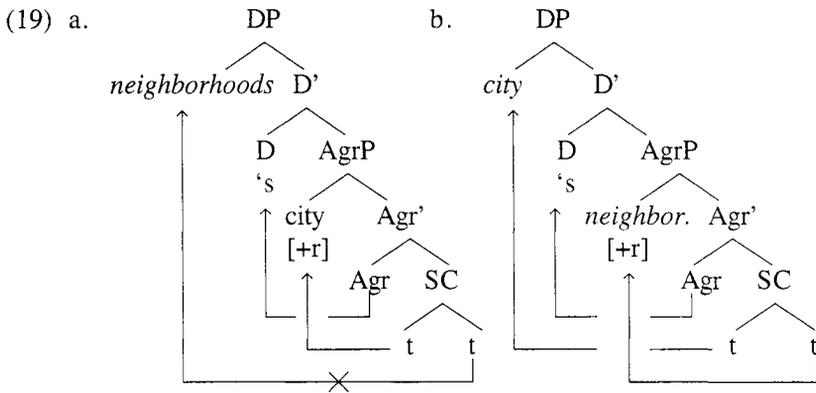
Needless to say, the syntactician must also predict this surprising gap; but it is precisely here that syntax works. Consider in this respect the syntax in (17), the structure discussed by Kayne (e.g., 1995) and Szabolcsi (e.g., 1983) in recent years, here presented in the more accurate guise of Hornstein, Rosen & Uriagereka (forthcoming). The main difference with Kayne's structure is that, instead of bottoming out as an AgrP, (17) (p. 291) is built from a small clause, which is designed to capture Relation R in the syntax.

Although I keep Kayne's Agr intact, I think of this position as a referential site because, as it turns out, whatever moves to its checking domain determines reference. If we are to be technical, the moved item is assigned a referential feature that is attracted to the checking domain of Agr. This means the derivations in (18) start from different lexical arrays, which is as expected: despite the obvious parallelism, the terms of the relations differ, at least, in definitude.

Nevertheless, what is important is that the two expressions in (18) have the same, if you wish, pseudo-thematic structure, and hence code the same Relation R.



Now observe the interesting movements, as in (19).



Note that this time we involve the specifier of D. I think this is to check spatial contextual features, although this is really not crucial. As is customary, we take the genitive 's to materialize as the head of D when its specifier is occupied, and following Kayne, we do not lexicalize Agr when it does not support lexical material, presumably because it incorporates to the D head. But these are all details; what matters is the shape of the movement paths: the ones in (19b) cross, while those in (19a) are nested. One possible account for the situation in (19) is in terms of the Minimal Link Condition. Intuitively, the head D cannot attract *neighborhoods* in (19a) because *city* is closer. But the main point is that, whereas the movements as shown in (19) are meaningfully different, we cannot say much about the relevant lexical correspondences — which would all seem to be licit. This simply means that it pays off to place Relation R in the syntax, contra the traditional assumption that views it as merely lexical.

## 2. *The syntax of possession*

We have, then, both conceptual and empirical reasons to suppose not only that the Kayne/Szabolcsi syntax for possession is right, but furthermore that this is where possession itself, as a semantic Relation R, is encoded — instead of lexically through relational terms. Ontologically, this is very interesting, since we now have to ask under what circumstances two terms enter into the pseudo-thematic relations involved in the small clause under discussion. We want the part (for instance, *neighborhood*) to be the small clause predicate, and the whole (for instance, *city*) to be the small clause subject — but why? Why not the other way around? And is this general? Likewise, if whatever moves to the Agr domain determines reference, what is the nature of reference? Is reference always coded in this relativistic manner?

If these questions seem too troubling, note that we can propose a very transparent semantics for the objects in (13)-(14).

- (20) a. [Ee:city(e)] T1(city, e) & T2(neighborhood, e)  
 b. [Ee:neighborhood(e)] T1(city, e) & T2(neighborhood, e)

We can think of each term of the small clause as satisfying some sort of primitive pseudo-role (T1 or T2), of Agr as the lexicalization of an event variable, and of D as a quantificational element. The small clause determines the pseudo-thematic properties of the expression, much as a verb phrase determines the thematic properties of a sentence; the primitive pseudo-roles of T1 and T2 do not seem, a priori, any more or less worrisome than corresponding verbal roles like AGENT or THEME. In addition to pseudo-thematic or lexical structure, the functional structure of the expression determines referential and quantificational

properties, through a variable site and a quantificational site. This fleshes out Szabolcsi's intuition that nominal and verbal expressions are structurally alike.

Architectural matters aside, though, we have to worry about the internal make-up of the small clauses. It is not enough to think of T1 and T2 as, say, WHOLE and PART roles, since we have seen the need for other inalienable relations. Of course, we could simply augment our vocabulary for each new sort of relation we find — but that is hardly illuminating. The bottom line is whether there is anything common to the three sentences in (21).

- (21) a. *El vino tiene 12°.*  
the wine has 12°
- b. *La organización tiene varios subórganos.*  
the organization has several sub-organs
- c. *La gente mediterránea tiene muchos parientes.*  
The people Mediterranean has many relatives

(21a) expresses a relation between a mass term and the measure of its attribute of concentration; (21b), the relation between a count term and the expression of its classifier of structure; (21c), the relation between an animate term and a specification of its kinship. Given their syntactic expression, these would all seem to be manifestations of Relation R — but what does that mean?

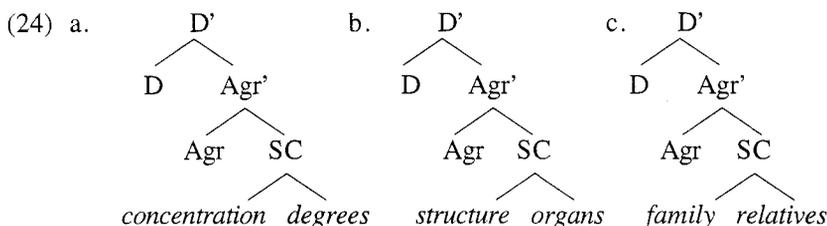
Note, also, the facts in (22).

- (22) a. *El vino tiene 12° de concentración.*  
the wine has 12° of concentration
- b. *La organización tiene varios subórganos de estructura.*  
the organization has several sub-organs of structure
- c. ? *La gente mediterránea tiene muchos parientes de familia.*  
the people Mediterranean has many relatives of family

Each of the possessed elements in (21) can show up with an associate term which demarcates the type of possession at stake; curiously, this term can be promoted, as shown in (23) (see [9]-[10] above).

- (23) a. *El vino tiene una concentración de 12°.*  
the wine has a concentration of 12°
- b. *La organización tiene una estructura de varios subórganos.*  
the organization has a structure of several sub-organs
- c. *La gente mediterránea tiene familias de muchos parientes.*  
the people Mediterranean has families of many relatives

Again, the expressions in (23) do not mean the same as those in (22); however, Relation R is kept constant in either instance. The examples in (23) are also significant in that any naive analysis of their syntax will make it really difficult to establish a thematic relation between the matrix subject and what looks like the *complement of the object*; plainly, thematic relations are not that distant. Fortunately, the Kayne/Szabolcsi syntax gives us (24).



Depending on what gets promoted up, T1 or T2, we will find the same sort of distributional differences we already saw for (18) and the like. In turn, what the possessors in (22) and (23) — *wine, the organization, and Mediterranean people* — possess is *the entire structure in (24)*, whatever it is that it refers to in each instance. That way, the thematic relation is as local in (23) as in (22) or (21), directly as desired.

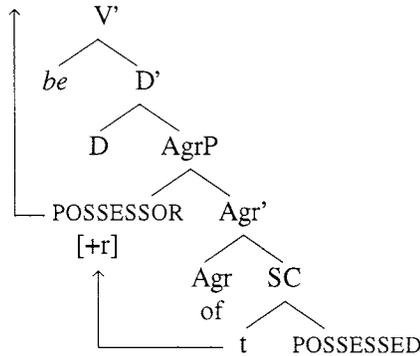
A related question that we must also address is when auxiliary *have* appears, and when it does not. Compare (23) to (25), which involves, instead, auxiliary *be*.

- (25) a. *El vino es de 12º.*  
the wine is of 12º
- b. *La organización es de varios subórganos.*  
the organization is of several sub-organs
- c. *La gente mediterránea es de muchos parientes.*  
the people Mediterranean is of many relatives

The structure of these examples is very transparent, as in (26) (p. 295). This is possessor raising, of the sort seen in many languages. Of course, possessor raising is also at issue in similar examples involving *have*. According to Kayne's analysis, a derivation of the form in (26) is involved in the paradigm of (21) to (23), with an associated D-incorporation to *be*; this, in the spirit of Freeze (1992), is in fact what causes *be* to spell out as *have*. If so, what is really the difference between (26), yielding (25), and a similar derivation

yielding (21)? Why does only one involve D-incorporation, resulting in auxiliary *have*?

(26) POSSESSOR *be* ... *of* POSSESSED



There had better be some difference, because there is actually a rather important consequence for meaning in each structure. Thus, compare the examples in (27).

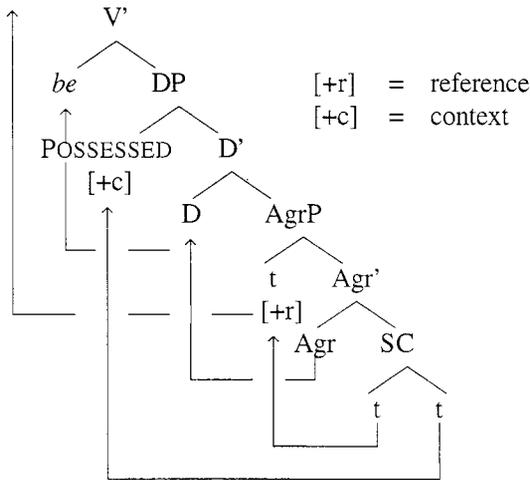
- (27) a. *La ciudad es de barrios pobres.*  
 the city is of neighborhoods poor
- b. *La ciudad tiene barrios pobres.*  
 the city has neighborhood poor

(27a) tells us what kind of city we are talking about — a poor city. However, (27b) tells us what kinds of neighborhoods the city has: some are poor. It could be, and in fact there is an invited implicature to the effect that the city also has rich neighborhoods. No such implicature is invited in (27a), and the existence of rich neighborhoods in the scenario that (27a) makes reference to is contradictory with what the proposition asserts.

These sorts of contrasts indicate a different derivation for *be* cases, as in (26), and for *have* cases, as in (28). Note, first, that this derivation is consistent with the fact that we can say in English *the city has poor neighborhoods in it*. We may follow Kayne in taking *in* — a two-place relation — to be one of the possible realizations of the D trace, redundantly spelled-out as a copy when *the spacial context of [Spec, DP]* forces agreement with it. Likewise, the clitic *it* spells-out the trace of the raised possessor in the specifier of Agr. In both of

these suggestions, I am assuming that movement is an underlying copying process, which may or may not involve trace deletion depending on linearization factors (as in Nunes 1995).

(28) POSSESSOR [*be*+D] (=have) ... POSSESSED  
 POSSESSOR...



But of course, the most pressing question is why (28) does not violate the Minimal Link Condition, just as (19a) did. Arguably, this is because the structure in (28) involves the Freeze-type incorporation that results in *have*. The general import of this sort of incorporation is to collapse distance within its confines. If so, the major difference between (19a) and (28) is that only in the latter are the terms related to the Agr/D skeleton equidistant from higher sites, in the sense of Chomsky (1995: Chap. 3) (though with differences of detail that I will not explore now). Of course, the Freeze incorporation is not done *in order to* salvage a derivation. It is just a possibility that Universal Grammar grants, by distributing appropriate matching features to the relevant lexical items — for instance, affixal features to the Agr and D that incorporate. Without the necessary combinations of features, the alternative derivations terminate along the way, and are thus not valid alternatives.

At any rate, why does this syntax entail the appropriate semantics? I have suggested in passing that the element that moves to the specifier of D codes *contextual confinement* for the quantifier in D; then we expect that movement through this site would have important semantic correlates. Concretely, in (28) the possessed serves as the context where Relation R matters, whereas the pos-

essor determines R's reference. Concerning poor neighborhoods, the city has *that* — but there is no reason to suppose the city does not have something else. This is different from the semantics that emerge for (26), where the possessor, a city, may serve to confine the context (although in the diagram I have not represented the possessor moving to [Spec, DP]). In this instance, the referent of R and the context confiner of the quantification over events which are structured in terms of R, are one and the same. Differently put, this is a *decontextualized Relation R*; regardless of context, the city is endowed with poor-neighborhoods. In other words, poor-neighborhoods is a standing characteristic of the city, in the sense of Raposo & Uriagereka (1995).

### 3. Paradigmatic gaps

I trust that these derivational gymnastics have the effect, at least, of confirming that some serious syntax is plausibly involved in possession. But now we have obviously opened a Pandora box. If indeed matters are so transparently syntactic as I am implying, why are there any gaps in the paradigms?

- (29) a. *El kilo de carne que corte Shilock deberá de ser*  
 the kilo of flesh that cut Shilock must be  
*exacto.*  
 exact.AGR
- a'. *El kilo de carne que compres deberá de ser tierno.*  
 the kilo of meat that buy-you must be tender.AGR
- b. *El grupo de truchas que estudio es interesantísimo.*  
 the group of trouts that study-I is interesting.SUP.AGR
- b'. *El grupo de truchas que ví eran alevines.*  
 the group of trouts that saw-I were young.AGR
- (30) a. *El carro de leña que traigas deberá de estar*  
 the cart of wood that bring-you must be  
*engrasado.*  
 oiled.AGR
- a'. \* *El carro de leña que traigas debe de estar seco.*  
 the cart of wood that bring-you must of be dry.AGR
- b. *Una bandada de pájaros está muy organizada.*  
 a flock of birds is very organized.AGR
- b'. \* *Una bandada de pájaros están piando como locos.*  
 a flock of birds are chirping like crazy.AGR

(29) is as predicted: depending on what moves to the referential site in the Kayne/Szabolcsi structure, we refer to either term of Relation R — as we can attest through agreement. For instance, *kilo* in (29a) agrees in the masculine, whereas *carne* ‘meat/flesh’ in (29b) agrees in the feminine. However, we can have referential shifts only with certain canonical measures or classifiers, such as *kilo* or *group*, but not with *cart* or *flock*, as shown in (30). This is confirmed in (31)-(32).

- (31) a. *La carne tendría el peso de un kilo.*  
 the meat must have the weight of one kilo  
 a'. *La carne tendría un kilo de peso.*  
 the meat must have one kilo of weight  
 b. *Las truchas tenían la estructura de un grupo.*  
 the trouts had the structure of a group  
 b'. ? *Las truchas tenían un grupo de estructura.*  
 the trouts had a group of structure
- (32) a. *La leña tendría las dimensiones de un carro.*  
 the wood must have the dimensions of a cart  
 a'. \* *La leña tendría un carro de dimensiones.*  
 the wood must have a cart of dimensions  
 b. *Los pájaros tenían la organización de una bandada.*  
 the bids had the organization of a flock  
 b'. \* *Los pájaros tenían una bandada de organización.*  
 the birds had a flock of organization

Although all possessive relations can be expressed in the pedantic guise of indicating not just a certain measure or classifier of the possessor, but also the type of measure or classifier this is, a reversal of this expression is possible only with *canonical* measures or classifiers, as shown in (31), but not otherwise (cf. 32).

Observe also the curious facts in (33) and (34).

- (33) a. *(gramos de) oro con/tiene(n) \*(forma de) anillo.*  
 grams of gold with/have(pl) form of ring  
 b. *\*(forma de) anillo con/tiene (gramos de) oro.*  
 form of ring with/has grams of gold
- (34) a. *(conjunto de) truchas con/tiene(n) \*(estructura de) grupo.*  
 set of trouts with/have(pl) structure of group

- b. (*\*estructura de*) grupo *con/tiene* (*conjunto de*) truchas.  
 structure of group with/has set of trouts

Why, together with *gold with the form of a ring* or *trouts with the structure of a group*, can we not say *\*gold with ring* or *\*trouts with group*? Why do we need to specify the notions “form” or “structure”? Conversely, we may say *grams of gold with the form of a ring* or *set of trouts with the structure of a group*, but not *\*form of ring with gold* or *\*structure of group with trouts*. Here what we cannot do is specify notions like “form” or “structure”, though they seem to be semantically appropriate.

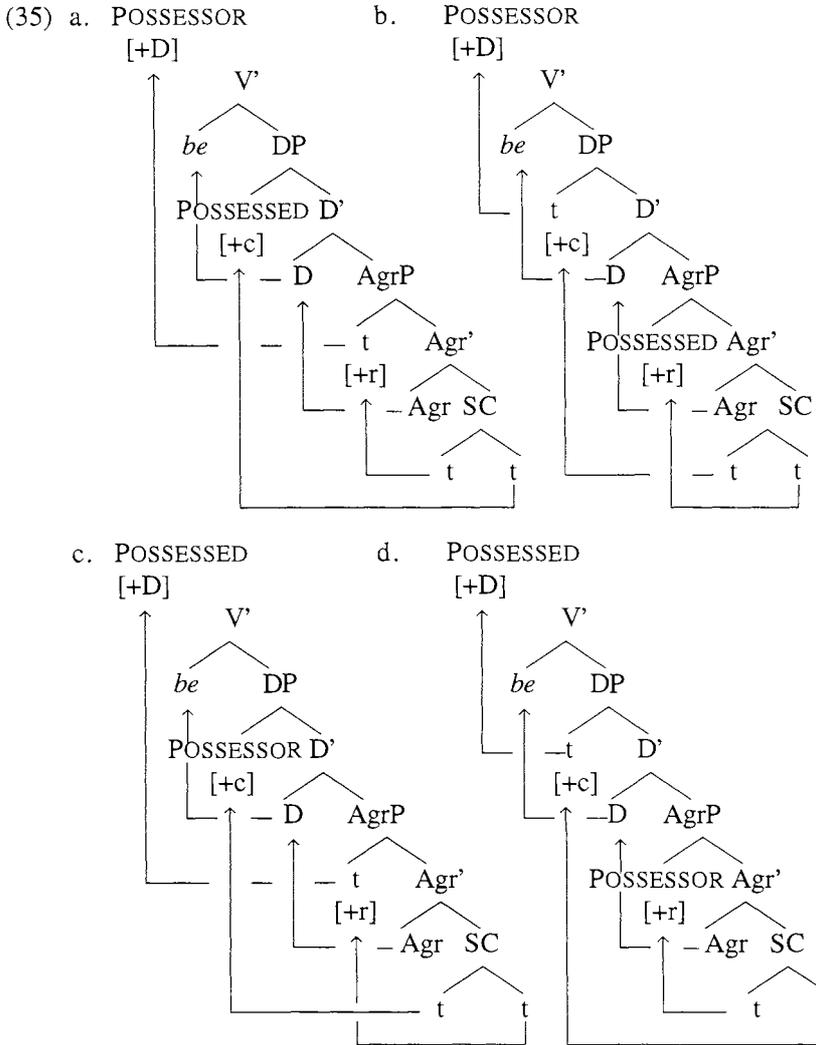
Note also that *have* is involved in the examples, which signals a derivation like (28). Curiously, though, the examples in (33) and (34) involve raising of *the possessed* (*ring* or *group*), instead of the possessor, as we saw in (28). I believe this is possible because of the Freeze incorporation, which leads to the spelled-out *have*, and which should allow *either* term of Relation R to be promoted to subject position.

To clarify the possibilities that this allows, I present the diagram in (35) (p. 300), with accompanying explanations.

Now, this should allow for more possibilities than are, in fact, attested: the possible combinations are as in (36), but only some are fully grammatical.

- (36) a. \* (*grs. of*) gold with (*the form of*) a ring in it/them.  
 a'. ? (*set of*) trouts with (*\*the structure of*) a group in it/them.  
 b. (*grs. of*) gold with (*\*the form of*) a ring (*\*in it/them*).  
 b'. (*set of*) trouts with (*\*the structure of*) a group (*\*in it/them*).  
 c. (*\*form of a*) ring with (*grs. of*) gold in it.  
 c'. ? (*\*structure of a*) group with (*a set of*) trouts in it.  
 d. ! (*form of a*) ring with (*grs. of*) gold (*\*in it*).  
 d'. ! (*structure of a*) group with (*a set of*) trouts (*\*in it*).

Let me abstract away the merely questionable status of some of these examples, concentrating only on relative judgments vis-a-vis completely ungrammatical instances. In turn, observe how the examples marked with an exclamation mark are possible strings of words — but this is arguably a mirage. I use the *in it* lexicalization of traces as an indication of the structure that concerns us now; (35b) and (35d) do not allow for such a lexicalization, since the surface grammatical object lands in [Spec, AgrP]. In contrast, examples with the structure in (35c) have the desired output format, in addition to the curious raising of the possessed element.



Explanation to diagram

First, we distribute features: [+r], a referential feature; [+c], a contextual feature; and [+D], the Extended Projection Feature that makes something a subject. Observe how all items marked [+D] are promoted to subject position (the top element in the structure); how the items marked [+c] move to or through the contextual site, by assumption [Spec, DP]; and how the items marked [+r] move to or through the referential site, [Spec, AgrP]. Needless to say, I am assuming that different elements may involve different features, sometimes two of them.

For reasons of space, I will not examine all of the structures in (35) in any detail. The main point I am trying to raise is a simple one, though: syntax alone does not predict the contrasts in (36) — at least I have not been able to determine how it could.

#### 4. *Towards a semantics for possession*

Nevertheless, some intriguing generalizations can be abstracted away from (36), in two separate groups. Those concerning referentiality are in (37).

- (37) I. In possessive structures mass terms are not referential.  
 II. A possessed T2 can be a subject only if referential.

If (37I) is correct, (35a) and (35d) are not viable derivations *for mass terms in possessor guise*, since these derivations would leave the referential Agr unchecked — a mass term being improperly forced into a referential site. This describes the ungrammaticality of (36a) and (36d). In turn, if (37II) is true, the movement to subject position in (35d) must be impossible — a non-referential possessed element ending up as subject; correspondingly, (36d) must be ungrammatical.

The generalizations in (38) concern the possible formats of possessed terms.

- (38) I. When the possessed T2 is manifested in the referential site, it must be typed with an overt marker.  
 II. Elsewhere, the possessed T2 may not be overtly typed.

As we already saw, the terms of Relation R may surface in purely lexical guise (as *gold* or *trouts*), or through the more detailed expression of their extension (as some *measure* of gold or some *set* of trouts). In fact, even in its bare guise, a noun like *gold* in our examples really means *some measure* of gold, just as *group* means *a structure* of a group, and so on. In any case, these manifestations are generally possible, occasionally obligatory, and occasionally impossible. Curiously, the possessor term T1 of Relation R has no obvious restrictions; in contrast, (38I) describes obligatory manifestations of the possessed term T2, as in (36b) and (36b'); and (38II) describes impossible manifestations of the possessed T2, as elsewhere in the paradigm. In other words, it is mostly T2 that is responsible for the idiosyncracies in (36). This might help us understand Relation R.

I have not really said much about what Relation R is, and I'm afraid I will not either — the question is very difficult. However, given the generalizations in (37) and (38), it seems as if T2, the second term of R, is less innocent than

the semantics in (20) would lead us to believe. There, the possessed T2 is taken as a pseudo-role, just as the possessor T1 is. However, we now have reason to believe that T2 is special. For example, when T2 is promoted to a grammatical site where reference appears to be necessary, we must accompany this element by a grammatical mark that overtly marks its type, like *set*, for instance. Otherwise, we in fact cannot mark the type of T2. This would make sense if T2 is *itself* the kind of element whose general purpose is to tell us something about the more or less abstract type of an expression, a kind of *presentational device* for an otherwise unspecified *conceptual space*. The idea is expressed as in (39).



Forgive my origami metaphor. The intention here is to talk about a raw mental space which gets measured, shaped, or otherwise topologically transformed, by way of a presentational operation. If this view of Relation R is on track, then T1 and T2 have a very different status: T2 is really *an operation on T1*, and the semantics in (20) would have to be complicated to capture this picture — a formal exercise that I will not attempt now.

The intuition is that generalization (38II) is the default way of realizing T2. What we see then in (38) is the Paninian Elsewhere Condition at work. When in referential sites, presentational device T2 is forced out of its canonical realization; in these contexts, T2 surfaces in the specific format that makes its nature explicit, as a *set*, or whatever.

This way of looking at T2 has nice, independent consequences. (40) is constructed so as to allow for a plausibly ambiguous quantifier interaction, while at the same time not invoking an irrelevant specific reading on the possessor.

(40) *By 2001, most women in Utah will have had two husbands.*

The example invokes reference to two husbands per woman, in a country that allows divorce; the alternative reading is a priori equally plausible in a state that allows polygamy, and where divorce is infrequent. However, the possessed term does not like to take scope over the possessor. We may account for this if the inalienably possessed element, a presentation device in the terms of (39), is frozen in scope because it is a predicate of sorts. This is an old intuition that squares naturally with the syntax of small clause that we are assigning to the terms of the R relation, where T2 is a predicate.

The other aspect of the generalizations concerning (36) that I find interesting is the fact that mass terms are not referential in possessive constructions. I do not know why that is, but I think it correlates with another fact illustrated in (41). The Spanish example in (41) shows the relevant grammatical ordering when more than one R relation is involved; crucially, alternatives to it, such as (42), are out.

(41) *animal de 100 kgs. (de peso) con varios órganos (de estructura)*  
 animal of 100 kgs. of weight with several organs of  
 estructura)  
 structure

(42) \* *animal de varios órganos (de estructura) con 100 kgs. de peso*  
 animal of several organs of structure with 100 kgs.  
 of weight

This suggests a structural arrangement along the lines of (43).

(43)

$$\begin{array}{c}
 R' \\
 \swarrow \quad \searrow \\
 R \quad [various\ organs\ (of\ structure)] \\
 \swarrow \quad \searrow \\
 [animal] \quad [100\ kgs.\ (of\ weight)]
 \end{array}$$

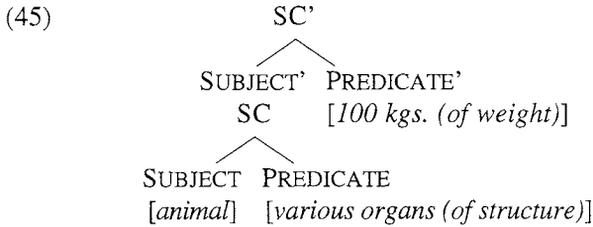
Syntactically, (43) corresponds to the structure in (44).

(44)

$$\begin{array}{c}
 SC' \\
 \swarrow \quad \searrow \\
 SUBJECT' \quad PREDICATE' \\
 \quad \quad \quad SC \quad [various\ organs\ (of\ structure)] \\
 \swarrow \quad \searrow \\
 SUBJECT \quad PREDICATE \\
 [animal] \quad [100\ kgs.\ (of\ weight)]
 \end{array}$$

If this much is granted, we have the possibility for a recursive structure, with potentially various levels of embedding, each corresponding to some type-lifting, whatever that means.

I must emphasize that (41) is a simple piece of data, and (44) a simple structure to describe it. Had (42) been grammatical, we would have needed (45) instead of (44).



But (42) is ungrammatical, and we should make much of this. We should because it makes no sense to blame the hierarchy in (44) on any sort of outside reality. Surely (44) looks Aristotelian, with substance coded logically prior to form — but there is no physical basis for this, or any similar distinction. Likewise, it makes no sense to blame (44) on any effective reality, of the sort presumably involved in how our species evolved. We have no idea what it would mean for us to code the world in terms of the alternative (45), simply because we do not.

All we know is we have (44), with or without a reason. That is enough for someone who is concerned with how the mind is, and pessimistic about finding how it got to be so. In these terms, a real question is how (44) is used to refer; apparently, standard reference in possessive structures is a phenomenon that starts in the second layer of structure in (44). This is like saying that the second presentational device in (44) is responsible for individuation — an intriguing restatement of generalization (37I).

### 5. A word on standard possession

I cannot close without saying something about simple possessions, having shown what I would like to think of as “ontological” possession. What are we to make of John Wayne simply having, say, a horse? Immediately, we can say this: inasmuch as standard possession exhibits many of the syntactic properties of ontological possession (e.g., presence of *have/with* and similar elements), we should probably take this general sort of possession to be nothing but ontological possession as well. Needless to say, if we do that, we have to discover in which way standard possession is hiding some sort of ontological claim.

Having freed ourselves from the optimistic view that a possessor is just the subject of *have*, and the possessed is just its object, what prevents us from thinking that, in *John has a horse*, the horse (yes, *the horse*) is actually ontologically in possession of something like a stage of John? I do not find (46) accidental in this respect.

- (46) *El caballo está en manos de Juan.*  
 the horse is in hands of Juan  
 'The horse is in Juan's hands.'

The question, of course, is why we take the horse to be in John's hands as a rough paraphrase for John having the horse.

Examples like (46) suggest that the horse is ontologically related to something which — for lack of a better word — we express in terms of a metaphor for a stage of John's: his hands. This is important, because we surely do not want to say that the horse, in this instance at least, is ontologically related to the whole of John (or else we would be invoking, again, the sort of inalienable possession that we have seen so far).

That is obviously just a speculation. I find it intriguing, though, in one crucial respect: once again the facts of language open a window into the facts of mind. Perhaps the small synecdoche we invoke in these instances — lexicalizing a part of an individual in place of one of its spatio/temporal slices — is no small indication of a surprising fact about standard possession: that it expresses an ontological, inalienable relation between what is alienably possessed and a spatio/temporal slice of what possesses it. At the very least, that is a humbling thought.

## 6. Conclusion

Let me gladly admit that much work lies ahead. The sketch in (44) is a syntactic structure corresponding to promissory semantics. Relation R may turn out to be a way of operating on a mental space of some sort, perhaps (somehow) lifting its dimensionality — but this is just a fancy way of talking about the topological little story in (39). Interestingly, although this may be thought of as a lexical semantics, it has to somehow make it into Logical Form, or else we will not predict the absence of scope interaction in (40). Basically, the possessed element associated to T2 does not take scope because it does not have the right type to be a scope-bearing element. Needless to say, (44) can be directly plugged into the Kayne/Szabolcsi syntax for possession, and may be seen as a generalization of their insight.

Philosophically, the main conclusion I'd like to reach is perhaps not surprising for the linguist: the view that possession is out there in reality, and we code it trivially through little things like *have*, *with*, and all the rest, is mistaken. I also think it is wrong to think of possession as the manifestation of a lexical relation that certain terms allow. Possession is a kind of syntax, with well-behaved properties. Correspondingly, the semantics of possession seems to be a kind of presentational operation. If so, possession is just a cover-term

for something which may happen in various mental dimensions that embed within one another. Much as I would like to turn all of this into an argument against the capitalist dictum that derives being from having, I am satisfied with getting closer to an understanding of the distributional properties of possession, without blaming them on whim, metaphor, or mistakes people make.

### REFERENCES

- Benveniste, Emile. 1971. *Problems in General Linguistics*. Coral Gables: University of Miami Press.
- Chomsky, Noam. 1965. *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Freeze, Ray. 1992. "Existentials and other locatives". *Language* 68.553-595.
- Hornstein, Norbert, Sara Rosen, & Juan Uriagereka. Forthcoming. "Integral Existentials". *West Coast Conference on Formal Linguistics* 14.
- Kayne, Richard. 1995. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Keenan, Edward. 1987. "A semantic definition of 'indefinite NP'". In *The Representation of (In)definiteness*, ed. by Eric Reuland & Alice ter Meulen, 286-318. Cambridge, Mass.: MIT Press.
- Nunes, Jairo. 1995. *The Copy Theory of Movement and Linearization of Chains in the Minimalist Program*. Ph.D. dissertation, University of Maryland.
- Raposo, Eduardo & Juan Uriagereka. 1995. "Two types of small clauses (toward a syntax of theme/rheme relations)". In *Small Clauses*, ed. by Anna Cardinaletti & Maria Teresa Guasti, 179-206. New York: Academic Press.
- Reid, Thomas. (1785). *Essays on the Intellectual Powers of Man*. Abridged edition by Anthony Douglas Wozzley, 1941. London: McMillan and Co.
- Szabolcsi, Anna. 1983. "The Possessor that ran away from home". *The Linguistic Review* 3.89-102.

**PRAGMATIC TRANSFER FROM LESS DEVELOPED  
TO MORE DEVELOPED SYSTEMS**  
**SPANISH DEICTIC TERMS IN BARCELONA\***

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**0. Introduction**

Weinreich (1968:4) held that languages are open to foreign influence due to their inherent structural weaknesses. Silva-Corvalán (1994:135) held that transfer depends on “superficially parallel structures” in the languages in contact. These conclusions suggest that for transfer to take place, the structure of the receiving-language paradigm must be no more developed than that of the source-language. Is transfer possible where the receiving-language has a fuller structural paradigm than the source-language? If so, on what linguistic factors would such transfer depend? In this paper I address these issues by analyzing pragmatic transfer in a contact-variety of Spanish spoken in Barcelona.

Compared to their Catalan counterparts, Spanish motion verbs, demonstratives, and locatives generally display non-parallel, broader structural paradigms. These paradigms are given in Table 1 (p. 308), where [s] = speaker and [a] = addressee; demonstratives are cited in their masculine singular forms).

Many “Barceloneses” employ Spanish deictics innovatively, using *venir* ‘come’, *traer* ‘bring’, *este* ‘this’, and *aquí* ‘here’ where monolingual Castilian Spanish speakers outside of Catalonia generally use *ir* ‘go’, *llevar* ‘take’, *ese* ‘that’, and *ahí* ‘there’. Such individuals effectively Catalanize the structurally richer Spanish paradigms, reducing them by one term each. I refer to such usage as “Catalan Spanish”. Compare the locatives in a phone conversation be-

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CATALAN: DEICTIC AND SCOPE		SPANISH: DEICTIC AND SCOPE	
<i>venir</i>	'come' motion towards [s] or [a]	<i>venir</i>	'come' motion only towards [s]
<i>anar</i>	'go' motion not towards [s] or [a]	<i>ir</i>	'go' motion only away from [s]
<i>portar</i>	'bring, take' motion [+object] towards [s] or [a] or [other]	<i>traer</i>	'bring' motion [+object] towards [s]
		<i>llevar</i>	'take' motion [+object] away from [s]
<i>aquest</i>	'this', 'that' object near [s] or [a]	<i>este</i>	'this' object near [s]
		<i>ese</i>	'that' object not too far from [s]
<i>aquell</i>	'yonder' object not near [s] or [a]	<i>aquel</i>	'yonder' object very far from [s]
<i>aquí</i>	'here', 'there' object near [s] or [a]	<i>aquí / acá</i>	'here' object near [s]
		<i>ahí</i>	'there' object not too far from [s]
<i>allà</i>	'yonder' object not near [s] or [a]	<i>allí / allá</i>	'yonder' object very far from [s]

Table 1: *Deictic paradigms in Catalan and Spanish*

tween two people in different countries, in Spanish (1a), Catalan (1b), and Catalan Spanish (1c).

- (1) a. *Mi madre está ahí/(?allí/allá)/( \*aquí/acá) en tu país.* [Spanish]  
'My mother is *there*/(?*yonder*)/(*\*here*) in your country.'
- b. *La meva mare és aquí/( \*allà) al teu país.* [Catalan]  
'My mother is *here*/(*\*there*) in your country.'
- c. *Mi madre está aquí en tu país.* [Catalan Spanish]  
'My mother is *here* in your country.'

My analysis argues that innovative deictic usage such as that in (1c) reflects the transfer of Catalan pragmatic assumptions, which include both [s] and [a], to Spanish [s]-only deictic systems. I call this a transfer of pragmatic scope.

Spanish data from 58 interviews were analyzed for this investigation. All of the informants demonstrated innovative usage with all of the deictics to some degree; some individuals demonstrated such usage up to 80% of the time. Results indicated that the pragmatic transfer is predictable not from paradigmatic or lexical structures but from scope differences and informational load. The analysis suggests a generalization regarding transfer and extension of pragmatic scope in nondeictic systems of the variety examined as well.

My investigation makes three important contributions to linguistics. First, my analysis provides evidence of transfer between non-parallel structures without gaps or weaknesses in existing linguistic paradigms; thus, it challenges popular theories of structural constraints on where crosslinguistic transfer can occur. Furthermore, the analysis underscores the permeability of the pragmatic component of the grammar and thus makes a case for linguistic motivations for pragmatic transfer in a language-contact situation. Finally, the case study recognizes a unique contact-variety of Spanish in which pragmatic transfer may be characteristic.

### **1. *Methodology and the quantitative analysis***

In the role of both friend and investigator (Edwards 1986; Milroy 1987), I was able to enter successfully into the personal networks of two fieldworkers in Barcelona. The sample included one network of 26 people who often speak Spanish and another of 32 people who often speak Catalan. Informants were male and female, from the middle to upper middle classes, in general ranging in age from 17 to 23. Almost all have received at least a high school education. The interview format was used to gather quantifiable data from each informant. Each interview lasted about an hour; all interaction was strictly in Spanish and the interviews were all recorded. During the interviews, informants were prompted orally and visually in three linguistic tasks involving the two pairs of motion verbs, the demonstratives, and the locatives. Self-report data on language background were gathered through an informal questionnaire.

SPSS 6.1 for the Macintosh was used to tabulate the data. Based on 2750 coded linguistic responses, index variables were created to represent each given speaker's score on each of the four deictic subsystems tested during each of the three tasks. Cronbach's alpha test for reliability was used systematically to compare the twelve index variables created for each speaker. Variation in task type and variation in deictic subsystem were both found to be statistically negligible ( $\alpha_{12}$  indices = .7966). That there was not significantly more or significantly less innovative usage in any one subsystem of the deictics than in any other ruled out paradigmatic structure and lexical similarity as independent

variables in explaining the amount of transfer. For example, one might have suspected less transfer for the motion [+object] verbs because they demonstrate unequally numbered paradigms in each language or because they form the only subsystem that does not contain cognate terms across languages; nevertheless, these verbs followed the same transfer pattern and rate as all of the other deictics.

In no case was transfer categorical: sometimes a given informant might follow the canonical Spanish deictic system while at other times, the same individual might follow the innovative Catalan Spanish system (Vann 1996). The two systems could thus be said to co-exist in a complex and highly variable model that differs somewhat for each person. What are the implications of such a model? I address elsewhere possible sociolinguistic implications based on extralinguistic motivations for transfer (Vann 1995, 1997, forthcoming), so I will concentrate here on the implications my results have for linguistic theory. Moreover, I will examine purely linguistic motivations for the transfer in this particular situation, and in pragmatics in general.

## **2. *Implications: Theoretical issues in language contact***

In situations of language contact, the relative importance of linguistic versus social motivations for transfer is debatable. Weinreich (1968) and Silva-Corvalán (1994) both argued primarily for linguistic motivations. I too will sustain linguistic motivations for transfer; however, my data involve the transfer of *pragmatic* structures, not syntactic structures such as those investigated by Silva-Corvalán, nor lexical, grammatical, or phonological structures such as those treated by Weinreich. Furthermore, my analysis diverges from both Weinreich and Silva-Corvalán's theories of transfer, which hold that "new structures" can enter a language only where there are paradigmatic gaps or parallel structures. The present case has involved just the opposite conditions. New structures have entered a language where the receiving-language (Spanish) has a fuller paradigm than that of the source language (Catalan), yet no parallel variants are present to motivate the transfer. At least, if the term "parallel structures" is to be understood to mean that, previous to the transfer, a structure in the source-language corresponds to an already existing variant in the receiving-language, then, at best, we only have partially parallel structures in this situation. Across the board, the deictics are not entirely lexically or pragmatically parallel, as discussed above. Furthermore, if there are any paradigmatic gaps, they are in the *Catalan* deictic systems, not in the more highly specified Spanish ones. Thus, Weinreich and Silva-Corvalán's con-

straints upon “new structures” entering a language do not seem to apply to new pragmatic structures in this contact situation.

Though my analysis does not rely on paradigmatic gaps or parallel structures, my results support Silva-Corvalán’s (1994:6) analysis of the realization of linguistic transfer as simplification or reduction of lexical oppositions (note that simplification is just the opposite of what one might expect from a gap-based transfer, where filling a hole would likely create a more complex system). Simplification of specific deictic terms in Catalan Spanish has led to their overgeneralization and extended pragmatic scope, exemplified by the reinterpretation of *venir*, *traer*, *este*, and *aquí* in Catalan Spanish at the expense of *ir*, *llevar*, *ese*, and *ahí*. Of course, deictic simplification has precedent in the Romance languages as seen in the reduction of the late Latin tripartite demonstrative system (\**eccu* ‘behold’ + *iste* ‘this’, \**eccu* ‘behold’ + *ipse* ‘that’, \**eccu* ‘behold’ + *ille* ‘yonder’) to binary systems in modern Catalan (*aquest*, *aquell*), Italian (*questo* ‘this’, *quello* ‘that / yonder’), French (*celui-ci* ‘this’, *celui-là* ‘that / yonder’), and Rumanian (*acest* ‘this’, *acel* ‘that / yonder’).

### 3. *Pragmatic permeability and transfer*

If paradigmatic gaps and parallel lexical or pragmatic structures are not the motivation for the transfer, then what is? To answer this question, I will proceed upon the premise that the transfer occurs in the underlying pragmatic component of the grammar and that this pragmatic component is “permeable”, or amenable to incorporation of referential material from a contact-language. The questions then become: (a) Why is the pragmatic component a site of permeability? and (b) Why does the pragmatic permeability manifest itself in the use of motion verbs, demonstratives, and locatives as opposed to other areas of deixis, or indeed, other nondeictic areas of pragmatics?

#### 3.1 *Pragmatic permeability*

From a theoretical linguistic standpoint, pragmatics is, arguably, not independent of real world localization in the way that other, related components of grammar, such as semantics, may be. Pragmatic interpretation requires assumptions or inferences about the speaker’s knowledge and beliefs about the world, whereas the interpretation of a lexical or syntactic referent does not vary depending on the context of discourse. I propose that pragmatics is permeable because of its link to contextualized assumption and inference. Contextual knowledge in a particular situation is far from given. Often times, even monolingual native speakers have to guess at the pragmatic intent of a speaker’s use

of an indexical expression, as in (2), taken from Green (1989:9 [emphasis in original]).

(2) *The dean expelled John because he discovered his secret.*

To whom does the italicized pronoun refer in this example? As Bourdieu has noted, “grammar defines meaning only very partially ... [S]chemes of interpretation used by those receiving the message ... may diverge ... from those which guided its production” (1991:38). Not all members of the same monolingual speech community will agree, all the time, on the pragmatic referent intended in a given expression, though there may be a consensus opinion. Thus, the use and interpretation of pragmatic referents are inherently inconsistent. This same inconsistency becomes “permeability” in the case of transfer from another language, if and when speakers of this other language coincide in interpreting a pragmatic referent differently from the monolingual consensus.

Not all languages interpret contextual knowledge in the same way. Talmy pointed out that different cultures and languages require different ways of looking at the same situation, and “some pre-selections of schematization are so pervasive ... that they can easily go unnoticed until one steps over to another language/culture” (1983:267). Thus, one could assert that bilinguals may tend to use the pragmatic schemata of their first language when speaking their second language because language learners are often unaware that points of reference can vary subtly across languages as they do with respect to deictics in Catalan and Spanish.<sup>1</sup> This unfamiliarity alone could potentially lead Catalan speakers to unconsciously transfer into Spanish the broad pragmatic scope associated with motion verbs, demonstratives, and locatives in Catalan. Indeed, in situations of second language acquisition, strategies of pragmatic reference are very frequently transferred from the learner’s first language, as demonstrated in Koike (1995).

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<sup>1</sup> Of course, these pragmatic schemata are related, in a more general sense, to different cultural conceptualizations of events across languages, which may extend well beyond notions of speaker and addressee position. Such is the case of the differentiation of the two Spanish verbs *sacar* ‘to take out’ and *quitar* ‘to remove’ versus the lack of such a distinction in Catalan, which has only the verb *treure* ‘to take out / remove’. Not surprisingly, in areas where Catalan is spoken as well as Spanish, these two Spanish verbs are sometimes used innovatively.

### 3.2 *Transfer involving motion verbs, demonstratives, and locatives in Catalan Spanish*

Why, in particular, should the specific deictics under examination be a site of pragmatic transfer from Catalan to Spanish when there are many other deictics, such as the personal pronoun series and the temporal adverbs, that do not show such transfer? I propose two specific linguistic motivations: pragmatic scope differences and informational load. Unlike the deictics under investigation, the personal pronouns and the temporal adverbs do not differ in pragmatic scope in Catalan and in Spanish. Furthermore, the informational load carried by these deictics is very different from that of the motion verbs, demonstratives, and locatives, which all carry their pragmatic scope somewhat secondarily. That is, the most important informational component of the motion verbs is the concept of motion. The most important informational component of the demonstratives is the qualification of the person or thing that they modify as limiting adjectives. The most important informational component of the locatives is the [+ location] feature they specify for the verb that they modify as adverbs. Perhaps deictic reference, in terms of pragmatic scope, is not primary to the meaning of all of these words. In contrast, personal pronouns' foremost informational role is deictic with primary emphasis on pragmatic scope in the *I/you/he* and *we/you/they* distinctions, and temporal adverbs do not even include pragmatic scope.

That the role of pragmatic scope in the usage of motion verbs, demonstratives, and locatives may be secondary in informational load to other, more primitive meanings supports the argument given earlier that the transfer associated with these words in Catalan Spanish is manifest as a reduction of lexical oppositions. If such is the case, this reduction may perhaps be a natural result of the fact that the lexical oppositions that contrast the pragmatic scope of motion verbs, demonstratives, and locatives no longer contrast the primary informational content of these words. Such an internal development has a precedent. Solé & Solé (1977:110) have pointed out that in everyday spoken (monolingual) Spanish, the distinction between *ese* and *aquel* is often blurred, and *aquel* is used less and less frequently. This reduction is likely due to the loss of a primary, or fundamental, pragmatic scope contrast between these two words. Additionally, some of the subsystems examined here can also be observed in similar flux elsewhere, such as *ir/venir* in some Caribbean and many US border dialects, perhaps for the same reason.

#### 4. *Summation*

There is still much debate today in the language-contact literature as to how much social and linguistic factors each contribute to motivating change in the subsystems of one language in contact with another. The present research has lobbied for linguistic motivations of pragmatic permeability and transfer, demonstrating that new pragmatic structures can enter a language where there are *no* gaps or superficially parallel structures present in existing linguistic paradigms. I submit that, wherever there is a difference in the pragmatic scope interpretation associated with reference in Catalan and Spanish, there will be *potential* permeability in pragmatic reference and thus *potential* for pragmatic transfer (from either language to the other). Of course, the realization of this potential may depend on various other linguistic or social factors.

#### 5. *Case in point*

This final section provides an example of a nondeictic, potentially permeable pragmatic system in which Catalan and Spanish again display diverging pragmatic scope. In Catalan rhematization, one takes information known to both the speaker and hearer into pragmatic consideration, whereas in Spanish rhematization, one only considers information known to the speaker. In all of the examples to follow, rhematic constituents appear in capital letters.

##### 5.1 *Rhematization in Catalan*

Consider first Catalan rhematization in examples (3a) and (3b), taken from Vallduví (1992).

- (3) a. *MOLTS* *AMICS* *té* *la Núria.*  
       many friends has Núria
- b. *MOLTS* *AMICS* *la Núria* *té.*  
       many friends Núria has

As (3a) and (3b) show, Catalan has free constituent order following a rhematic object. Inversion of the subject is possible, but not necessary. Vallduví situated his pragmatic analysis in the literature of focus (F) / open-proposition (OP) structure where the open-proposition is known to the speaker and the hearer and the only new information is the focus. Different [F, OP] pairs provide different “packaging” interpretations; in (3a) and (3b) above, OP = ‘Núria has x’, and F = ‘many friends’.

While traditionally rhematization has been viewed as a wh-movement operation, parallel to wh-question formation, Vallduví demonstrated that this

analysis is not acceptable in Catalan, because a *wh*-movement would necessarily trigger subject-verb inversion, and as seen in (3b), subject inversion need not occur in Catalan. Vallduví's conclusion was that rhematization is actually not a *wh*-movement in Catalan, but rather a process of multiple right-dislocations of all elements except the focus itself, which remains in situ. An important consequence of this conclusion was that when multiple right-dislocation occurs, the dislocated phrases can end up in any order, as indicated in examples (4a) and (4b), which are the syntactic representations of (3a) and (3b):

- (4) a. [IP (pro)<sub>i</sub>] [e]<sub>v</sub> *MOLTS AMICS*] *té<sub>v</sub>*, *la-Núria<sub>i</sub>*.  
           many friends       has Núria
- b. [IP (pro)<sub>i</sub>] [e]<sub>v</sub> *MOLTS AMICS*] *la-Núria<sub>i</sub>*, *té<sub>v</sub>*.  
           many friends       Núria       has

Thus, we see that in Catalan, speakers move only the OP, that is, information that can be defined pragmatically as [+s, +a]. In this language, rhematization exhibits the same pragmatic scope that the motion verbs, demonstratives, and locatives exhibit; discourse presuppositions are referenced with regard to the speaker and the interlocutor.

### 5.2 Rhematization in Spanish

In contrast to Catalan, Spanish rhematization involves movement of the information known only to the speaker. This movement is syntactically a left dislocation of the emphatic constituent (Hernanz & Brucart 1987).

- (5) a. \* [O' [COMP *LAS ACELGAS<sub>i</sub>*] [O *María detesta t<sub>i</sub>*]]  
           chards                               Mary       hates
- b. [O' [COMP *LAS ACELGAS<sub>i</sub>*] [O *detesta María t<sub>i</sub>*]]  
           chards                               hates       Mary

Example (5a) is unacceptable in Spanish because of the lack of subject-verb inversion. The inversion is obligatory for well-formedness, as in (5b), because rhematization qualifies as *wh*-movement in Spanish, and all *wh*-movement in Spanish necessarily triggers subject-verb inversion. Thus, there exists an important difference in the way Catalan and Spanish represent [F, OP] structure at the surface: Catalan moves [OP] and Spanish moves [F]. In Spanish rhematization, speakers move only information that can be defined pragmatically as [+s]. The pragmatic scope of rhematization in Spanish is thus consis-

tent with the pragmatic scope of Spanish motion verbs, demonstratives, and locatives; discourse presuppositions are centered around the speaker only.

### 5.3 *Rhematization in Catalan Spanish*

Examples from my interviews illustrate that, at times, some individuals in Barcelona do not invert the subject and the verb in rhematic sentences in Spanish, as in (6) and (7).

(6) EN CATALÁN yo tengo libros publicados.  
in Catalan I have books published

(7) DOS HERMANOS Juan perdió en la guerra civil.  
two brothers John lost in the civil war

The examples in (6) and (7) represent a possible syntactic manifestation of the same pragmatic transfer from Catalan to Spanish that is manifested with certain deictics; i.e., gapless transfer in pragmatic scope. These examples from an area of pragmatic reference other than deixis suggest that, in addition to certain deictics, nondeictic elements of pragmatic reference in Spanish that are scoped differently from corresponding elements in Catalan may be permeable in this contact situation. This tentative evidence of a more generalized pragmatic permeability in this contact variety of Spanish furnishes an important contribution to research on language transfer, which has thus far mostly concentrated on phonological, semantic, and syntactic transfer. Not only can pragmatic transfer occur in the absence of structural gaps and parallels, but perhaps it is even a predictable and productive process in this variety.

## REFERENCES

- Bourdieu, Pierre. 1991. *Language and Symbolic Power*. Cambridge: Harvard University Press.
- Edwards, Viv. 1986. *Language in a Black Community*. San Diego: College-Hill Press.
- Green, Georgia. 1989. *Pragmatics and Natural Language Understanding*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Hernanz, María Lluïsa & José María Brucart. 1987. *La sintaxis*. Barcelona: Editorial Crítica.
- Koike, Dale. 1995. "Transfer of pragmatic competence and suggestions in Spanish foreign language learning". In *Speech Acts Across Cultures*, ed. by Susan Gass & Joyce Neu, 257-281. Berlin: Mouton de Gruyter.

- Milroy, Lesley. 1987. *Language and Social Networks*. Second Edition. Oxford: Basil Blackwell.
- Silva-Corvalán, Carmen. 1994. *Language Contact and Change: Spanish in Los Angeles*. Oxford: Oxford University Press.
- Solé, Yolanda & Carlos Solé. 1977. *Modern Spanish Syntax*. Lexington, Mass.: D. C. Heath and Company.
- SPSS® 6.1 for the Macintosh [computer software]. 1995. Chicago: SPSS Inc.
- Talmy, Leonard. 1983. "How languages structure space". In *Spatial Orientation: Theory, Research, and Application*, ed. by Herbert Pick & Linda Acredolo, 225-282. New York: Plenum Press.
- Vallduví, Enric. 1992. "Focus constructions in Catalan". In *Theoretical Analyses in Romance Linguistics*, ed. by Christiane Laeufer & Terrell A. Morgan, 457-479. Amsterdam: John Benjamins.
- Vann, Robert E. 1995. "Constructing Catalanism: Motion verbs, demonstratives, and locatives in the Spanish of Barcelona". *Catalan Review* 9.253-274.
- \_\_\_\_\_. 1996. *Pragmatic and Cultural Aspects of an Emergent Language Variety: The Construction of Catalan Spanish Deictic Expressions*. Ph.D. dissertation, University of Texas at Austin.
- \_\_\_\_\_. 1997. Pragmatic and sociolinguistic aspects of Spanish deictic expressions in Barcelona". In *1996 Mid-America Linguistics Conference Papers*, ed. by Clifton Pye, 478-484. Lawrence, KS: Department of Linguistics, The University of Kansas.
- \_\_\_\_\_. Forthcoming. "An empirical perspective on practice: Operationalizing Bourdieu's notions of linguistic habitus". In *Proceedings of Bourdieu: Language, Culture, and Education. An International Conference*, April 17-18, 1997, Southampton, England.
- Weinreich, Uriel. 1968. *Languages in Contact*. The Hague: Mouton.



# OBJECT SHIFT IN OLD FRENCH\*

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## 0. *Introduction*

The phenomenon of Object Shift (OS) in the Germanic languages has provided substantial support for syntactic movement driven by morphological feature-checking, for configurational properties of clause-level functional categories, and for word order variation produced by their interaction. This article brings to light a type of Romance OS which targets the neuter pronoun *ce* 'it' in Old French (OF) and Middle French (MF), and which, on the face of it, appears to be of a fundamentally different nature from Germanic OS. First, OF/MF OS results in OV sequences, while in the comparable Germanic (SVO) languages, OS always gives VO word order. Second, in contrast to Germanic OS, OF/MF OS is attested with infinitives and periphrastic verb forms. I will argue, however, that OS in the two language families is fundamentally the same, and that the differences lie in the functional structure of clauses in OF/MF, and in the head targeted by verb movement. In addition to bringing to light a new instance of OS, this article also confirms crucial aspects of recent analyses proposed for Germanic OS.

## 1. *The properties of direct object ce*

In contrast to Modern French, the neuter pronoun *ce* 'it, this, that' is widely used in both OF and MF in all grammatical functions, subject, direct object (DO) and object of P.

- (1) a. *Morz est ses sires, ce li poise.* (Y2093)  
dead is her lord this to-her grieves  
'Her lord is dead, this grieves her.'

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\* I am grateful to the LSRL participants in general, and to Viviane Déprez, Johan Rooryck, Barbara Vance and Deborah Arteaga in particular for their insightful comments and suggestions. They are, of course, in no way responsible for the shortcomings of this article.

- b. *Li rois respont: "Ce sai ge bien ..."* (E0059)  
 the king answers this know I well  
 'The king answers: 'This I know well ...''
- c. ... *de ce s'est Crestiens vantez.* (E26)  
 of this is Chrétien boasted  
 '... of this Chrétien has boasted.'

Pronominal *ce* is clearly a non-clitic element. It regularly occupies first position in a matrix clause, triggering inversion of the subject and verb, as required by the V2 status of OF (1b). It can also occur in isolation, be modified by adjectives such as *meïsmes* 'even', *tout* 'all', and be conjoined, all properties known to be impossible for clitic pronouns.

- (2) a. ... *et ce, comant pot avenir?* (P2377)  
 and this how was-able to-happen  
 '... and this, how was it able to happen?'
- b. ... *et tout ce fesoit Boorz et Hestor qui*  
 and all this did Boorz and Hestor who  
 '... and Boorz and Hestor, who  
*vouloient prendre le roi.* (Ar112-49)  
 wanted to-take the king  
 wanted to take the king, did all this.'
- c. *Ne me dites ne ce ne quoi ...* (E2767)  
 neg me tell not this not whatever  
 'Tell me neither this nor that ...'

Because the referent for *ce* is almost always a proposition or a piece of discourse, rather than an entity, it is a common discourse linker. As a result, *ce* is a prime candidate for topicalization; indeed, in the vast majority of examples from my corpus (83%), it occurs clause-initially, in embedded as well as matrix clauses.<sup>1</sup> However, DO *ce* can occupy a number of positions in a

<sup>1</sup> The data were drawn from the following texts: Conservative OF (12th-century prose, 12th- and 13th-century verse): Chrétien de Troyes, *Cligès*, *Yvain (ou le Chevalier au Lion)*, *Le Chevalier de la Charrette (Lancelot)*, *Érec et Énide*, *Le Roman de Perceval*; Bérout, *Tristran*; Conon de Béthune, *Les Chansons*; Philippe Mouskes, *Chronique rimée*; Huon le Roi, *Le Vair Palefroi*, *La Male Honte*; Guillaume (dit LeClerc), *La Male Honte*; Innovative OF (13th-century prose): *La Mort le Roi Artu*; Middle French (14th and 15th centuries): Jehan de Joinville, *La vie de Saint Louis*; Philippe de Mezieres, *L'Estoire de Griseldis*; *Les Cent Nouvelles Nouvelles* (anonymous); Philippe de Vigneulles, *Les Cent Nouvelles Nouvelles*; Rabelais, *Gargantua, Le Tiers Livre* (1534, 1543); Classical French (16th and 17th centuries): Marguerite de Navarre, *Heptaméron*; Bonaventure des Periers, *Nouvelles*

clause, and in examples where another constituent is the topic (or in the absence of topicalization), an intriguing pattern occurs. If the lexical verb is infinitival, DO *ce* never follows it; rather, it precedes the infinitive and follows any matrix material.

- (3) *Mes la reïne ne pot ce croire, ...* (Ar44-8)  
 but the queen neg could this to-believe  
 'But the queen couldn't believe this, ...'
- (4) ... *les gens qui ont accoustumé a ce faire, getent leur*  
 ... the people who have accustomed to this to-do throw their  
 '... the people who are accustomed to doing so throw their open  
*roys desliees parmi le flum du soir.* (StL189)  
 nets untied among the river of-the evening  
 nets into the evening river.'

If the lexical verb is a past participle, DO *ce* immediately precedes the participle:

- (5) *Sire, por coi avés vos ce fait?* (Ar148-53)  
 Lord, for what have you this done  
 'Lord, why have you done this?'
- (6) *Alors, après ce dit, ledit chareton se mist en voie ...*  
 then after this said the-said wagoner self put in way  
 'Then, after he said this, the said wagoner set off ...'  
 (CNNV82-79)

If the lexical verb is finite, DO *ce* occurs in two positions. One is post-verbal, the otherwise canonical DO position; while this is unattested in Conservative OF (COF), it is increasingly common in Innovative OF (IOF) and MF.

- (7) *Et dit ce en admonnestant les hommes de non jamais*  
 and he-said this in admonishing the men of not never  
 'And he said this while admonishing the men to never  
*plus se confesser de telle chose à leurs femmes.*  
 more self to-confess of such thing to their wives  
 again confess such a thing to their wives.'  
 (CNNV72-84)

The second position is pre-verbal, following the subject, giving SOV order. This is attested almost exclusively in embedded clauses in COF in my corpus.

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*recreations et joyeux devis*; D'Eutrapel, *Les Balivermeries*; Benigne Poissonot, *L'este*; Jacques Yver, *Le Printemps*; Montaigne, *Les Essais*; Agrippa d'Aubigné, *Les Tragiques*.

- (8) ... *et quant li rois çou entendi, sus est saillis, ...*  
 and when the king this heard up is leapt  
 ‘... and when the king heard this, he leapt up ...’ (Chrnq19965)

To summarize, DO *ce* often does not occur in canonical DO position, even though OF and MF are SVO languages. In all periods, DO *ce* does not follow a non-finite verb, but must precede it; for non-topicalized *ce*, this gives the word order possibilities in (9a, b). I will refer to this as Short Shift (SS).

- (9) a. [V<sub>modal/auxiliary</sub> *ce* V<sub>infinitive/past participle</sub>] (OF, MF)  
 b. [(P+) *ce* V<sub>infinitive/past participle</sub>] (MF, CF)  
 c. [S *ce* V<sub>finite</sub>] (COF)  
 d. [S V<sub>finite</sub> *ce*] (IOF, MF)

With finite verbs, the situation changes over time. In COF, DO *ce* does not follow a finite verb; if not topicalized, it precedes the verb and follows the subject, as in (9c); I will refer to this as Long Shift (LS). In IOF and MF, non-topicalized DO *ce* follows a finite verb, as in (9d).

## 2. Object Shift

### 2.1 Object Shift in the Germanic languages

Many recent analyses of Germanic word order, including Collins & Thráinsson (1996), Bobaljik & Jonas (1996), and Roberts (1995), among others, argue for a process termed Object Shift. OS involves moving an object leftward outside of its VP, where the left edge of VP is identified by negation and manner adverbs, as in the Icelandic example in (10):

- (10) *Jón<sub>i</sub> las<sub>j</sub> bækurnar<sub>k</sub> [vP ekki [vP t<sub>i</sub> [v<sup>-</sup> t<sub>j</sub> t<sub>k</sub> ]]].*  
 John read the-books not  
 ‘John did not read the books.’ (Collins & Thráinsson 1996:394)

OS is characterized by three primary properties. The crucial property, first noted by Holmberg (1986), is that overt verb movement is a necessary condition for OS. Verb raising (to AgrS or C, depending on the analysis) occurs in V2 clauses with finite lexical verbs, and OS does as well (10). Where verb raising does not occur, i.e., in V2 clauses with non-finite lexical verbs or in non-V2 clauses, OS is impossible, as illustrated in the Swedish examples in (11) from Josefsson (1992:76).

- (11) a. *Anna har (\*den) inte sett \*(den).*  
 Anna has it not seen it  
 ‘Anna has not seen it.’

- b. *Anna lovade att (\*dem) inte tvätta \*(dem).*  
 Anna promised to them not wash them  
 'Anna promised to not wash them.'
- c. *Jag vet att Anna (\*den) inte ser \*(den).*  
 I know that Anna it not see it  
 'I know that Anna doesn't see it.'

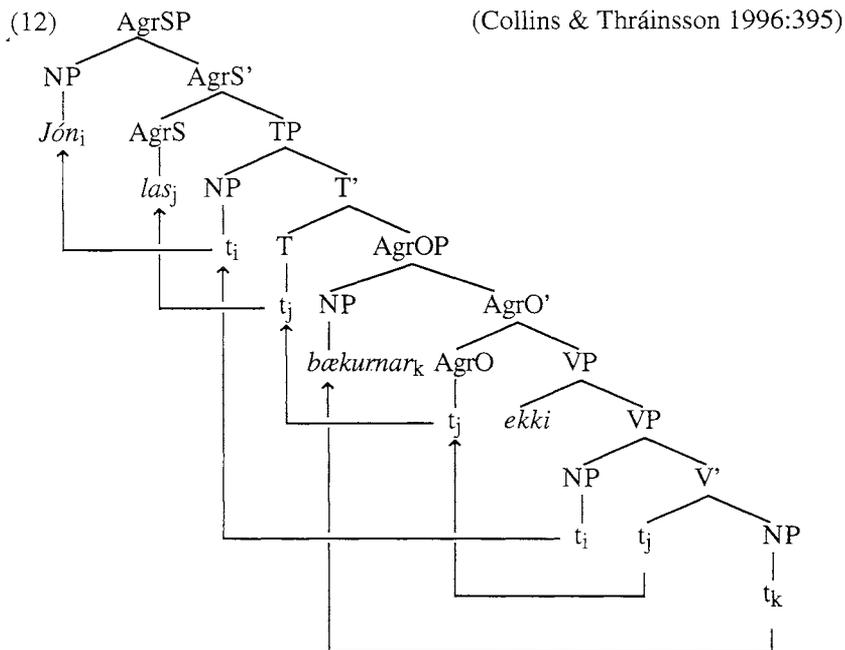
The Germanic languages differ in what types of nominals can undergo OS. In all except Modern English, personal pronouns undergo OS; full NPs also do so in Icelandic, German, Dutch, Yiddish, Frisian and Afrikaans (see Bobaljik & Jonas 1996). Finally, pronominal OS is obligatory whenever the verb movement requirement is met, while full NP OS appears to be optional.

Although OS strongly resembles scrambling in its leftward movement and clause-boundedness, there are good arguments that these are separate phenomena, as Haider, Olsen & Vikner (1995), Holmberg & Platzack (1995), Bobaljik & Jonas (1996), and Merchant (1996) point out. Scrambling licenses parasitic gaps, exhibits Weak Crossover effects, moves PPs, lands between two adverbials, moves to the left of the subject, and is used as a topicalizing or focusing device, while OS does none of these. On the other hand, OS requires verb movement and allows quantifier float, neither of which is true of scrambling.

Following Bobaljik & Jonas (1996) and Collins & Thráinsson (1996), the Minimalist framework of Chomsky (1995) provides an account of the correlation between verb movement and OS. Consider the structure in (12) (p. 324). First, verb movement to AgrO makes [Spec, AgrOP] equidistant from [Spec, VP] for the DO, thus allowing the DO to move to [Spec, AgrOP] without violating the Minimal Link Condition (MLC). Then, verb movement to T makes [Spec, TP] equidistant from [Spec, AgrOP] for the subject, allowing subject movement to [Spec, TP] (which, crucially, counts as an A-position). If the DO were to shift without verb movement to T, the subject would not be able to escape from the VP because movement past [Spec, AgrOP] would violate the MLC, causing the derivation to crash. Thus, verb movement and OS go hand in hand.

## 2.2 Short and long shift in Old and Middle French

In Section 1, Short Shift and Long Shift were defined as instances where DO *ce* precedes a non-finite lexical verb and a finite lexical verb, respectively (9). This characterization suggests that OS is at work here, but is this truly the



case? Importantly, the type of evidence identifying OS in Germanic is unavailable in OF/MF because negation and manner adverb placement is much less reliable as a diagnostic of the left edge of the VP here. Vance (1997) argues convincingly that negative adverbs in OF/MF (*pas*, *mie* ‘not’, etc.) adjoin to the left of TP, not VP, so OS could occur without crossing these. Moreover, the VP-edge delimiters that do exist, such as *einsi* ‘rather’, *laienz* ‘inside’, and manner adverbials, occur in the crucial contexts insufficiently often in my corpus to be used as a diagnostic for OS.

However, there is other evidence that OS is at work in positioning DO *ce* pre-verbally. First, two facts strongly suggest that this is A-movement. It is possible to float the quantifier *tout* ‘all’ in the SS position (between the auxiliary and its past participle).

- (13) “*Hé lasse! ce ai- je tout fet!*” (StL642)  
 alas this have I all done  
 “‘Alas! I have done all this!’”

As Merchant (1996) and Déprez (1991) note, quantifier float is not possible off of nominals in A' positions. Furthermore, in contrast to clause-initial instances of DO *ce*, the contexts in which SS occurs reveal that *ce* here is de-emphasized, rather than discourse-prominent, contrary to what would be expected with an A' sort of movement (i.e., scrambling). Finally, one other aspect of DO *ce*'s behavior argues that OS is involved. Both SS and LS appear to be obligatory in COF, and SS continues to be obligatory in IOF and MF (LS is lost after the COF period). This is identical to the situation in the Germanic languages, where pronominal OS is obligatory.

The parallel between Germanic pronominal OS and OF/MF DO *ce* leads us to another consideration. One of the proposed analyses for Germanic pronominal OS argues that this is an instance of cliticization, not true A-movement (Bures 1993, Holmberg 1986, Déprez 1990, Josefsson 1992). There are, however, sufficient differences between the Germanic pronominals undergoing OS and OF/MF DO *ce* to argue against extending this account to OF/MF. First, recall from Section 1 that *ce* displays typical non-clitic behavior in topicalized and post-verbal positions: it can be stressed, conjoined, modified and used in isolation. This contrasts with the Germanic pronouns, which can do none of these. Furthermore, it is not the case that *ce* is a clitic only in shifted positions, given that it can be modified in the SS position.

- (14) ... *le varlet, qui estoit el tertre, ot tout ce regardé, ...*  
           the page who was on-the hillock had all this watched  
           '... the page, who was on the hillock, had watched all this ...'

Third, if *ce* is a clitic, it is of a radically different type than the other object pronouns in the Romance languages. Unlike normal object clitics, it never precedes an auxiliary in compound verbs, and never clitic-climbs from an infinitive to a modal verb. Finally, in P + infinitive constructions, personal pronouns in OF and MF take the non-clitic form (although this begins to change in MF), suggesting that *ce* in this (SS) position is also not clitic. As a result, I conclude that OS *is* operative in SS and LS of *ce*, making this phenomenon more akin to Germanic full NP OS than to pronominal OS.

### 3. Accounting for Object Shift in Old and Middle French

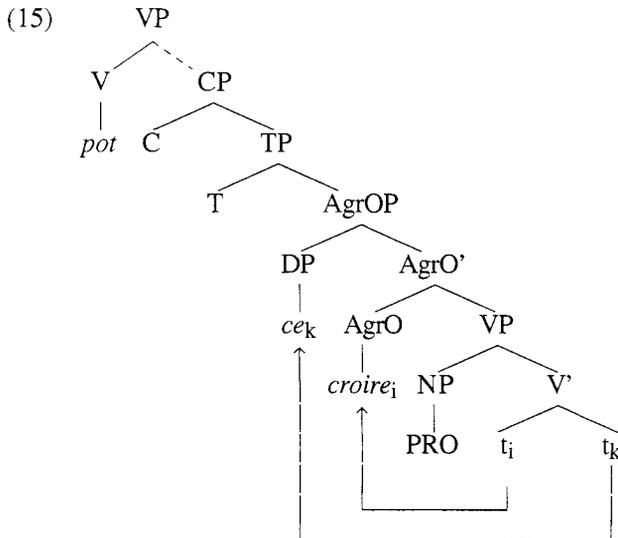
I am confident that the data described above and the conclusions reached concerning their significance accurately reflect an OS phenomenon in OF and MF, not previously highlighted in the literature, generative or otherwise. It should be noted, however, that the analysis I propose below represents a first stab at explaining the phenomenon, and I have no doubt that many of its

elements will require revision upon further research. The analysis treats as significant the fact that OS gives VO order in the Germanic SVO languages, but OV order in OF/MF. I suggest that all verbs in OF/MF undergo short verb movement only, to AgrO, while in the Germanic SVO languages, verb movement targets a position beyond AgrO, moving only finite verbs.

### 3.1 *Short shift with infinitival verbs*

Section 2.1 showed that while OS occurs in clauses with finite verbs in Germanic, it does not occur with infinitival verbs ([10] vs. [11b]). Recalling the analysis sketched there (12), why might this be? Quite plausibly, the answer lies in verb movement: analyses of Germanic OS maintain that verb movement does not occur in infinitival clauses (Josefsson 1992, Holmberg & Platzack 1995, Vikner 1995). The result is that OS cannot occur here without violating the MLC.

How do OF and MF differ, then, from the Germanic situation? Martineau (1990) argues convincingly that infinitives undergo Pollock's (1989) Short Verb movement, moving outside VP. In our terms, this means that the infinitival verb raises to AgrO, and normal OS movement places *ce* in [Spec, AgrOP], deriving the attested word order for *ce* in these types of clauses.



Thus, OF and MF differ from Germanic in that verb movement (albeit Short) does occur here, allowing OS to occur.

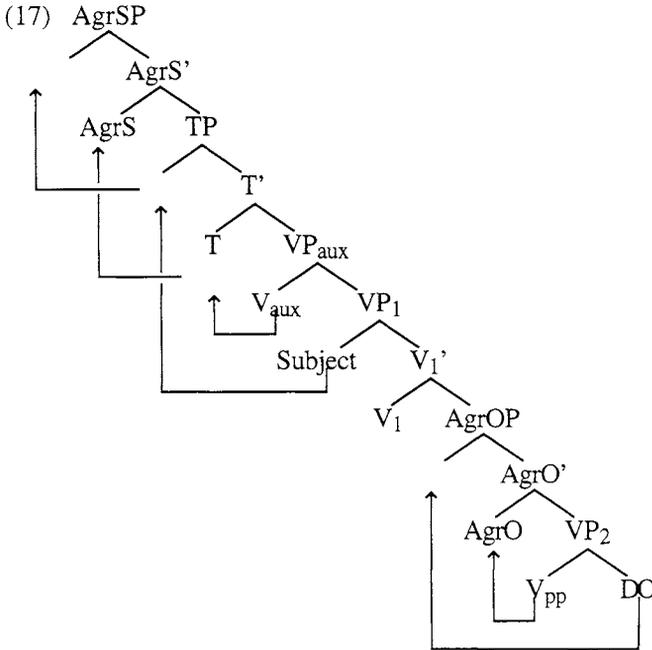
### 3.2 *Short shift with periphrastic verbs*

Turning next to OS in clauses with periphrastic verbs, it is important to note that, like Modern French, past participles in OF and MF agree in number and gender with their DO. Kayne's (1989) analysis of this phenomenon in Modern French suggests essentially that an AgrOP projection immediately dominates the participial projection, to which the participle moves. When a DO is extracted from the VP (via *wh*-movement, passive, cliticization, etc.), it moves through [Spec, AgrOP], checking agreement features.

I conclude from this that in periphrastic structures, AgrOP occurs between the auxiliary VP and the lexical VP projections; the need for this structure has been argued for independently by Travis (1991), Collins & Thráinsson (1996), and others. In addition, the past participle moves to AgrOP in OF and MF, just as in Modern French, allowing us to characterize SS as OS to a VP-internal AgrOP, rather than to a VP-external one.

- (16) [<sub>AgrSP</sub> AgrS [<sub>TP</sub> T [<sub>VPaux</sub> V<sub>aux</sub> [<sub>AgrOP</sub> DO [<sub>AgrO'</sub> AgrO+V<sub>pp</sub> [<sub>VPlex</sub> S [<sub>V'</sub> t<sub>pp</sub> t<sub>DO</sub>]]]]]]]]]

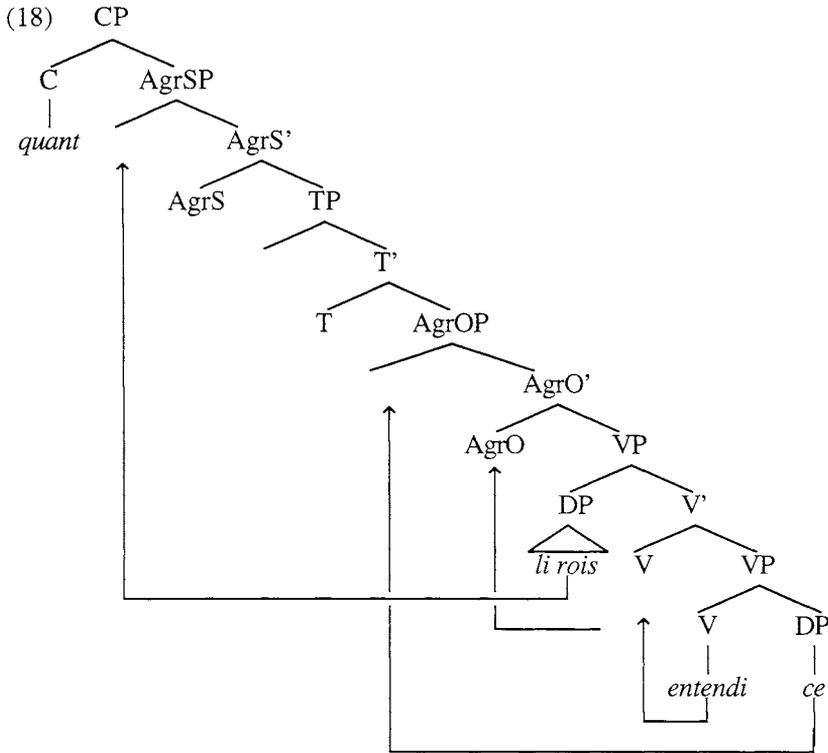
As it stands, however, (16) will yield an illicit structure. In order for the subject to move to [Spec, TP] when OS occurs, the lexical V (V<sub>pp</sub>) must raise to T, rendering [Spec, TP] and [Spec, AgrOP] equidistant from the subject in [Spec, VP]. In periphrastic structures, however, the lexical V is prevented from raising to T by the presence of the auxiliary verb, so the subject cannot raise and the structure should be ruled out. A possible resolution comes from a more articulated VP structure à la Larson (1988), where the subject is generated in a top lexical-VP layer; this structure is argued for on independent grounds by Collins & Thráinsson (1996) in their analysis of double OS in Icelandic (see [17], p. 328). In OF and MF, the past participle moves to AgrO, and *ce* to [Spec, AgrOP]; the subject, no longer dominated by AgrOP, is free to raise to [Spec, TP] once the auxiliary verb raises to T. Given this analysis, it is unnecessary to maintain that Germanic OS does not occur in this type of structure; rather, following Collins & Thráinsson (1996), OS does take place to the VP-internal AgrOP projection. The difference between the OF/MF and Germanic word orders results from the past participle moving past AgrO in Germanic, rendering the OS string vacuous.



### 3.3 Long Object Shift

As noted in Section 1, LS in OF and MF occurs almost exclusively in embedded clauses in COF in my corpus, and is characterized by *ce* occupying a position higher than the finite lexical verb, but lower than the subject (8). The majority of my examples are CPs introduced by *quant* 'when, since', *se* 'if', *si com* 'just as', or a wh-phrase. Following Vance (1997), these are regular, non-V2 embedded clauses with a complementizer in C, and the subject in [Spec, AgrSP] at Spell Out. One way to generate the OV order of LS would be to posit verb movement to AgrO, but no further, just as for SS. *Ce* then moves to [Spec, AgrOP] (see [18] p. 329).

Now, the subject must raise to [Spec, AgrSP]; note, however, that it cannot do so via [Spec, TP]: since the verb moves no further than AgrO, [Spec, TP] and [Spec, AgrOP] are not equidistant from the subject, and since both are A-positions, the movement is disallowed. However, if Vance (1997) is correct, [Spec, AgrSP] is *not* an A-position, but an A' position, and given a Relativized Minimality interpretation of the MLC (Collins & Thráinsson 1996, Kitahara 1994), the subject can move there directly.



The analysis proposed here admittedly flies in face of other analyses of OF and MF verb movement which argue for raising to AgrS. However, if it is correct, it could help explain why LS occurs only in embedded clauses. Vance (1997) argues that preverbal subjects in matrix clauses are checked for nominative Case in [Spec, TP], under government by AgrS. Suppose that this is so only when V moves to AgrS. Under the proposed analysis of LS, the verb in these structures does not raise to AgrS overtly, and so cannot enable Case checking; in the absence of any other checking mechanism, LS is ruled out. However, Vance argues that in embedded clauses, C checks nominative Case in [Spec, AgrSP] under government, so here verb movement is not crucial for nominative Case-checking, and LS can occur.

#### 4. Conclusion

I have argued that OF and MF possess an instance of OS, targeting the pronominal *ce*; if this preliminary analysis turns out to be correct, it has a number of advantages. First, the parallels and differences between Germanic OS and OF/MF OS can be attributed to differences in the head targeted by verb movement. In OF/MF OS, the verb, finite or nonfinite, raises in the overt syntax only as far as AgrO; this results in OV word order when *ce* shifts to [Spec, AgrOP]. In Germanic OS, only finite verbs move, and they move farther than AgrO, resulting in VO order. Second, the analysis offered here provides confirmation for crucial aspects of the OS analyses offered by Bobaljik & Jonas (1996) and Collins & Thráinsson (1996). OS to a position external to the VP requires verb movement outside VP in OF/MF, just as in Germanic. Furthermore, the availability of [Spec, TP] as an A-position, argued for in OF by Vance (1997) on independent grounds, is clearly crucial for the *ce* OS account, just as it is for the accounts of Germanic OS referred to above.

However, the analysis proposed here does leave unaddressed a number of important issues. First, many analyses of other aspects of OF/MF syntax argue that finite verbs always overtly raise at least as far as AgrS; my analysis suggests that this is not true, at least when LS occurs in COF. Second, the above analysis is incompatible with approaches to Stylistic Inversion in OF which rely on the subject remaining in situ; use of the layered VP, with the subject in top layer, predicts that we should find combinations of SS and Stylistic Inversion like (19a), but not (19b).

- (19) a. [ XP V<sub>aux</sub> Subject *ce* V<sub>pp</sub> ]  
 b. [ XP V<sub>aux</sub> *ce* V<sub>pp</sub> Subject ]

Instead, (19a) is unattested in my corpus, and there is one example of (19b).

- (20) ... *sire, hui nos a ce fait li nains ...* (L5154)  
 lord, today to-us has .this done the dwarf  
 ‘ ... Lord, the dwarf did this to us today ... ’

Third, my analysis poses questions for the treatment of *ce* as opposed to object clitics; if both target a functional projection such as AgrOP, as many recent treatments of object clitics claim, then AgrOP must be VP-external for object clitics, but VP-internal for *ce*. Finally, the proposed analysis makes crucial use of Agr-projections; in more recent work (Chomsky 1995: Chap. 4), these are argued not to be present, and the implications that this move has for the analysis of *ce* clearly need to be addressed.

## REFERENCES

- Bobaljik, Jonathan D. & Diane Jonas. 1996. "Subject positions and the roles of TP". *Linguistic Inquiry* 27.195-236.
- Bures, Anton. 1993. "There is an argument for an LF cycle here". *Chicago Linguistic Society* 28 (2).14-35.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Collins, Chris & Höskuldur Thráinsson. 1996. "VP-internal structure and Object Shift in Icelandic". *Linguistic Inquiry* 27.391-444.
- Déprez, Viviane. 1990. *On the Typology of Syntactic Positions and the Nature of Chains*. Ph.D. dissertation, MIT.
- \_\_\_\_\_. 1991. "Parameters of object movement". In *Studies on Scrambling: Movement and Nonmovement Approaches to Free Word-Order Phenomena*, ed. by Norbert Corver & Henk van Riemsdijk, 101-152. Berlin: Mouton de Gruyter.
- Haider, Hubert, Susan Olsen & Sten Vikner. 1995. "Introduction". In *Studies in Comparative Germanic Syntax, Vol. 1*, ed. by Hubert Haider, Susan Olsen & Sten Vikner, 1-46. Dordrecht: Kluwer Academic Press.
- Holmberg, Anders. 1986. *Word Order and Syntactic Features in the Scandinavian Languages and English*. Ph.D. dissertation, University of Stockholm.
- Holmberg, Anders & Christer Platzack. 1995. *The Role of Inflection in Scandinavian Syntax*. Oxford: Oxford University Press.
- Josefsson, Gunlög. 1992. "Object Shift and weak pronominals in Swedish". *Working Papers in Scandinavian Syntax* 49.59-94. Trondheim: Linguistics Department, University of Trondheim.
- Kayne, Richard. 1989. "Facets of Romance past participle agreement". In *Dialect Variation and the Theory of Grammar*, ed. by Paola Benincà, 85-103. Dordrecht: Foris.
- Kitahara, Hisatsugu. 1994. *Target Alpha: A Unified Theory of Movement and Structure-Building*. Ph.D. dissertation, Harvard University.
- Larson, Richard K. 1988. "On the double object construction". *Linguistic Inquiry* 19.335-391.
- Martineau, France. 1990. *La montée du clitique en moyen français: une étude de la syntaxe des constructions infinitives*. Ph.D. dissertation, University of Ottawa.
- Merchant, Jason. 1996. "Object scrambling and quantifier float in German". *North East Linguistic Society* 26.179-193.
- Pollock, Jean-Yves. 1989. "Verb movement, Universal Grammar, and the structure of IP". *Linguistic Inquiry* 20.365-424.
- Roberts, Ian. 1995. "Object movement and verb movement in early Modern English". In *Studies in Comparative Germanic Syntax, Vol. 1*, ed. by Hubert Haider, Susan Olsen & Sten Vikner, 269-284. Dordrecht: Kluwer Academic Press.

- Travis, Lisa de Mena. 1991. "Inner aspect and the structure of VP". Paper presented at the Annual Meeting of the North East Linguistic Society, University of Delaware.
- Vance, Barbara. 1997. *Syntactic Change in Medieval French: Verb-Second and Null Subjects*. Dordrecht: Kluwer.
- Vikner, Sten. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford: Oxford University Press.

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