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MICROVARIATION IN SYNTACTIC DOUBLING

Sjef Barbiers | Olaf Koeneman | Marika Lekakou | Margreet van der Ham

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MICROVARIATION IN SYNTACTIC DOUBLING—AN INTRODUCTION

Sjef Barbiers

ABSTRACT

This introduction discusses some reasons for doing large-scale microvariation research on syntactic doubling. It provides an overview of the types of syntactic doubling phenomena attested so far, the issues that they raise and the types of analyses that have been proposed.

1. SYNTACTIC DOUBLING[1]

The syntax of natural language can be defined as the set of rules or principles according to which morphosyntactic features are combined into morphemes, morphemes into words, words into phrases, and phrases into sentences. According to the Principle of Compositionality, one of the leading hypotheses of

[1]The chapters in this volume are a selection of the papers presented at the Edisyn workshop on Syntactic Doubling that was organized at the Meertens Institute in Amsterdam, March 16–18, 2006. All chapters were assessed by two anonymous reviewers and by the editors. Since the chapters start with an abstract, they are not summarized in this Introduction.

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modern linguistic research, the meaning of a complex expression is determined by the meanings of its constituent expressions and the rules used to combine them.[2] If this is correct, every constituent should contribute to the meaning of the complex. From this point of view, syntactic doubling is an unexpected phenomenon. In syntactic doubling, a constituent (i.e., a morphosyntactic feature, morpheme, word, or phrase) is expressed two or more times. For example, in the colloquial English sentence in (1a), negation is expressed three times, whereas Standard English would use only one negative element (1b). The construction in (1a) is known as negative concord.

(1) a. At the end of the month, nobody ain't got no money.
b. At the end of the month, nobody has money.

Since the additional negative elements in (1a) do not yield a meaning different from (1b), the question arises as to why these elements are there, or even, how they can be there. Normally, when we interpret a sentence, it is impossible to simply ignore the presence of some of the constituting elements, and that is exactly what seems to be necessary in (1a) to arrive at the intended interpretation. These questions are important, because syntactic doubling is a pervasive and very frequent phenomenon, and by no means restricted to negative elements.

The Principle of Compositionality is primarily relevant for semantic research. Its syntactic counterpart, the Economy Principle, states that language design is maximally economical and efficient.[3] According to this principle, there should be no superfluous steps and elements in the derivation of a syntactic structure. The Economy Principle is one of the reasons why current generative syntactic research concentrates on dependencies, such as the dependency between the argument position of a wh-word and the fronted position in which it surfaces, and syntactic agreement phenomena, such as the agreement between a subject and a finite verb. Both are considered to be imperfections that a language conceivably could do without, since they involve seemingly superfluous steps or elements.[4] Syntactic doubling, of which agreement is in fact a subcase, should be part of the list of imperfections, as it seems to violate economy as well.

Syntactic doubling may provide us with a window on pure syntax, i.e., on those aspects of syntax that are independent of building a complex meaning. This does not imply, however, that doubling never contributes to the information that is conveyed by a sentence. Even when it does not contribute to the meaning in the narrow sense, doubling can have a discourse function, for example, in dislocation constructions, where a constituent can be presented as a contrastive topic. Therefore, for each doubling construction, we have to ask if it

[2]The Principle of Compositionality is commonly attributed to Frege (1892).
[3]The Economy Principle was proposed in Chomsky (1995).
[4]Cf. Chomsky (2001).

involves purely syntactic doubling, doubling with a semantic effect, or doubling with a discourse function.

It is possible that there is more syntactic doubling in natural language than meets the eye. Suppose we take subject–verb agreement to be the default, given that so many languages have it. On this perspective, doubling of morphosyntactic features of the subject is obligatory. For cases where such doubling is not visible, it must then be assumed that there is abstract doubling. For finite verbs, there are two relevant cases of invisibility: (i) absence of finite inflection; (ii) absence of the subject. An example of the first case is given in (2b), where abstract first person singular inflection is taken to be present on the verb on the basis of the contrast with (2a). Similarly, it may be necessary to assume for languages that do not have finite verb inflection at all (e.g., Chinese) that there is abstract inflection in the whole paradigm. An example of the second case, absence of the subject, is the well-known pro-drop phenomenon, e.g., in the Italian sentence in (2c).

(2)	a.	He walk-s	(-s: 3p, singular)	(English)
	b.	I walk-Ø	(-Ø: 1p, singular)	(English)
	c.	Ø ti am-o	(Ø: I=1p, singular)	(Italian)

If doubling is the default case in certain syntactic domains, the question arises under which circumstances one of the doubles can or must be unpronounced. It is clear that there are language-specific and even morpheme-specific rules. For example, in (2a) both the subject pronoun and the agreement morpheme have to be pronounced, in (2b) the agreement morpheme has to be unpronounced, and in (2c), the subject pronoun can optionally be pronounced but the agreement morpheme must be pronounced. An advanced morphosyntactic theory should be able to explain these properties and cross-linguistic differences. More generally, the syntactic researcher should be aware of the possibility that there is abstract doubling.[5]

2. SYNTACTIC MICROVARIATION

Modern syntactic research has primarily focused on idealized idiolects, often standard languages, and there are good methodological reasons for this choice. Our current state of syntactic knowledge, however, calls for an extension to large-scale microcomparative syntactic research.[6] Morphosyntactic feature specifications, e.g., for gender, number, person, definiteness, tense, aspect, and

[5]Two interesting examples of proposals for abstract doubling in the realm of focus particles are Bayer (1996) and Kayne (2000).

[6]Cf. Kayne (2000), Barbiers (in press) for discussion.

negation, play a central role in modern syntactic research, and cross-linguistic variation in feature specifications is hypothesized to correlate with other syntactic differences such as word order variation and various types of ellipsis.[7] More fine-grained data are necessary to investigate minor morphosyntactic differences between closely related language varieties, and the number of data and language varieties involved should be large enough to test hypothesized correlations in a reliable way. In the words of Kayne, large-scale microcomparative syntactic research comes closest to a language laboratory where one could do experiments with languages by altering minor properties of a language and observe which other properties change as a result of this.[8]

The insight that large-scale microcomparative syntactic research is required to make the next steps towards understanding the syntax of natural language has led to a considerable number of dialect syntax projects recently: the ASIS project on Northern Italian dialects, the FRED project on English dialects, Scandiasyn on Germanic Scandinavian dialects, Findiasyn on dialects of Finnish, Cordial-Syn and Duplex on European Portuguese dialects, the SAND project on dialects of Dutch, and projects on varieties of Afrikaans, Swiss German, Basque, Breton, and Appalachian English.[9] There are several initiatives for similar projects elsewhere in Europe.

All of these projects cooperate in the framework of the European Dialect Syntax project (Edisyn).[10] Edisyn has two goals. One goal is to make all the dialect syntactic data that are collected in these projects available in an online network of databases with a common search engine, to support microcomparative syntactic research. The second goal is to study syntactic doubling phenomena, for the reasons discussed earlier, but also because the results of some of the dialect syntax projects suggest that syntactic doubling is much more frequent in substandard varieties than in standard varieties. For example, the negative concord phenomenon in (1a) occurs in many dialects of German, English, and Dutch, but it is absent in the corresponding standard languages. The SAND-data show the same for subject doubling, complementizer doubling, wh- and relative pronoun doubling, auxiliary doubling, agreement doubling (complementizer agreement). All of them are impossible in Standard Dutch but possible in substandard varieties.

If it is true that syntactic doubling phenomena are much more common and frequent in substandard varieties, this raises interesting questions about the differences between standard and substandard languages. Received wisdom has it that the main difference is socio-political, but here we may have identified a linguistic difference. The question is why such a difference should exist. One possible answer would be normative pressure, in which case we need to document the activities that normative grammarians undertook to get rid of doubling. For negative concord,

[7]This is a central hypothesis in the Minimalist Program that starts with Chomsky (1995).
[8]Kayne (2000, p. 5).
[9]Cf. http://www.dialectsyntax.org// for more information and links to these projects.
[10]http://www.meertens.nl/projecten/edisyn.

this may be possible,[11] but there is no evidence so far that the same would hold for other types of syntactic doubling. One could also ask why the tendency does not go in the opposite direction, such that syntactic doubling phenomena would be more typical for standard languages. A relevant observation for this question could be that syntactic doubling is also quite common in child language.[12]

3. TYPES OF SYNTACTIC DOUBLING

The chapters in this volume show that doubling of functional elements such as determiners, prepositions, complementizers, negation, auxiliaries, pronouns, agreement, comparative and superlative morphemes, tense and aspect morphemes is quite common. When lexical elements are doubled, they are usually doubled by a functional element, e.g., in many dialects a verb can be doubled by the meaningless auxiliary DO. Doubling involving two lexical elements seems to be much rarer and is totally absent in this volume. This may be accidental, however, as it is known that such doubling does exist. For example, duplication of a lexical verb has been attested (see Section 3.5.1). This section provides an overview of the various types of syntactic doubling that have been found, with an example of each type.

3.1. Doubling in the Nominal Domain

The types of doubling attested for nominal phrases include determiner doubling, ONE-insertion, various types of agreement, possessive, proximal and distal pronoun doubling.

3.1.1. Determiner Doubling

In some Germanic varieties determiners can be doubled. An example is Swiss German, which allows doubling of indefinite and definite articles.[13]

(3) a. ä ganz ä liebi frau. (Swiss German)
a really a lovely wife

b. de vil de schöner garte. (Swiss German)
the much the nicer garden

Double indefiniteness also occurs in Bavarian, Northern Swedish, and Northern Norwegian.[14] Frisian has an indefinite singular adjectival suffix that doubles the indefinite article and expresses high degree. This suffix can optionally

[11] Cf. Weiß (2004).
[12] Cf., e.g., Van Kampen (1997) for wh-doubling in Standard Dutch child language.
[13] Examples from Glaser and Frey (2006).
[14] Kalluli and Rothmaier (2006), Delsing (1993).

be combined with ONE, giving rise to tripling.[15] Double definiteness occurs in Faroese, Norwegian, and Swedish, with a definite determiner and a definite suffix on the noun.[16] This may also be analyzable as definiteness agreement. Multiple occurrence of a non-suffixal definite determiner exists in Modern Greek.[17]

In south-eastern varieties of Dutch, the numeral *één* 'one' can optionally cooccur with an indefinite article (4a). When *één* 'one' occurs, the construction expresses high degree. Since *één* 'one' is the stressed counterpart of *een* 'a', the features indefinite and singular are doubled.[18] Cases like (4a) can be taken to be a permutation of the construction in (4b). Since the construction in (4b) is also possible in Standard Dutch, it is not doubling that distinguishes dialectal Dutch from Standard Dutch under this analysis, but the possibility of permutation.[19]

(4) a. Je bent een raar kind (één). (South-eastern Dutch)
you are a strange kid (one)
You are a very strange kid!

b. één zo 'n raar kind. (Standard Dutch)
one such a strange kid

Definite determiner doubling is also attested in southern varieties of Dutch, but only in elliptical constructions, where the definiteness feature is represented twice, once in the article and once in the demonstrative:

(5) a. Hij wil den dieën hebben. (Southern Dutch)
he want the that have
He wants to have that one.

b. Hij wil (*den) dieën auto hebben. (Southern Dutch)
he want the that car have.

3.1.2. Agreement In Nominal Groups

Agreement should be considered a doubling phenomenon, as agreeing affixes by definition express one or more morphosyntactic features of an element elsewhere in the sentence (cf. also Section 1). Agreement is often obligatory and in that case it cannot be exploited to convey a special meaning or discourse status, unlike some of the doubling phenomena discussed in this book.

[15]Tiersma (1999), Barbiers (2005b).
[16]Cf. Julien (2005) for recent discussion.
[17]Cf. Alexiadou and Wilder (1998), Lekakou and Szendroi (2007).
[18]Cf. Perlmutter (1970) for this relation between English *one* and *a*.
[19]Cf. Barbiers (2005b) for description and analysis.

A first case of agreement is adjectival concord, which doubles morphosyntactic information such as gender, number, and definiteness that is present elsewhere in the nominal group, e.g., on the noun and/or the determiner. This is illustrated for gender agreement in French in (6).

(6)	un-e	bon*(-ne)	histoire	(French)
	a.FEM	good.FEM	story.FEM	

A second case involves case agreement, in which more than one element in a nominal group expresses the same case information. An example from German is given in (7).

(7)	ein-es	schön-en	Haus-es	(German)
	a.GEN.NEUT	nice.SUFF	house.GEN.NEUT	

A third case of agreement is found in Alemannic in examples like (8).[20] This type of doubling is restricted to family names and unique nouns referring to families. Although the nominal phrase diachronically is a singular genitive, in present-day Alemannic it behaves as a plural nominative, witness the plural agreement on the finite verb.

(8)	s	Nochbar-s	kumm-et	ooh.	(Alemannic)
	-s	neighbour-s	come-PL	also	

3.1.3. Possessive Doubling

Doubling of possessive pronouns is quite frequent. In colloquial varieties of German and Dutch, a possessive pronoun can double a full nominal phrase, as in (9a, b). There are also varieties that allow doubling of the possessive pronoun itself (9c, d). Doubling of the possessive pronoun in non-standard German and Dutch is only possible when the second pronoun is third person, even when the first pronoun is not third person (9e, f).[21]

(9)	a.	der Lola	ihr	Film	(Colloquial German)
		the Lola	her	film	
		Lola's film			
	b.	Jan	z'n	boek	(Colloquial Dutch)
		John	his	book	
		John's book			

[20] Cf. Brandner (this volume).
[21] Cf. Weiß (this volume).

c. eam sei Haus (Berlin German)
him his Haus
his house

d. hem z'n boek (Colloquial Dutch)
him his book
his book

e. meiner seiner (Berlin German)
mine his
mine

f. jouw (*je) boek (Colloquial Dutch)
your your book

3.1.4. Proximal And Distal Doubling

A final type of doubling inside nominal groups involves words like HERE and THERE. An example from Norwegian is given in (10a).[22] A slightly different construction is found in Afrikaans (10b), where proximity is expressed by a demonstrative and a proximal locative pronoun.

(10) a. den her-re (her) boka (her) (Norwegian)
the here.AFF here book.DEF here
this book here

b. in hier-die mooi land (Afrikaans)
in here-this beautiful country
in this beautiful country

3.2. Doubling in the Adjectival Domain

Doubling in adjectival phrases is found in comparative and superlative constructions. It has been reported for varieties of English and Dutch.[23] In the superlative, it may involve cooccurence of superlative MOST with a superlative suffix (11a), or it may involve addition of a superlative suffix to a suppletive superlative, as in (11b). The same possibilities exist for the comparative (11c, d).

(11) a. It is one of the most liveli-est towns that I know of. (App. English)

b. That was the best-est chocolate gravy I ever ate. (Colloq. American)

c. Then we can promote a more healthi-er environment. (Fiji English)

[22]Examples from Vangsnes (2006).

[23]Kortmann and Szmrecsanyi (2006) for English and Corver (2006) for Dutch.

d. Ik voel me wat beter-der. (Coll. Dutch)
I feel me what better-er
I feel somewhat better.

3.3. Doubling in the Prepositional Domain

3.3.1. Preposition Doubling

Preposition doubling is found in many language varieties.[24] An Icelandic example is given in (12). The construction has also been reported for Norwegian, Swedish, and English, although in the latter language it is restricted to relative clauses. We seem to have a case of pure syntactic doubling in (12), as the verb takes a prepositional complement in which the preposition is meaningless.

(12) Um hvað eruð þið að tala um? (Coll. Icelandic)
about what are you to talk about
What are you (pl.) talking about?

Cases like (12) should not be confused with cases like (13) in Colloquial Dutch. In (13), the preposition *tegen* 'against' is stranded by the R-pronoun *daar* 'there'. The combination of *daar* and *tegen* is doubled by the full PP *tegen die man* in left dislocated position.

(13) Tegen die man daar praat zij niet tegen. (Coll. Dutch)
against that man there talks she not against
She does not talk to that man.

A third type of P-doubling, illustrated in (14), occurs in directional and locational PPs.[25]

(14) a. Ich fahr uff Koostanz uffi. (Alemannic)
I drive on Konstanz on.DIR
I'll drive to Konstanz.

b. Es hanget a de Wand (d)anne. (Alemannic)
it hangs on the wall on
It is attached to the wall.

3.3.2. R-Pronoun Doubling

In some language varieties that have R-pronouns, these can be doubled. R-pronouns typically occur in languages in which P-stranding is only possible if the nominal complement of the preposition is replaced by an R-pronoun,

[24]Jónsson (this volume).
[25]Brandner (this volume).

such as German and Dutch.[26] In Upper German dialects, the R-pronoun can be doubled, as in (15).[27]

(15) Do ha-n-i it dr-a denkt. (Alemannic)
there have-N-I not there-upon thought
I didn't think about that.

3.4. Pronoun Doubling

Pronouns seem to be the prototypical candidates for syntactic doubling. In addition to the possessive pronouns discussed in 3.1.3 and the R-pronouns discussed in 3.3.2., doubling is found with subject pronouns, expletive pronouns, direct and indirect object pronouns, wh-pronouns, relative pronouns, and resumptive pronouns.

3.4.1. Subject Pronoun Doubling

Various types of subject pronoun doubling have been reported in the literature. It occurs, e.g., in Flemish, Brabantish, Northern Italian dialects, West Swedish, Finland Swedish, Colloquial Norwegian, Colloquial Finnish. Some examples are given in (16).[28]

(16) a. dat ze zij in Brussel werkt. (Flemish)
that she.w she.s in Brussels works
that she is working in Brussels.

b. Zij werkt zij in Brussel. (Brabantish)
she.s works she.s in Brussels
She is working in Brussels.

c. Marie ee zij daar niet mee te maken. (East-Flemish)
Mary has she.s there not with to do
Mary has got nothing to do with it.

d. Te ghe de vegnì anche ti. (Milanese)
you.w have to come also you.s
You have to come along as well.

[26]The pronoun is called R-pronoun because in Dutch all forms of its pronominal paradigm contain an /r/. R-pronouns in other language varieties do not necessarily contain an /r/. Cf. Van Riemsdijk (1978).

[27]Cf. Brandner (this volume) and Fleischer (2002).

[28]Cf. De Vogelaer and Devos (this volume), Van Craenenbroeck and Van Koppen (this volume) for Brabantish and Flemish; Poletto (this volume) for northern Italian dialects; Holmberg and Nikanne (this volume) for Colloquial Finnish, Vangsnes (this volume) for Colloquial Norwegian and Swedish. The West-Swedish example is from Levander (1909). The Finland Swedish example is from Östman (2006).

e. Ig ar ig sakt ig mier y gryt-un. (West Swedish)
I have I sure I more in pot.DEF
I surely have more in the pot.

f. An a han joort hi. (Finland Swedish)
he has he done it
He has done it.

g. Ne sai kaikki lapset samat oireet. (Coll. Finnish)
they got all children same symptoms
All the children got the same symptoms.

h. Jon/han har mye penger, han! (Coll. Norwegian)
Jon/he has much money he
John/he has a lot of money.

Several distinctions need to be made in this domain. Firstly, one type of subject pronoun doubling involves dislocation structures, i.e., sentences in which one occurrence of the subject is in the initial or final position of the clause and separated from it by an intonational break. An example is (16h).[29] The dislocation usually has a discourse effect, e.g., the dislocated subject is interpreted as a contrastive topic. It is clear that this type of doubling is not the same construction as subject pronoun doubling without dislocation (e.g., 16a, b). There is no clear discourse effect in the latter, and languages can have one of the constructions while disallowing the other.[30] For example, Colloquial Dutch allows the dislocation construction illustrated for Norwegian in (16h), but not doubling constructions of the type in (16a, b).[31] For non-dislocation cases like (16a), it has been claimed that the linearly first pronoun can never be more specified that the second one.[32] The second distinction must be made between doubling of pronouns, as in (16a, b, d, e–g) and doubling of full nominal constituents, such as (16c, h). Finally, we distinguish doubling and tripling. An example of tripling is (16e). It can also be found in various Flemish dialects and in colloquial Finnish.

[29]Cf. Cinque (1990) for a distinction between different types of dislocation structures.

[30]Nuyts (1995) claims that the subject doubling construction in the dialect of Antwerp expresses more empathy from the part of the speaker than a construction with one subject. If true, that could be a discourse effect. However, it is not very clear how the notion of empathy is defined. Eefje Boef (p.c.) tried to test this claim for various Flemish and Brabantish dialects by setting up situations which involve a lot of empathy and found that both doubling and non-doubling were allowed.

[31]Colloquial Dutch right-dislocation of the type found in (16h) differs from its colloquial Norwegian counterpart in that the first element of the doubling pair can only be a pronoun if the right-dislocated element is a pronoun.

[32]Cf. Nuyts (1995) for this observation and Barbiers, Koeneman, and Lekakou (2008b) for an extension to wh-doubling and an explanation.

3.4.2. Doubling By Expletives

Expletive constructions can be taken to involve doubling as well. This is most obvious for subjects, as in some languages the expletive pronoun occurs in a syntactic position that is otherwise restricted to subjects.[33] This is illustrated for English in (17). If doubling always involves the sharing of one or more morphosyntactic features, then this must be the case in expletive constructions too. Possible candidates are partitive or indefinite features.

(17) There is a bird on your shoulder. (English)

There is a striking asymmetry between subjects and objects, since expletive constructions like (18) with an object instead of a subject do not seem to be possible cross-linguistically:

(18) *John bought there a house. (English)
Intended interpretation: There was some house that John bought.

When the object is clausal, doubling by an expletive pronoun is possible:

(19) I really regret it that the parcel has not arrived. (English)

In languages with R-pronouns, this is also possible with clausal complements introduced by a preposition.

(20) Hij hoopt er op dat zij wint. (Dutch)
he hopes there on that she wins
He is hoping that she will win.

3.4.3. Direct And Indirect Object Pronoun Doubling

Many language varieties allow doubling of direct and indirect objects. As in the case of subject pronoun doubling, this may involve doubling of a phrasal object or indirect object by a pronoun, or doubling of a pronoun by a clitic. These constructions often involve dislocation constructions with a discourse effect. It is not clear if the type of non-dislocative doubling discussed in Section 3.4.1 (example (16a)) is ever possible for direct and indirect objects. In any case, there are language varieties that allow subject pronoun doubling but not doubling of direct and indirect object pronouns, e.g., the southern Dutch subject pronoun doubling varieties. Direct and indirect object doubling, or clitic

[33] Cf. Haegeman (this volume) and Carrilho (this volume) for expletive constructions in West-Flemish and European Portuguese that cannot be analyzed as instances of doubling.

doubling, is particularly well-known from Romance and Slavic languages. Some examples are given in (21).

(21) a. Lo vedo, Gianni (Italian)
him see.1 Gianni
Gianni, I see him.

b. Le di un regalo a mi madre. (Spanish)
to her gave-I a gift to my mother
I gave my mother a gift.

c. Petre mu go dade proektot
Petre him.DAT.CL it.ACC gave project-the
nemu. (Macedonian)
him. DAT
Petre did give the project to him.

3.4.4. WH-PRONOUN DOUBLING

In wh-pronoun doubling a wh-constituent is doubled by another wh-constituent. The first distinction to be made is clause-bound wh-doubling (short wh-doubling) and wh-doubling across clause boundaries (long wh-doubling). These two types of wh-doubling constructions are independent, as a language variety may allow one but not the other. Short wh-doubling is attested in Swiss German and in various Northern Italian dialects. Some examples are given in (22). As the examples show, the two wh-elements can be identical (22a), or different (22b).

(22) a. Wer isch da gsi wer? (Swiss German)
who is there been who
Who was there?

b. Sa alo magnà che? (Northern Italian)
what has-he eaten what
What did he eat?

In long wh-doubling constructions, a wh-pronoun in the initial position of an embedded clause is doubled by a wh-pronoun in the initial position of a higher clause. As in the case of short wh-pronoun doubling, the two (or more) wh-pronouns can be identical (23a) or different (23b). In a small number of Dutch varieties, the second pronoun in a doubling construction is a relative pronoun (23c). It is also possible for a wh-pronoun to double a wh-phrase (23d). The opposite order of pronouns in (23b, c) is never possible, which suggests the same generalization as in the case of non-dislocative subject pronoun doubling, i.e., the first pronoun cannot be more specified than the second pronoun.[34]

[34]Cf. Barbiers, Koeneman, and Lekakou (2008b).

(23) a. Wie denk je wie ik gezien heb? (Coll. Dutch)
who think you who I seen have
Who do you think I have seen?

b. Wat denk je wie ik gezien heb? (Coll. Dutch)
what think you who I seen have
Who do you think I have seen?

c. Wat/wie denk je die ik gezien heb? (dialectal Dutch)
what/who think you REL I seen have
Who do you think I have seen?

d. Wat denk je welk boek ik gekocht heb? (Coll. Dutch)
what think you which book I bought have
Which book do you think I have bought?

3.4.5. Doubling In Relative Clauses

3.4.5.1. Short relatives. In some language varieties a relative pronoun can cooccur with a complementizer. An example of this so-called doubly filled COMP effect is given in (24a). Doubly filled COMP is a theoretical notion from a stage of generative theory in which it was assumed that there was one clause-initial position, COMP, which could be filled by exactly one constituent in some languages but by two constituents in other languages.[35] In English, for example, the COMP position can be filled by a complementizer or by a relative pronoun, but not by both. Although complementizers and relative pronouns have different syntactic functions, it is not unlikely that certain morphosyntactic features are doubled here. For example, the relative pronoun and the complementizer in (24a) possibly share a definiteness feature.

(24) a. de man die da het verhaal verteld heeft (Brabantish)
the man REL.AGR that the story told has
the man who told me the story

b. de man die (*da) het verhaal verteld heeft (St. Dutch)
the man REL.AGR that the story told has

c. the man that told me the story (English)

3.4.5.2. Long relatives. In long relatives, the relative pronoun can sometimes be doubled. In such cases there is a relative pronoun that occurs in the initial position of the most deeply embedded relative clause and a relative pronoun in the initial position of the higher relative clause. An example is given in (25). Relative pronoun doubling is found both in subject and in object relatives.[36]

[35]Cf. Chomsky and Lasnik (1977).

[36]Cf. SAND Volume 1 (Barbiers et al. 2005) for different variants and their geographic distribution.

(25) de man die ik denk die het verhaal heeft verteld (East-Flemish)
the man REL I think REL the story has told
the man who I think told us the story

In some dialects, this type of doubling can be combined with the doubly filled COMP phenomenon discussed in 3.4.5.1. This is illustrated for Tyrolean in (26).[37]

(26) es Haus des *wos* du glapsch des *wos* die M.
the house REL C-REL you think REL C-REL the M.
gekaaft hot (Tyrolean)
bought has
the house which you think Maria bought

Another type of doubling in long relative constructions involves resumption. An example is given in (27).

(27) de man waar van ik denk dat ze hem
the man where of I think that they him
geroepen hebben (East. Dutch)
called have
the man who I think they have called

3.5. Doubling in the Extended Verbal Domain

In the doubling constructions described so far, at least one of the elements is functional, belonging to a closed class of elements with a primarily grammatical function. In the types of languages discussed in this volume doubling with two identical lexical elements is very rare. We have not found any such cases for adjectives or nouns. Prepositions do double, but they are often considered to be (semi-)functional elements as well. In the verbal domain, doubling also usually involves functional material, but there are exceptions.

3.5.1. Doubling Of Lexical Verbs

In some languages, including Spanish, Portuguese, Hungarian, Turkish, and Hebrew, a lexical verb is doubled when fronted. An example from Spanish is given in (28).[38]

[37]Cf. Alber (this volume) for data, analysis, and a different view on doubly filled COMP.
[38]Example from Vicente (2007).

(28) Leer, ningún estudiante ha leído este libro. (Spanish)
read.INF no student has read this book
As for reading, no student has read this book.

Some other languages use DO when a lexical verb is fronted and there is no auxiliary to carry finite inflection.

(29) Werken doet Jan niet. (Dutch)
work.INF does Jan not

Semantically empty DO that doubles a lexical verb also occurs in the so-called periphrastic DO construction as it is found in spoken German, Dutch, and English. An example from German is given in (30).[39]

(30) Sie tut ein Buch lesen. (Colloquial German)
she does a book read
She is reading a book./ She reads a book.

In present day Standard English, DO-support is restricted to the so-called NICE environments: negative and interrogative sentences, emphasis, ellipsis, and tags. In this use, DO seems to have lost all of its aspectual properties, such that it is even compatible with stative raising verbs like *seem*. In this respect, periphrastic DO in many dialects of Dutch is different, in that it is only compatible with dynamic verbs.[40]

3.5.2. Auxiliary Doubling

3.5.2.1. Double modals. Double modals are found in varieties of English. An example from Scottish English is given in (31).[41]

(31) He should can go tomorrow. (Scottish English)
He ought to be able to go tomorrow.

From the perspective of Standard English that allows only one modal per clause, this is a case of doubling. However, syntactic doubling was defined in the Introduction as multiple expression of the same constituent (i.e., morphosyntactic feature, morpheme, word, or phrase). In modal doubling of the type illustrated in (31) there are two distinct modals and each modal makes an independent semantic contribution. In languages that freely allow more than one modal per clause and in which these modals can be identical, such as Dutch, apparent doubling of a modal

[39]Example from Erb (2001).
[40]Cf. SAND Volume 2, Barbiers et al. (2008c).
[41]Example from Brown (1991).

always has semantic consequences. For example, in (32a) the modal can either have an epistemic or a dispositional interpretation but not both at the same time. In (32b), on the other hand, the first instance of *kunnen* 'can' has an epistemic interpretation, whereas the second instance has a dispositional interpretation.

(32) a. Jan kan schaatsen. (Dutch)
Jan can skate
Jan is able to skate.
It is possible that John is skating.
#It is possible that John is able to skate.

b. Jan kan best schaatsen kunnen. (Dutch)
Jan can best skate can.inf
It is perfectly possible that John is able to skate.

Thus, according to the definition in the Introduction, modal doubling is not a genuine case of doubling. In fact, modals seem to be the only type of auxiliary that do not allow real doubling, an observation that calls for an explanation.

3.5.2.2. Doubling of perfective auxiliaries. Perfective auxiliary doubling, i.e., doubling of HAVE or BE, is attested in varieties of German, French, Italian, and Dutch. Some examples are given in (33).

(33) a. On a eu mis de l'eau sur
one has had put of the.water on
les chaises. (Franco-Provençal)[42]
the chairs.
They have put water on the chairs.

b. I ha gässa cha und denn bin i
I had eaten had and then am I
hei gange. (Bavarian German)[43]
home gone
I had eaten and then I went home.

c. Co go bio magnà,… (Northern Italian)[44]
when have.1sg had eaten,…
when I had eaten…

d. Ik heb vandaag nog niet gerookt gehad. (Brabantish)[45]
I have today yet not smoked had.PCP
I haven't yet smoked today.

[42]Example from Carruthers (1994).
[43]Example from Poletto (2007).
[44]Example from Poletto (2007).
[45]Example from Barbiers, Koeneman, and Lekakou (2008a).

Here as well, the question arises as to whether the two instances of HAVE make independent semantic contributions. The following interpretations/functions could be suggested for perfective auxiliary doubling: (i) perfect tense in language varieties in which preterite tense was lost and substituted by the perfect tense; (ii) a perfect tense referring to an unspecified moment in the remote past; and (iii) the perfect tense of an inalienable possession (undative). For Brabantish and Limburgian Dutch it has been shown that none of these options apply. In these varieties, perfective auxiliary doubling seems to be a genuine case of semantically empty doubling.[46] For Franco-Provençal, it has been suggested the participle *eu* 'had' in doubling constructions has been reanalyzed as a particle, given that it also occurs with verbs that normally select *être* 'be' as their perfective auxiliary.[47]

In German and dialectal Dutch the passive auxiliary allows doubling in the perfect tense, as illustrated in (34b). At first sight, this does not look like doubling since (34b) contains the perfective auxiliary BE and the passive auxiliary BECOME and each of these auxiliaries makes its own contribution. However, the fact that in Standard Dutch the participle of the passive auxiliary (*geworden*) must be left out suggests that its presence is redundant and thus that we are dealing with a genuine case of doubling.

(34) a. De hond wordt geslagen. (Dutch)
the dog becomes beaten
The dog is being beaten.

b. De hond is geslagen geworden. (South-eastern Dutch)
the dog is beaten become
The dog has been beaten.

3.5.2.3. Doubling of aspectual and causative auxiliaries. Doubling and even tripling of aspectual GO, COME, and BEGIN is found in Swiss German (35a–c).[48] It is also possible to double COME with GO (35d).[49] Causative LET can be doubled in Swiss German as well (35e).

(35) a. Si gaat de zmittag go (ge) choche. (Swiss German)
she goes the lunch go go cook
She is going to cook lunch.

b. Si chunt de zmittag cho (ge) choche. (Swiss German)
she comes the lunch come go cook
She is coming to cook lunch.

[46]Cf. Barbiers, Koeneman, and Lekakou (2008a).

[47]Cf. Carruthers (1994).

[48]Examples from Van Riemsdijk (2002).

[49]According to Van Riemsdijk (2002), the sentences in (35b) and (35d) do not mean exactly the same.

c. Si faat de zmittag afe choche. (Swiss German)
she begins the lunch begin cook
She is beginning to cook lunch.

d. Si chunt de zmittag go (ge) choche. (Swiss German)
she comes the lunch go go cook
She is coming to cook lunch.

e. Si laat de zmittag la aabräne. (Swiss German)
she lets the lunch let burn
She is letting the lunch burn.

Doubling and tripling of GO also occurs in West-Flemish:[50]

(36) dank morgen goan go (gen) fish. (West-Flemish)
that-I tomorrow go go go fish
that I am going to go fishing tomorrow.

3.5.3. Doubling Of Verbal Morphology

Doubling of verbal morphology has been attested for finite verbs (both past and present tense), imperatives and participles. This is illustrated in (37) for Colloquial Swedish.[51]

(37) a. Lars försöker o skriver ett brev. (Colloquial Swedish)
Lars try.PRES and write.PRES a letter
Lars tries to write a letter.

b. Lars försökte o skrev ett brev. (Colloquial Swedish)
Lars try.PAST and write.PAST a letter
Lars tried to write a letter.

c. Försök o skriv ett brev! (Colloquial Swedish)
try.IMP and write.IMP a letter
Try to write a letter!

d. Lars hade försökt o skrivit ett brev. (Colloquial Swedish)
Lars had try.PCP and write.PCP a letter
Lars had tried to write a letter.

Finite verbal agreement (i.e., person and/or number) can also be doubled on the complementizer. Complementizer agreement occurs in dialects of Dutch and

[50]First reported in Haegeman (1990). Example from Van Riemsdijk (2002).
[51]Cf. Wiklund (2007) and this volume for data and analysis.

German.[52] An example from Bavarian is given in (38).[53] Notice that Bavarian allows the subject pronoun to be silent here. This is also the case in Frisian.

(38) Wenn-st moan-st … (Bavarian)
if-2SG think-2SG
If you think ...

Doubling of participial morphology occurs in Alemannic, Frisian, and some north-eastern dialects of Dutch (39a). It is also known as the Participium pro Infinitivo construction, because a participle occurs where an infinitive is expected on the basis of the selecting auxiliary.[54] The opposite, the well-known Infinitivus pro Participio effect in which an infinitive occurs instead of the expected participle, may be taken to be a case of infinitive morphology doubling (39b).[55]

(39) a. Zou hij dat gedaan hebben gekund? (North-eastern
would he that done.PCP have.INF could.PCP Dutch)
Could he have done this?

b. Hij had het moeten doen. (Dutch)
he had it must.INF do.INF
He should have done it.

Doubling of the infinitival marker is attested in certain dialects of Alemannic. A Swabian example is given in (40).[56]

(40) Mir bruuchet der Bese zum dGarage
we need this broom for-to the garage
zum / z /Ø fürbe. (Swabian)
to wipe
We need this broom to wipe the garage.

3.5.4. Negation Doubling

An example of negation doubling in which multiple instances of negation express a single sentential negation (i.e., negative concord) was given in (1), repeated here as (41).

[52]Cf. SAND Volume 1 (Barbiers et al. 2005) for complementizer agreement in the dialects of Dutch.

[53]Example from Brandner (this volume).

[54]Cf. SAND Volume 2, Barbiers et al. 2008c for geographic distribution and references.

[55]Cf. SAND Volume 2, Barbiers et al. 2008c for geographic distribution and references.

[56]Example from Brandner (this volume).

(41) At the end of the month, nobody ain't got no money.

In (41), the negative morpheme *n-* is doubled. It is present as constituent negation in the negative quantifiers *nobody* and *no money*, and as part of the sentential negation *n't*. There are also language varieties that have doubling of the sentential negation itself. Well-known cases are Standard French, Flemish, and Afrikaans (42a–c).[57] Cases of tripling and quadrupling of clausal negation can be found in dialects of Italian. This is illustrated for Venetian in (42d) and for Ligurian in (42e).[58]

(42) a. Je n' ai pas lu ce livre. (French)
I not have not read that book

b. da Valère nie en-wilt werken. (West-Flemish)
that Valère not not-wants work
that Valère does not want to work.

c. dat ek daardie man nie ken nie. (Afrikaans)
that I that man not know not
that I don't know that man.

d. No-l me piaze gninte NO! (Venetian)
not-it me likes nothing no
Why do you think I like it, I really do not.

e. ɛŋ t ɛŋ t ɛŋ lɔvi nɛ:nt. (Ligurian)
not you not yourself not wash nothing
You don't wash yourself.

3.5.5. Focus Particle Doubling

In some languages, focus particles such as *just*, *only*, *already*, *even* can double. In Dutch, there are two types of focus particle doubling: doubling by an identical particle and doubling by a distinct particle.[59] Identical doubling is illustrated in (43a), distinct doubling is illustrated in (43b). Since focus particles can be associated to nominal and verbal constituents it must be proven that cases like (43a) are not just apparent cases of doubling, involving an adnominal and adverbial occurrence of the particle with independent contributions from each particle. The sentence in (43c) shows that the particle *maar* 'only' is incompatible with the stative verb *kennen* 'know'. The second, 'adverbial', instance of

[57]Flemish example from Haegeman (1995).
[58]Venetian example from Poletto (2008). Ligurian example from Manzini (this volume).
[59]Cf. Barbiers (2003) for description and analysis.

maar 'only' in (43a) must therefore be licensed by the presence of adnominal *maar*, so we are dealing with a genuine case of doubling.

(43) a. Maar één student ken ik maar. (Dutch)
only one student know I only
I know only one student.

b. Jan is alleen maar boos op Marie. (Dutch)
Jan is only only angry at Marie
Jan is only angry at Marie.

c. Die student ken ik (*maar). (Dutch)
that student know I only

3.5.6. Complementizer Doubling

There are two types to distinguish here, doubly filled COMP and true complementizer doubling. Doubly filled COMP was discussed in Section 3.4.5. True complementizer doubling involves multiple occurrence of complementizers. An example of this from Colloquial Dutch is given in (44a), where the interrogative complementizer cooccurs with the default subordinating complementizer. As (44b) shows, complementizer doubling and doubly filled COMP can cooccur.[60] Example (44c) illustrates that the default subordinating complementizer *dat* 'that' cannot be left out in Dutch in the absence of the interrogative complementizer *of* 'if'. Since *dat* 'that' can be left out in (44a), this suggests that it represents redundant features there. This redundancy presumably involves the features finite and subordinate. The order of interrogative and default subordinating complementizer is not fixed cross-linguistically. Hungarian, for example, has the opposite order of Dutch (44d).[61]

(44) a. Weet jij of (dat) Jan komt? (Colloquial Dutch)
know you if that John comes
Do you know whether John will come?

b. Weet jij wie of dat er komt? (Colloquial Dutch)
know you who if that there comes
Do you know who is coming?

c. Ik weet *(dat) Jan komt. (Dutch)
I know that John comes

d. Nem tudom hogy megjött-e János. (Hungarian)
not know-I SUB came-INTER János
I don't know if John has arrived.

[60]Examples from SAND Volume 2 (Barbiers et al. 2008c).
[61]Example from Szabolcsi (1994).

4. TYPES OF SYNTACTIC ANALYSES

4.1. Introduction

The chapters in this volume provide extensive and detailed syntactic analyses of many of the doubling phenomena discussed so far, and there are quite some analyses in the literature as well. The goal of the present section is not to review these analyses but to classify them into different types. It should be stressed that a unified analysis of syntactic doubling is unlikely in view of the heterogeneity of the doubling phenomena. It also does not seem to be possible to classify the syntactic doubling phenomena discussed in this chapter in terms of their function or meaning, since for many of the doubling phenomena it is not clear that they contribute anything to the semantics or pragmatics of the sentence.

One function of doubling that has been suggested now and then in the literature is reinforcement of a phonetically weak or weakened element. The best known example is the so called Jespersen Cycle, illustrated here for negation in French:[62]

(45)	a.	Je	ne	dis.		(Old French)
		I	NEG	say		
	b.	Je	ne	dis	pas.	(Modern French)
		I	NEG	say	NEG	
	c.	Je	dis	pas.		(Colloquial French)
		I	say	NEG		

A weak negative element *ne* comes to be reinforced by a phonetically stronger non-negative element *pas*. In the next stage, *ne* disappears and *pas* becomes the only negative element. The subsequent diachronic development could be that *pas* weakens such that reinforcement by a new negative element becomes necessary. Doubling in other syntactic domains could be interpreted in the same way. For example, a hypothetical Jespersen Cycle for subject doubling and the pro drop phenomenon could be:

(46)	a.	mang	io
		eat	I
	b.	mang-io	
		eat-I	
	c.	(io)	mang-io
		I	eat.1SG
	d.	io	mang
		I	eat

[62]Cf. Jespersen (1917). Example from Zeijlstra (2004).

Though not at all implausible, proposals of this type must be made more precise by defining the syntactic positions available in a clause on the basis of comparative syntactic research. This is what theoretical syntactic research has tried to do in the past 50 years or so, and also what we will do in the next sections.

4.2. Doubling as Multiple Spell-Out of Chain Positions

According to the first type of analysis, a constituent can be associated with more than one position in a syntactic structure, and doubling arises when more than one of these positions is spelled out.[63] The simplest example involves the position of verbs. In Dutch, verbs occur at the end of the clause (47a), but the finite verb occurs in the position of the complementizer when the clause has no complementizer (47b). The main verb remains in its clause-final position if there is an auxiliary in first position (47c). If there is no meaningful auxiliary and the main verb remains in clause-final position, a dummy auxiliary has to be inserted in first position that carries the finite morphology (47d).

(47) a. Als Jan de speler weg stuur-t, dan ...
if Jan the player away send-s then...
If Jan sends the player away, ...

b. Stuur-t Jan de speler weg ___, dan ...
send-s Jan the player away ___ then...
If Jan sends the player away, ...

c. Wil Jan de speler weg sturen, dan...
wants Jan the player away send then...
If John wants to send the player away,...

d. Doe-t Jan de speler weg sturen, dan...
doe-s Jan the player away send then ...
If Jan sends the player away, ...

The underlined positions in the examples in (47) form a chain of dependent positions, as the position of the main verb is dependent on the presence of a complementizer or auxiliary. The main verb in (47b) can be said to occupy both positions. It is in clause-final position because it forms a predicative unit with the particle *weg* 'away' and it is in clause-initial position where it marks the clause as a conditional clause. If building a syntactic structure starts with the main verb and procedes from right to left (or, in hierarchical terms, from bottom to top), we can say that in (47b) the verb *stuur-t* 'send-s' starts in the clause-final position and moves up to the clause-initial position. These two

[63]The most articulated recent theory of multiple chain link spell-out is Nunes (2004). In this volume, the analyses of Alber, Holmberg, Van Craenenbroeck and Van Koppen, and Jónsson assume multiple chain link spell-out.

positions for the verb are visible in (47d), where the main verb remains *in situ* and is doubled by the dummy verb DO.

Besides the periphrastic DO construction exemplified in (47d), some of the other doubling phenomena discussed in Section 3 are good candidates for an analysis in terms of mulitple chain link spell-out. Subject pronoun doubling (Section 3.4.1; cf. examples 48a, b) qualifies as such.[64]

(48) a. dat ze zij in Brussel werkt (Flemish)
that she.W she.S in Brussels works
that she is working in Brussels

b. Zij werkt zij in Brussel. (Brabantish)
she.S works she.S in Brussels
She is working in Brussels.

As in the case of periphrastic DO, it can be shown that a clause has more than one position for subjects. The sentences in (49a, b) show that there is a position for subjects preceding adverbials such as *gisteren* 'yesterday' and a position for subjects following such adverbials. The sentences in (49c, d) show that the subject can precede or follow the finite verb in verb second position.

(49) a. dat <zij> gisteren <ZIJ> gebeld heeft.[65] (Dutch)
that she.S yesterday she. S called has

b. dat <ze> gisteren <*ze> gebeld heeft.[66] (Dutch)
that she.W yesterday she.W called has

c. Toen heeft zij gebeld. (Dutch)
then has she called

d. Zij heeft toen gebeld. (Dutch)
she has then called

Thus, we can say that there is a chain of subject positions and that in subject doubling constructions the subject pronouns fill those positions, whereas in non-doubling constructions/language varieties only one subject position per clause is visible.

Even in the latter type of language varieties the availability of more than one subject position can be visible, as in the case of expletive constructions (cf. Section 3.4.2). In the English example in (50a), the expletive fills a position that is a designated position for subjects, as (50b, c) show.

[64]The analyses in Van Craenenbroeck and Van Koppen (2000, 2002, this volume) and Haegeman (1990a, 1991) show that this is a considerable simplification of the actual structure.

[65]In the post-adverbial position focal stress is obligatory.

[66]As a weak pronoun, *ze* 'she' cannot bear stress, and elements following adverbs like *gisteren* 'yesterday' require stress.

(50) a. There is someone calling you. (English)
b. Someone is calling you. (English)
c. *You is someone calling. (English)

wh-doubling as it occurs, for example, in German and Colloquial Dutch (cf. Section 3.4.3 and example 51) has been analyzed as multiple chain link spell-out as well.

(51) Wie denk je wie ik gezien heb? (Coll. Dutch)
who think you who I seen have
Who do you think I have seen?

Parallel to periphrastic DO and subject doubling constructions, it can be shown that a sentence may have more than one position for wh-elements. More specifically, every clause has a clause-initial position for wh-elements, which means that if a sentence consists of more than one clause, it has more than one position for wh-elements:

(52) a. Wie heb je gezien?
who have you seen
b. Ik weet niet [wie hij gezien heeft].
I know not who he seen has
c. Wie denk je wie hij gezien heeft?
who think you who he seen has

Again, language varieties would not differ with respect to the number of positions that they have available for wh-elements, but only in the number of positions that can be pronounced in one sentence.

Periphrastic DO, subject doubling, and wh-doubling have in common that the duplicate does not have to be identical to the original morphologically. Thus, a main verb can be duplicated by DO, *zij* 'she.S' can be duplicated by *ze* 'she.W', and *wie* 'who' can be duplicated by *wat* 'what'. The generalization appears to be that the original cannot be underspecified with respect to the duplicate.[67] Other candidates for an analysis in terms of multiple chain link spell-out include R-pronoun doubling, relative pronoun doubling, auxiliary doubling, and preposition doubling.

The multiple chain link analysis explains why there can be two or more occurrences of one constituent. To capture cross-linguistic variation with respect to

[67]Cf. Barbiers, Koeneman, and Lekakou (2008b) and Holmberg and Nikanne (this volume) for an explanation in terms of partial copying. Cf. Nunes (2004) and Fanselow and Ćavar (1999) for an explanation of non-identical doubling in terms of scattered deletion (i.e., deletion of different parts of two or more copies).

the availability of doubling and tripling, additional assumptions are necessary. Optimality theory is a possible approach, in which doubling is favored or disfavored due to different constraint rankings.[68] Another possibility would be that even in languages that do not have multiple spell-out, multiple spell-out does not violate any grammatical principle. It could simply be an option that is allowed but not utilized by the language due to language-external factors.[69]

Another issue that needs to be addressed in the multiple spell-out approach include cross-linguistic differences with respect to the size of constituents that can be doubled. There is a tendency for constituents with more than one word to not double, but there are exceptions, e.g., in Afrikaans it is possible to double a constituent consisting of a preposition and a wh-element. Languages also differ as to which positions in the chain can be spelled out. In wh-chains like (52c), the wh-element can occur in the clause-initial positions, but it cannot occur in the argument position where it occurs in multiple wh-questions (cf. (54)).[70]

4.3. Doubling as Big Constituent Splitting

The second type of analysis proposed in the literature to account for doubling starts from the assumption that what surfaces as multiple occurrences of one constituent originates as one big constituent consisting of all the visible occurrences.[71] For example, according to such an analysis the German construction in (53) would start with a constituent [was wen]. In the course of building up the syntactic structure this constituent would split up into *wen* and *was*, *was* taking the higher wh-position, *wen* taking the lower wh-position. Like the multiple spell-out analysis, this analysis crucially assumes that there is more than one wh-position in the clause.

(53) a. Was denkst du wen ich gesehen habe? (German)
who think you who I seen have

b. Was denkst du [~~was~~ wen] ich gesehen habe? (German)
what think you what who I seen have

This type of analysis raises a number of issues. The first issue is why the hypothesized big constituents never surface as such. For example, in many languages a wh-constituent remains in its base position when there is another wh-constituent in clause-initial position. In such a configuration, the big XP is expected to become visible, but that seems to be generally excluded. This is illustrated for German in (54).

[68]Cf. Alber (this volume).

[69]Cf. Barbiers (2005a, in press) for such an approach.

[70]Cf. Nunes (2004) for a formal account of the two properties in this paragraph.

[71]Cf. Kayne (1994), Uriagereka (1995), Poletto and Pollock (2004), Belletti (2005), and Poletto (this volume) for analyses of this type.

(54) Wer hat [(*was) wen] gesehen?
who has what who seen

Obviously, it is possible to explain this away. For example, for a case like (54) the features of *was* could be argued to be a subset of the features of *wen*. When *was* is adjacent to *wen* it is locally redundant, so it is deleted (or not spelled out). Alternatively, the spell-out of [was wen] could be taken to be *wen*.[72]

A second issue involves the question why such big constituents would exist in the first place. It is true that assuming a big constituent solves the problem of redundancy at the clausal level. For example, the problem that the verb *sehen* 'see' can only have one object but seems to have two in sentences like (53) seems to be solved if it is assumed that these two elements in fact constitute one constituent. However, this merely shifts the problem of redundancy to the constituent level, where we also would like to know why some or all features are doubled.

Finally, this type of analysis requires extraction from positions (e.g., the specifier of a specifier) that have been argued to disallow extraction.

4.4. Doubling as Agreement

Subject–verb agreement has been central in the development of syntactic theory in the past 50 years. In subject–verb agreement constructions, morphosyntactic features of the subject are repeated on the verb. Thus, subject–verb agreement is a core case of syntactic doubling. It has been shown that finite verb agreement is associated to a designated syntactic position.[73] Many languages have a clausal position that is only accessible to finite verbs. This is illustrated for French in (55). The finite verb in (55a) occurs between the two negative elements, but the non-finite verb has to follow them (55b). In English, main verbs for some reason cannot occur in this position, but auxiliaries can (55c, d). As we have seen earlier, if there is no auxiliary in the clause, the dummy verb DO has to be inserted to carry the finite inflection (55e).

(55) a. (Je sais) que Jean ne mange pas de pommes. (French)
I know that Jean not eats not of apples
(I know) that John does not eat apples.

b. (Il est stupide) de ne <*manger> pas <manger>
it is stupid to not eat not eat
de pommes.
of apples
To not eat any apples is stupid.

[72]As proposed in Barbiers, Koeneman, and Lekakou (2008b).
[73]Cf. Emonds (1976), Pollock (1989).

c.	*(I know)	that	John	eats	not		any apples.
d.	(I know)	that	John	will	not	eat	any apples.
e.	(I know)	that	John	do-es	not	eat	any apples.

The latter observation has led to the assumption that finite agreement originates in a position preceding negation and that the subject has to move to the position immediately preceding it to check this agreement. Similar agreement relations have been argued to hold for wh-elements, negation, focus etc., and they are often visible because they may cause a constituent to move to the position where the features are generated.[74] Schematically, such configurations look as in (56). An (abstract) functional head F is in an agreement relation with a constituent or head that shares morphosyntactic features with F.[75] In GB-theory and early minimalism, this agreement was considered to be the trigger of movement. Later minimalism assumes that agreement is a condition on movement but does not force it. Configurations such as (56) can give rise to two different types of surface doubling. When there is no movement, doubling involves a functional element high in the structure and an agreeing constituent lower down in the structure. When there is movement, doubling involves a so called SpecHead configuration in which the moved constituent is left-adjacent to the agreeing functional head.

(56) a. F[x,y,..] ..... XP [x,y,..]

agreement

b. F[3sing] ..... DP [3sing]

c. F[Wh] ..... DP [Wh]

Agreement may also be at stake in doubling cases that look like a combination of an analytical and a synthetic construction. Comparative and superlative doubling discussed in Section 3.2 can serve as an illustration. Both can be expressed analytically (57a, b), synthetically (57c, d), and doubly (57e, f). If the agreement configuration is as in (57g, h), we only have to assume variation in the spell-out of the comparative/superlative features.

(57) a. more lively c. livelier e. more livelier

b. most lively d. liveliest f. most liveliest

g. Degree [-er] ..... A [-er]

h. Degree [-est] ..... A [-est]

[74] E.g., Rizzi (1996), Haegeman (1995).

[75] Cf. Wiklund (this volume) for agreement between verbs.

The multiple chain link spell-out approach discussed in Section 4.2 is often combined with the agreement approach.

As was noted in the Introduction, in the minimalist program agreement and displacement are considered to be imperfections of language design and agreement is supposed to have no semantic import. A deeper question that remains to be answered under such an approach is why these imperfections are there, and thus, why doubling exists.

An alternative approach is to assume that agreement does have semantic import. One option would be that agreement is a pronoun itself and thus an argument of the verb. The question then shifts to why an argument of the verb should be repeated. A second option is that agreement is playing a role in establishing predication relations.[76]

An extension of the idea that a clause contains a range of functional heads that agree with other constituents is the assumption that a certain meaning element (e.g., negation) may be expressed by more than one functional head and that these heads are interpreted as a chain, i.e., as one constituent at the level of Logical Form.[77] In the opposite situation, one element in syntax is broken up to create two meaning elements at Logical Form.[78]

5. DOUBLING QUESTIONS — A SUMMARY

The most relevant questions about doubling were discussed throughout this Introduction and many of them are explicitly addressed in the chapters in this volume. We will therefore end this Introduction by providing a list of questions that should be kept in mind while reading these chapters and for future research.

1. Why does natural language have doubling?
2. Are there cases of doubling with a purely syntactic function?
3. To what extent is it possible to provide a unified analysis of syntactic doubling?
4. What are the semantic and pragmatic contributions of doubling?
5. Why do languages differ with respect to the availability of doubling?
6. Why do languages differ with respect to the positions in which duplicates can occur?
7. Does the cross-linguistic variation as mentioned in 5 and 6 correlate with other syntactic properties of these languages or is it irreducible?

[76]Cf. Jelinek (1984) for the idea that agreement morphemes are pronouns. Cf. Rothstein (1983) for the idea that agreement has a function in establishing a predication relation. Barbiers (1995) also proposes that agreement is one of the ways to establish a predication relation: it reduces a dyadic relation to a monadic relation.

[77]Cf. Manzini (this volume) for multiple negation.

[78]For example, a wh-constituent that is split into an operator and a restrictor part.

8. At which level of the grammar does doubling arise: in syntax, at PF, or both?
9. How is doubling handled at the level of LF, in particular if only one instantiation of the constituents is sufficient for semantic interpretation.
10. If all languages have the same abstract syntax (the Universal Base Hypothesis), should we assume that there is much more doubling than meets the eye?
11. Is it true that doubling phenomena are much more frequent in colloquial speech and in dialects than in formal speech and standard languages, and if so, how can this be explained?
12. What is the relation between the temporary occurrence of doubling phenomena in child language and the occurrence of the same doubling phenomena in dialects of the language that the child is acquiring?
13. Why does doubling often involve at least one functional element?
14. Why is doubling of phrases that consist of more than one word rare if not non-existent?
15. Is it true that in doubling chains lower elements cannot be underspecified with respect to higher elements?
16. Is it true that modals, unlike other auxiliaries, do not double cross-linguistically, and if so, why?

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1

DOUBLING AS SPLITTING

Cecilia Poletto

ABSTRACT

In this chapter I would like to restrict my inquiry to those cases of doubling where the doubled elements do not display the same form and have different syntactic status as well. I will claim that these cases are to be analyzed differently from those in which the two occurrences are morphologically identical. As shown by Belletti (2005), inside the class of "non-identical" doubling the two elements can be both XPs or one an XP and one a head. I will further restrict my attention to these cases and show that this type of doubling can indeed be analyzed as cases of splitting of a constituent along the following mechanism: the lower portion of the constituent is moved to the highest specifier of the XP and then the (lower) remnant created is moved to a checking position inside the structure of the clause (to Case, Operator, etc.). I will deal with three examples. The first has to do with DP clitic doubling: I interpret clitics as belonging to a remnant checking a Case feature in IP. The second case is provided by wh-doubling, where the remnant containing a clitic wh-form is moved to a high wh-Operator position. The third case is Negation: here I propose that discontinuous negative markers are also instances of doubling obtained by splitting an originally complex NegP.

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1. INTRODUCTION

In this chapter I deal with doubling and address the general question of a syntactic treatment of this phenomenon, which seems to be extremely widespread in non-standard languages.[1] Before discussing the empirical domain under investigation, it is necessary to provide a definition, as "doubling" is a label used to mark empirical fields which potentially lend themselves to very different syntactic analyses. Here I intend to focus on cases of doubling in which the two (or more) "doubles" are morphologically distinct, although they clearly form a unit from the semantic point of view. For instance, if an argument is doubled, there are not two arguments in the clause, but the two items are interpreted as a single one. The same is true for wh-doubling, which is not an instance of multiple questions, but there is only one variable at LF. Negative doubling is an instance of negative concord, so it does not yield a double negation interpretation.

Those cases of doubling where we see what looks like two heads (as for instance double complementizer, double subject clitics or double object clitics) are to be analyzed differently, and I do not think that the analysis I present here is adequate for those cases. So I restrict my claim to cases where at least one of the two elements is a maximal projection.

Doubling has been considered in the recent literature on traces (see Nunes 2004 among others), which considers them as copies of the same item, as a strong argument in favor of the idea that a moved element can be spelled out either in the higher position to which it moves (the head of the chain, in more traditional terms) or in the lower position from which it has moved (the tail of the chain), or even in the intermediate positions in the case of cyclic movement. General constraints on avoidance of superfluous information then require spelling out of only one copy of the two (or more) created by the movement procedure. If this requirement is circumvented, and both copies are spelled out, doubling arises. Without additional assumptions this predicts that, given that both copies are identical, the two forms spelled out will be identical as well. As it is well known that a lot of cases of doubling do not have identical doublers, something more has to be said. This is precisely the type of doubling I am interested in, as it seems to pose a problem for a theory which views doubling as multiple spell-out of copies of the same chain, because the two (or more) "copies" are not identical, one always being a single word and more functional (in the sense that it never contains a lexical category and cannot expand to an XP containing a specifier or complements) while the other is always an XP.

One view in order to solve the problem would be the one taken in Barbiers (2006) who assumes that higher copies can spell-out only part of the features of the chain, and this would explain the morphological differences between the

[1]By non-standard language I intend here dialects like Piedmontese or Lombard, but also Friulian, Central Rhaetoromance or Franco-Provençal, which are considered by the Italian state (and by many linguists) as independent languages.

two doublers. In this chapter I will take a slightly different view and propose that non-identical doubling should be analyzed along the lines of a different tradition, the one sustained by Uriagereka (1995), Kayne (1994) and Belletti (2006) (among others), who propose that the two elements involved originate inside the single unit which is then split by movement.

Belletti deals with cases like left dislocation and focalization in standard Italian and shows that DP doubling can be performed either by a clitic or by a tonic pronoun or by a quantifier, yielding the following possible constructions:

(1) [[X°] XP]

(2) [[Pron + focus/topic] [XP]]

(3) [[QP] [XP]]

As can be easily seen, all these constructions contain a lexical and a functional element. Here I will concentrate on cases that include clitics as doublers, namely constructions that can be analyzed as in (1) and illustrate the theoretical point on the basis of three doubling phenomena: subject DP doubling, wh-doubling and negative concord. It is however possible to analyze also the structures in (2) and (3) along the same lines, although I will not attempt to do this here.[2]

What I will not deal with extensively in this chapter is the parametric problem, namely the reason why some languages allow (or even require) doubling while others do not. I will limit myself to assume that the difference cannot lie in any special structure, in the sense that no "big DP" is necessary to obtain doubling. Rather, the mechanism of doubling has to do with the amount of pied piping allowed and with the procedure of splitting the nominal expression (NE). In other words, doubling does not require projecting any special structure, as functional categories and their layering must be universal. It is the possibility of splitting the XP that must be involved in languages allowing doubling.

Before starting with the description of the empirical domain I use, I briefly point out a methodological issue. In this chapter I attempt to formulate implicational scales that do not describe what is possible in a single dialect or in a set of dialects, but the doubling cases that are always found in any dialect once a given type of doubling is present (for instance in dialect X if doubling of a DP is found then doubling with pronouns is always found). This type of data is generally not used in generative studies, which usually concentrate on what is grammatical and what is not, and not on "chains of phenomena". What I use here is a set of comparisons of sets of grammaticality judgements for each dialect.

[2]Doubling is also more generally interesting from the point of view of our theory of economy in language design: if economy is seen in a simplistic way as "nothing superfluous should be allowed" why is doubling so widespread? Indeed, a phenomenon like doubling should not exist at all, and in fact it is often banned by normative grammarians in their language planning as something redundant.

In Section 2, I present the case of subject clitic doubling and discuss the analysis I use developing a theory of movement for doubling. In Section 3, I analyze cases of wh-doubling showing that it is the amount of functional structure endowed with strong features that matters in doubling, not the lexical portion of the XP doubled. In Section 4, I discuss cases of negation doubling and show that even a purely functional category as negation can be doubled. Section 5 contains some more general theoretical considerations and concludes the chapter.[3]

2. DP DOUBLING AND FEATURE STRIPPING

In this section I report and extend some observations that I made in Poletto (2000) concerning the doubling of subjects. Looking across dialects, it is possible to establish an implicational scale of those elements that are always doubled if others are as well. So, for instance, there are dialects where only tonic pronouns are doubled, others where DPs and tonic pronouns are doubled, but no dialect where DPs are doubled while tonic pronouns are not. The implicational scale can be represented as a set of generalizations as follows:

(4) a. If DPs are doubled in a given dialect, tonic pronouns are also doubled.
b. If QPs are doubled, both DPs and tonic pronouns are doubled as well.
c. If variables in wh-contexts as relative, interrogative and cleft structures are doubled, then doubling is always obligatory with all other types of subjects.

Or as a scale proper:

(5) Pronouns (Veneto dialects like Arsiero, Padova, Venezia)
Pronouns, DPs (Trentino dialects like Rovereto, Lombard dialects like Lecco)

[3]As a cautionary note I should add that all the data presented here come from the ASIS database and complete paradigms are not always available. When this is the case I will mention this. Here I use examples from subject clitic doubling but indirect object clitics are also doubled with the same type of scale in the same area. Direct object clitic doubling depends on the presence of a preposition in front of the DP, and it is not found in the Northern domain but only in the Southern one, for which the database has no systematic data yet. Concerning the examples, I have translated subject clitics with the corresponding English pronoun. Each dialect is mentioned with the name of the village or city in italics and the standard acronym of the province, a list of which is provided here

BG, Bergamo; BL, Belluno; BZ, Bolzano; CO, Como; GE, Genova; NO, Novara; RO, Rovigo; SO, Sondrio; TN, Trento; TO, Torino; VE, Venezia; VI, Vicenza; VR, Verona.

The cities that are already the capital of a province with the same name do not have the abbreviation

Pronouns, DPs, QPs	(Lombard dialects like Milan)
Pronouns, DPs, QPs, Variables[4]	(Friulian and Piedmontese dialects)[5]

This means that there are dialects where only tonic pronouns are obligatorily doubled (I leave here left dislocation aside), while all other types of subjects are not, as shown in (6):

(6) a. Ti *(te) parli massa e luri *(i) parla
you you speak too-much and they they speak
massa poco.
too little
You talk too much and they talk too little. (Arsiero (VI))[6]

b. Nisun (*el) me capisse.
Nobody he me understands

c. El mario (*el) magna el pom.
the boy he eats the apple

MISSING EXAMPLES

The second stage of the scale in (5) is represented by those dialects in which tonic pronouns and DPs are obligatorily doubled, but not quantifiers and variables:[7]

(7) a. Lee *(la) leeuc un liber de storia. (Lecco (CO))
she she reads a book of history
She is reading a history book.

b. El bagai *(el) mangia el pom.
the boy (he) eats the apple
The boy is eating the apple.

c. Nisogn (*el) me capess.
nobody (he) me understands
Nobody understands me.

d. Chi (*al) mangia i patati?
who (he) eats the potatoes
Who is eating potatoes?

---

[4]Here only bare quantifiers and bare wh-items are considered. As for complex wh-phrases see later, for non-bare quantifiers asthey are not present in the ASIS database.

[5]This generalization concerning areas is not precise, as not all dialects of a given region belong to the same type.

[6]Here I quote the name of each village or city with the indication of the province, which helps to get an idea of the area, in the case of big cities which are already provinces, there is no indication close to the noun.

[7]This system is widespread in the Trentino dialects and in Romagna and Emilia as well.

The third stage is the one in which tonic pronouns, DPs and quantifiers are doubled but not variables:[8]

(8) a. Te gh'e[9] de vegnì anche ti. (Milan)
you have to come also you
You have to come along as well.

b. El fio el mangia l pom.
the boy he eats an apple
The boy is eating an apple.

c. Un quidun el riverà in ritart.
a somebody he will-arrive late
Somebody will arrive late.

d. I don che (*i) neten i scal in andà via.
the women that they clean the stairs have gone away
The women who clean the stairs have gone.

The last stage is the one in which doubling is obligatory with all types of subjects, and is also quite widespread, especially in Piedmont and Friul, but in Lombardy as well.

(9) a. Ta ghe de gnì a te. (Malonno (BG))
you have to come also you
You have to come along as well.

b. Al pi al mangia al pom.
the boy he eats an apple
The boy is eating the apple.

c. Vargu al rierà n ritardo.
a somebody he will-arrive late
Somebody will arrive late.

d. Le fomne che le neta le scale e e ndade via.
the women that they clean the stairs they have gone away
The women who clean the stairs have gone.

This type of data is rarely taken into account, because implicational scales are not easily built into a generative grammar. However, they are interesting as they reveal, in this case, that elements that are more definite are more frequently doubled than elements that are less definite. This is not surprising given that fact that the doubler is a clitic, which is by itself definite and is therefore

[8]This type of system is widespread in Lombardy, in the East as well as in the Western and Northern varieties.

[9]The verb *have* (also in its modal version corresponding to English "have to") has a locative clitic left adjoined to it, which however is a pure expletive and does not have any deictic meaning.

obviously "more compatible" with other definite elements. However, in many dialects the clitic is also compatible with quantifiers and wh-variables, therefore it must have somehow lost its definiteness feature. This is, though, only a very imprecise observation, as shown by the following facts. Differences in the possibilities of doubling are found inside the class of tonic pronouns, second person pronouns are more frequently doubled than third person pronouns:[10]

(10) a. TI te magni sempre. (Venice)
you you eat always
YOU eat all the time.

b. *TI magni sempre.
you always eat

c. Lu (el) magna.
he (he) eats
HE is eating.

d. Nane (el) magna.
N. (he) eats
N. is eating.

e. Nisun (*el) magna.
Nobody (he) eats
No one is eating.

Given that all pronouns are definite, the explanation provided earlier cannot be correct.

Moreover, the same is true for quantifiers: universal quantifiers are more easily doubled than existential or negative quantifiers, as shown in (11):

(11) a. Bisogna che tuti i faga citu. (Bellinzona
it is necessary that everybody they make silente (Ticino, CH))
Everybody must be silent.

b. Quaidun (*al) telefunarà al prufessur
somebody he will-phone the teacher
Somebody will phone the teacher.

[10]As we will see later, the basic intuition I develop in order to explain the implicational hierarchy described here is related to the amount of morphological distinctions which reflect the amount of internal structure each type of nominal element has. It is surely true that second person pronouns contain more internal structure than third person pronouns, (cf. among others Harley and Ritter (2002) and Benincà and Poletto (2005)). According to this view one would expect second person plural and first person plural to be doubled much more frequently than second person singular, because they are even more complex in terms of feature composition. However, this is not the case. On the contrary first and second person plural generally do not present subject clitics inside IP at all and are pro drop. The only type of subject clitic found with first and second person plural are subject clitics located in the CP layer (with the notable exception of Florentine *vu* "you") and behave totally differently (see Poletto (2000) for a discussion of this).

How can we explain (a) the implicational scale in (5) and (b) the differences internal to each class? I propose that the reason why the implicational scale works this way and not, for instance, in the opposite way has only partially to do with the feature [definiteness]. I think rather that doubling occurs more frequently with those elements that have more functional information. The more an element has a complex feature composition (which is of semantic origin, but is reflected into its syntax, i.e., in the number of internal functional projections that contain a feature and in its morphological makeup) the more probable doubling will be. This means that the implicational scale is a probability scale: the more an element has features, the more it will be prone to split and double. For instance, DPs are more prone to double than QPs because they generally have more syntactic projections in their internal composition, and these syntactic projections are visible in their morphological makeup in terms of distinctions for gender, number, etc. The reason why a given dialect "cuts" at a certain point of the scale is therefore related to the fact that it has a strong feature (which is often also encoded in the morphology, though not always) in the internal projection where the internal movement occurs, as we will see later.

This means that the elements at the beginning of the implicational scale (pronouns) must have more FPs containing a strong feature than those at the end of the scale. Is this really true? Can we indeed identify a distinction in terms of strong features for each of the elements located in the implicational scale?

Let us start by asking what is the feature that makes tonic pronouns the type of elements at the top of the implicational scale. One plausible candidate might surely be case: it is generally true that even languages that have lost case in the DP system, often still maintain it in the pronominal system (one example is English, or Italian). However, tonic pronouns are only in some dialects (for instance Friulian) marked for case, i.e., Friulian displays a different morphology for subject tonic pronouns and object tonic pronouns. This is not true across the whole NI domain, where the majority of the dialects do not display case distinctions for either DPs or tonic pronouns.

Inside the class of pronouns, the second person pronoun must be more complex in its feature composition than third person, which is generally also assumed to be the default pronoun (see Benincà and Poletto (2005) on the feature composition of person pronouns): first and second person pronouns are both probably marked with a [+participant] or [+deictic] feature, contrary to third person pronouns. This is the feature involved in the distinction between second person pronouns and third person pronouns seen earlier.[11]

Moreover, all tonic pronouns can only occur in NIDs (Northern Italian dialects) as Topics or contrastive Foci, otherwise a clitic form is the only possible form. No neutral sentence can contain a tonic pronoun, because this must either be interpreted as a Topic or as a contrastive Focus. Hence, all tonic pronouns

[11]First person singular pronouns generally do not have a subject clitic of the IP type, so the prediction that they should go with second person instead of third person is not testable.

must contain a left peripheral feature in their internal composition (either Focus or Topic). This is not the case for DPs, which need not be topicalized or contrastively focalized and as such can occur in neutral sentences. DPs do not have a [+participant] feature either. However, DPs clearly have more features than quantifiers, because they are all endowed with gender.[12] Quantifiers in the NIDs do have a number feature, which is reflected in the morphology of the quantifier itself and in the subject clitic doubling it, as the following examples show. However, to my knowledge there is no dialect where any quantifier shows gender:[13]

(12) a. Tuc i panseva. (Albosaggia (CO))
everybody they thought ...
Everybody thought ...

b. Vargù al ruarà tardi.
somebody he will-arrive late
Somebody will arrive late.

(13) a. Tuti i pensau che ... (Arzeno (GE))
everybody they thought that ...
Everybody thought that ...

b. Quarchedun u telefunià au prufesu.
somebody he will-phone the teacher
Somebody will phone the teacher.

Universal quantifiers are generally doubled by a plural clitic, while existential (and negative) quantifiers are doubled by a singular clitic. If we assume that plural is the only marked feature and singular simply originates as no marking for number, we can also explain the distinction between universal quantifiers and existential quantifiers. Moreover, it is well known that universal quantifiers are more easily left dislocated than existential and negative quantifiers, because they can be more easily interpreted as [+specific]. One could assume that specificity is also reflected in the syntax, or that universal quantifiers can be more easily interpreted as specific because they have a number feature.[14] In any case, the distinction between universal and existential quantifiers has to be drawn in terms of features.

The type of elements that are located at the bottom of the scale are wh-items. If the implicational hierarchy described earlier has to be explained in terms of

[12]There is a discussion in the literature whether gender is a feature of the noun or of the determiner. Here I do not take a stand with respect to this, as I consider the whole DP structure, and what is necessary for the DP is to have gender, irrespectively from its location.

[13]An anonymous reviewer points out that "expanded" quantified expressions such as "no girl" should pattern with DPs and not with QPs. Unfortunately the prediction is not testable as there are not such data in the database.

[14]Notice that tonic pronouns and DPs are also [+specific], so it is not the case that quantifiers simply have different features with respect to DPs, they indeed lack features that are present at the higher steps of the implicational scale.

feature specifications, the fact that wh-items are less prone to be doubled than other types of NE is straightforward. In the Romance languages the morphological make-up of wh-items is extremely reduced, as they do not have any participant, topic/focus, case, person, gender or number; the only distinction wh-items display is one in terms of [+/– human] or it concerns the role the wh-item has in the clause (location, manner, time and reason). In this case, the feature lacking with respect to quantifiers is number (along with all the others for pronouns).

We can thus rewrite the scale seen earlier in (5) assigning to each type of element a feature which is the one relevant for its position in the doubling scale.

(14)

Table 1: Doubling scale.

Second person pronouns	Third person pronouns	DPs	QPs	Variables
Participant				
Topic/ focus	Topic/ focus			
Gender	Gender	Gender		
Number	Number	Number	Number	

Reading the rows we obtain the feature relevant for each stage of the scale, reading the columns we obtain the feature composition of each nominal element. As (14) shows, the elements at the bottom of the scale have less features than the elements located higher, variables have none.

If we assume that it is the number of strong features (in the minimalist sense that they are visible to syntactic operations) that matters in doubling phenomena, we have not yet accounted for the probabilistic flavor of the implicational scale in (5).

Let us start by assuming that nominal expressions (NE)[15] morphologically marked for a given feature have a syntactic projection corresponding to these features in their internal structure, in the NE where this feature is not present the corresponding FP is either inert or not even projected.[16] This internal projection has features which must be checked against the corresponding projection in the IP layer,[17] therefore the NE has to move to the Specifier of the relevant FP in the IP.

[15]I use the term nominal expression to include pronouns, DPs, QPs and wh-items.

[16]The carthographic approach of Rizzi (1997) and Cinque (1999) which this chapter assumes does not really distinguish between these two options. It is not clear whether there is any difference in saying that the projection is not there or is not active. Schweikert (2005) has shown that even FPs that do not contain any feature are relevant for the interpretation, but I will not go into this very complex matter here, as it deserves a treatment on its own.

[17]The assumption that the IP structure contains a NumberP is quite widespread (see among others Shlonsky 1990; Poletto 2000; Manzini and Savoia 2005). That person features also have their own projection (either split in their basic components as speaker, addressee, etc. or as a single PersP) is proposed by authors like Zanuttini (2006), Bianchi and Safir (2004), Sigurdsson (2004, 2007).

In other words, not only does Nominative case undergo the probe–goal procedure, other features can also be checked either through movement in the syntax to the relevant node in the IP or through the "Agree" mechanism.

Suppose that an NE has more than one feature, say F1 and F2,[18] to check. The checking process can proceed through the simple Agree rule, in which case there is no movement in the syntax, or through movement. If this is done through movement, the whole DP can be remerged twice in the Spec of F1 and then F2. Alternatively, we can move only the relevant part of the NE to separately check F1 through a (clitic) piece of the DP, the one carrying F1, and F2 through the remnant (XP) piece, which carries the F2 feature. The more features there are to check, the more probable it becomes that some movement procedure occurs, as this is one of the ways checking is achieved.

Movement can pied pipe the whole constituent, and in fact it does in some languages that do not display doubling. In other languages, instead of remerging the whole NE, only the subpart containing the relevant information is stripped from the DP and remerged. Hence, the probabilistic flavor of the scale is due to two factors: (a) the more features a given element is endowed with, the more checking procedures have to be applied, hence the more movement becomes probable and (b) when movement occurs, lack of pied piping can manifest itself in stripping the part of the DP with the relevant feature leaving a remnant. How does this stripping procedure come about? In what follows I discuss the technical details of this.

The mechanism ensuring that only the relevant functional projection of the NE is moved is the following: Kayne (1975) and Uriagereka (1995) in their work propose that the small DP is located in the Specifier position of a big DP the head of which contains the clitic. Here I will try to preserve the idea that the two pieces start as a whole complex, but I will try a different technical execution. Let us assume that in the Romance languages, clitics are located in the head of the Case projection (KP, following Giusti's (1993) terminology and proposal) which in turn takes as its complement a set of functional projections that for the moment I label DP (but see later for a more detailed structure of what DP stands for), as illustrated in (15a):

(15) a. $[_{KP}\ [_{K^\circ}$ clitic] [DP]]]
b. $[_{XP}$ DP $[_{X^\circ}\ [_{KP}\ [_{K^\circ}$ clitic] [~~DP~~]]]]]

(15b) represents movement of the internal part of the NE, namely DP to the edge of the DP phase, here labeled SpecXP. The DP portion of the NE is then moved to IP leaving a remnant behind which now contains only the clitic as lexical material. The DP moves then to the checking position it has features for and the remnant containing KP with the clitic moves independently to the case

[18]A case we will see further on is for instance left dislocation, where the DP checks case as well as Topic features.

position. Suppose (15) is applied to subjects: the subject DP is always located higher than the position where Nominative case is assigned, which is the position where the subject clitic lands.

(16) $[_{SubjP}$ DP…. $[_{NomP}$ $[_{KP}$ $[_{K^{\circ}}$ clitic $[\sout{DP}]]][_{vP}$ …]]]

In Poletto (2000) I proposed that subjects in the NIDs are never located in the usual SpecIP position, but much higher in the structure (in a dedicated CP position located before low complementizers in FinP but lower than high complementizers in ForceP, see also Paoli (2003) for an extensive description of double complementizer constructions which prove this point). Several authors made a similar proposal (cf. among others Cardinaletti (2004) and Rizzi and Shlonsky (2005)), locating the higher position of the subject in a Topic-like position inside IP which is assumed to contain EPP features (which are therefore dissociated from Nominative case in terms of position). To the present analysis, the exact location in IP or CP of the higher position of the subject is irrelevant.

Notice that this analysis predicts that the two doubles are never structurally identical. One contains the KP, while the other only contains the lower portion of the DP internal structure including the lexical head.[19]

In the case of objects the same type of derivation can be applied modulo the target positions of the DP and of the KP, which is in this case Accusative and not Nominative.

According to this view, clitic movement is not movement of a head, but of a remnant XP, which is a welcome result in the framework of recent analyses proposed by Cinque (2006). Second, we are able to maintain the idea that syntactic structure is universal (see Cinque 1999). Languages with doubling do not have any special "big or complex DP" similar to the one in (1), but exactly the same type of DPs other languages have. What is then the property that distinguishes doubling languages from non-doubling languages? I think that in doubling languages, it is possible to have movement of a part of the NE containing the lexical noun to the edge of the DP phase and then further into the sentence structure, either to IP or to CP. In other words, the distinction between doubling and non-doubling languages is a property of the highest Specifier of the NE, which attracts part of its internal structure only in doubling languages with a movement that looks similar to V2 in the sentential domain. Thus, the only difference between doubling and non-doubling languages lies in the splitting of part of the NE as the result of movement of the lower portion of the DP to a higher position internal to the DP followed by a "stripping" procedure of this part from the

[19]An anonymous reviewer points out that extracting the lower DP from XP and moving it to IP is a violation of the subject island condition. Notice however that this condition has anyhow to be parametrized, as Boskovic (2005) has shown that the subject island condition is not valid in the Slavic languages. Moreover, one could argue that the edge of the DP phase in the doubling languages is transparent to movement even if it is a left branch.

highest specifier of the NE.[20] The DP which has first moved to SpecXP creating the remnant KP can then be moved independently from SpecXP to a Spec position in the IP or CP layer if it has further features to check.

If head movement does not exist, and a clitic also moves as a remnant, the lower DP in (15) moves to the Specifier of a projection immediately above KP containing the clitic, as in (15a,b). This process creates the remnant KP in (15) containing only the clitic. Once the DP has moved out to IP, the whole XP containing the remnant with the clitic is then moved to the appropriate case position in the IP layer.[21]

Suppose for example that you need to check the Nominative case feature in NominativeP (or SpecT if the more minimalist view is taken). The element that can do that is the one corresponding to the highest functional layer of the DP, realized as a clitic, which has a morphological distinction for case:[22]

(17) a. To nono el vien. (Venice)
your grandfather he comes
Your grandfather is coming.

b. I ga visto to nono.
they have seen your grandfather
They have seen your grandfather.

(18) (To nono), i lo ga visto.
(your grandfather) they him have seen
They have seen your grandfather.

As shown in (17) the DP *to nono* has no distinction in terms of case features. The distinction is provided by the subject clitic *el* (or by the object clitic in case of dislocation of the object). Note that subject clitic doubling (17a) and left dislocation (18) are a counterexample to what seems otherwise a pretty strong generalization, namely that the "functional" double is located higher than the bigger double containing also the lexical head noun (see Barbiers, Koeneman and Lekakou (2008) for an analysis of this generalization). In this case the DP "*to nono*" is located higher in the structure than its clitic counterpart *el*. This is true of all left dislocations, not only that of the subject. The reason why this is so is the following. The procedure of stripping away a functional portion from an XP is to check functional features, which are always located higher in the structure than

[20]This analysis predicts that also in non-doubling languages one should find cases of doubling where the two elements are close to each other. Bulgarian seems to be such a case, where we see a clitic and a tonic form which however form a constituent.

[21]On the idea that KP is located on top of a DP see Giusti (1993, 2006), Polo (2005).

[22]The question whether this analysis is only valid for NIDs or is extendable to other languages is an empirical one. As such a work like the one presented here presupposes a big set of data to create the generalizations illustrated earlier, I think it is more prudent here to suspend the question until we have a more solid set of data for other doubling languages as we have for the ones examined here.

the argumental position where the whole XP is merged. Therefore, in the most common case the functional double is higher than its lexical double. However, if the DP portion of the XP still has features (which should be located lower than case in its internal structure) to check, nothing prevents it from moving independently to check the remaining feature and end up in a higher node with respect to its functional double. Further interesting counterexamples to this generalization are cases of doubling of indirect objects like the following:

(19) A chi ti ghe ga ditto cussì? (Venice)
to whom you to-him have said so
To whom did you talk like that?

(20) A IU ghe go ditto cussì. (Venice)
to him to-him have said so
I talked like that TO HIM.

Here we see a wh-item *a chi* "to whom" doubled by the clitic *ghe* "to-him" that is higher than the clitic itself. The same is true of all focalizations in the CP layer of Dative pronouns which also obligatorily require a doubling clitic in the Veneto dialects, as shown in (20). Hence, the feature that triggers movement of the DP can either be EPP (17a), Topic (18), Focus (20) or wh- features (19), which are located in the CP or in any case higher than TP. This is exactly what happens in a structure like (16) where the lexical DP still has an EPP feature to check in subject position; the result of this checking turns out to be that the DP is higher than the clitic.[23] In fact, subject DPs can occur in different positions in Italian dialects, as well as in standard Italian, while the clitic double has a fixed position (as all clitics). DP subjects can be postverbal (presumably in the SpecvP) position or preverbal (in the SpecEPP position), contrastively focussed in the CP, left or right dislocated or even questioned, and thus occupy the relevant positions. Subject clitics are the head of KP and as such they only target the Case position.

Let us then examine a case of left peripheral movement of the DP, namely topicalization (from now on Left Dislocation).[24] Left dislocation obligatorily requires a clitic pronoun for subjects, objects and Datives in the NIDs. A lot of work has been done on whether Left Dislocation is indeed movement or not, but very little is found in the literature on the reason why a resumptive clitic is there. In this view, the clitic is the part of the NE and checks its case feature.

An apparent counterexample to the assumption that the two doubles never copy the same feature is provided by number and gender. When doubling occurs, these features are expressed both on the DP and on the clitic. Note,

[23]As we will see later the part of the DP which moves to the SpecT position is not the entire Case projection (KP according to Giusti 1993) but the lower portion of the DP once the KP has been moved out.

[24]I follow here Rizzi's terminology who talks about Left Dislocation but labels the corresponding projection TopP.

however, that number and gender in Romance spread throughout the DP to all adjectives as well as quantifiers and possessives. I propose that the real number feature corresponding to the NumP internal to the DP is expressed by the clitic and that what is found on the DP is simply an agreeing form, the same that is also found in adjectives and modifiers of the Noun, which do not have an independent NumP, but must agree in gender and number with the head noun (see again Giusti 1993 on agreement spreading inside the DP structure).[25]

If this hypothesis is correct, doubling depends on how many features have to be checked in the functional structure: the more there are, the more probable movement and splitting become.

Suppose for instance that the internal structure of an XP is built in the following way:

(21) $[_{FP1}\ [_{FP2}\ [_{FP3}$ [Lex. Cat.]]]

The procedure of splitting will take away a proper subset of functional projections, moreover it will strip away functional layers starting from the highest one.[26] Therefore, either F1 is split and moved (hence copied) onto a projection in the IP or CP area of the clause, or F1 and F2, but never F2 alone or F1 and F3 leaving F2 behind. In other words, we have to assume that the ordinary restrictions on moving a proper sub-tree apply. The reason why we have the implicational scale described earlier is due to the layering of the functional projections itself, hence Topic and Focus (which correspond to the left periphery internal to the DP) will be higher than Number and Gender (which correspond to its IP). As for the mechanism that selects the relevant projection moved, this is the first strong projection after the higher strong one: if we have both Case and Topic with strong features to check, given that Case is higher than Topic, it will be Topic which moves to create the remnant containing Case (and the trace of TopicP) which then moves to the relevant Case projection in the IP of the clause. The same applies in other cases where the two features are Case and Number, here it will be Number that moves creating the remnant which contains its trace. Hence, this analysis does not need any special rule, it makes use of restrictions that are already present in the grammar, as remnant movement, the fact that we always move proper subtrees, and that the layering of the FPs is what it is (all the recent work on DP assumes that Case is the highest projection and that if there are Topic and Focus projections they are located immediately below Case, while Number and Gender are lower, see among others Giusti (2006).

[25]Notice that there are languages in which even Case can spread as an agreeing morphology from the DP to the NP, the *n* morpheme of the dative plural and the *s* of the genitive and masculine singular in German are residues of this process.

[26]See Cardinaletti and Starke (1999) for a similar idea in deriving clitic, weak and tonic pronouns. Giorgi and Pianesi (1997) also assume a similar condition of feature scattering, which has to apply to proper subset of features.

We noticed that in general the lower portion of the internal structure of the original XP, which has not been copied, can stay *in situ* and only in the case of subject doubling and left periphery movements (topicalizations, focalizations and wh-movement) do we find a case in which the DP moves independently as it has a further EPP feature to check. This hypothesis accounts for the implicational scales we have examined for DP doubling (and wh-doubling, see later). The more functional features a given XP has to check the more probable the splitting and stripping procedure is bound to occur. If doubling amounts to partial movement of an XP, the portion of functional layer(s) that can be stripped away has to be the highest one of the XP internal structure. As we have seen, a remnant movement analysis ensures that it is not possible to split and strip intermediate portions of the internal structure of the XP.

If the idea is correct, the prediction is that we should never find doubling of intermediate pieces of functional structure, the functional double must always contain a proper sub-tree of the whole XP and precisely the highest one. This prediction seems to be borne out in the case we have seen earlier, but it clearly requires further testing.

A closer look at Left Dislocation structures provides further empirical support. As mentioned earlier, Left Dislocation is one of those exceptions to the descriptive generalization that the functional double (the resumptive clitic) ends up in a higher position with respect to the lexical double (the DP containing the noun) on a par with subject clitic doubling.

Left Dislocation is particularly interesting in a theory of doubling because it is the first syntactic context in which doubling is manifested in the diachronic development of NIDs. Notice also that all Romance languages allow or require a clitic in Left dislocations even when they do not in any other construction. More specifically Vanelli (1987) examines the diachronic development of subject clitics and observes that in the 16th century subject clitics do not double NE of any type in their argumental position. However, Left Dislocations is the only context in which doubling can occur. Furthermore, these are (along with non-finite clauses) precisely the contexts in which tonic pronouns, which in this period still have a Nominative form different from the Accusative one, can occur in the LD position in oblique Accusative case instead of their Nominative form. In later texts, the oblique form then spreads over to other constructions, leading to the disappearance of a case distinction on tonic pronouns and to a situation where only clitics are marked for case, as the one found nowadays in the majority of the dialects.

Why should this be so? As far as I know nobody has up to now ever tried to explain this observation, which in fact is straightforwardly accounted for in the present analysis of doubling.

Let us assume following Giusti (1993, 2006) *a.o.* that Case is a high projection of the DP corresponding to the ForceP in the CP phase. If the idea of splitting is correct, we expect that if doubling applies, it will strip away the Case layer (KP) from the rest of the NE, Case being the highest functional feature requiring checking realized as an independent syntactic projection. Remember that the splitting procedure occurs as a movement of the lower portion of the NE

followed by remnant movement of KP with the clitic inside to the Case position in IP. The category moved to create the remnant has the feature located immediately lower than Case, namely Topic, which is exactly the feature checked by Left Dislocation in the CP.[27] This is precisely what happens according to Vanelli in the evolution of the NIDs: tonic pronouns lose their case feature in Left dislocation position and clitic pronouns occur precisely in this case.

Furthermore, only the clitic has overt case morphology distinguishing Nominative, Accusative, Dative and Genitive, while NEs do not.[28] We can thus restate (15) and (16) rendering more precise the label DP, which is in fact only a cover term for a number of functional projections inside the structure of the NE. After KP we have, on a parallel with the structure of the clause, a Topic layer followed by a Focus layer, which is then followed by other functional projections corresponding to the IP in sentence structure [29]:

(22) $[_{KP}\ [_{K^\circ}$ clitic $[_{TopicP}\ [_{FocusP}\ [_{FP}\ [_{NP}]]]]]]$

(23) $[_{XP}\ [_{TopicP}\ [_{FocusP}\ [_{FP}\ [_{NP}]]]]][_{X^\circ}\ [_{KP}\ [_{K^\circ}$ clitic $[\sout{_{TopicP}\ [_{FocusP}\ [_{FP}\ [_{NP}]}]]]]]]$

In the above structures we have movement of the lower Topic phrase containing the lower portion of the DP structure including the NP to the Spec of a position higher than KP. The remnant KP created by this movement only containing the clitic pronoun has to check the Case feature located in IP and is therefore moved to the projection in the high IP layer where Case is checked. The other piece of the structure, namely TopicP still has to check its feature in the Spec of a Topic projection inside the CP layer. The TopicP containing the internal part of the NE (including NP) bypasses the position of its clitic double. Therefore, the fact that the highest layer has been stripped away from the DP leaving TopP as the highest projection, gives the TopicP internal to the DP structure the possibility to raise to the CP layer.[30]

The other cases of doubling seen under the implicational scale earlier can all be treated in the same way. They are the result of a first movement of the lower portion of the nominal structure to the highest specifier, followed by remnant movement of the clitic to a projection in the IP.

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[27]See Giusti (2006) and Poletto (2006) for evidence that the DP in Romance has an internal active left periphery

[28]In the Romance languages the DP can be preceded by a preposition, but has never case on its own. I assume here Kayne's (2002) treatment of prepositions as higher functional heads requiring the movement of the DP in their specifier (and subsequent movement of the preposition itself)

[29]Notice that if the clitic is the only element occurring, we could hypothesize along the lines of Sportiche (1996) there clitics have a null pro counterpart which moves independently. This is expected given the view I take on wh-*in-situ* being a null version of wh-doubling with a null clitic. It is expected that also the phrasal doubler can be null.

[30]The same type of analysis can be adopted for the Focus and wh- examples of indirect objects seen earlier, modulo the position of the clitic, which is a position for dative case and the position of the XP in the left periphery, which is not a Topic but a Focus or a wh-item.

Suppose the nominal structure has the following internal layering lower than the internal left periphery seen earlier, with Gender and Number corresponding the the IP area of the clause:

(24) $[_{XP}\ [_{KP}\ [_{K^{\circ}}$ clitic $[_{Deixis}\ [_{Addressee}\ [_{Speaker}\ [_{TopicP}\ [_{FocusP}\ [_{GenderP}\ [_{Number}\ [_{NP}]]]]]]]]]]$

We can assume that any of these projections can in principle be moved higher than KP creating the remnant containing the clitic. As seen earlier, if we move TopicP, this constituent will have to move to the left periphery of the clause to a Left Dislocation position: tonic pronouns in the NIDs, as well as in standard Italian and in general in all Romance languages which have clitics, are used only when they are either Topic or Focus. Therefore, doubling of tonic pronouns is similar to doubling of left dislocated items and requires movement of the Topic of Focus phrase higher than KP.

We could also speculate that the reason why second person pronouns are doubled more easily than third person is that they have left peripheral positions corresponding to Deixis and Addressee which are active and have to check corresponding projections in the left periphery of the clause (see Sigurdsson 2004, 2007 for the assumption that Person is realized in the CP layer).

Definite DPs have Gender and Number and this is the category that moves to SpecXP creating the remnant. In the case of Quantifiers, the projection moving to SpecXP is Number and for wh-items it is wh-.

With this analysis in mind let us now consider other instances of doubling.

3. WH-DOUBLING: THE FUNCTIONAL STRUCTURE OF OPERATORS

Let us now consider other cases of doubling to test whether the splitting hypothesis for non-identical doubling is correct. A good candidate is wh-doubling, which also occurs in various NIDs.

(25) a. S' a-lo fat che? (Illasi (VR))
what has-he done what?
What did he do?

b. Ndo e-lo ndat endoe?
where is-he gone where?
Where did he go?

[31]Another type of doubling is similar to the one between a full pronoun and a DP discussed by Belletti (2006). Munaro (1999) defines this second type of doubling as operator doubling, as one element is always *che* (*that*/*what*), while the other can be WHO, WHAT, WHICH X, or HOW MANY X. Similar cases probably occur in the Germanic languages, although I do not make any claim for those here.

As extensively discussed in Poletto and Pollock (2004), one type of wh-doubling is similar to DP clitic doubling because one of the two doubles has indeed clitic properties, while the other is an XP.[31] Poletto and Pollock (2004) apply the usual tests of cliticization to the higher wh-item and show that it behaves as a pronominal clitic because it cannot be modified, coordinated, used in isolation, bear stress and moved in another position within the sentence. Cases like (25) also display the property of DP doubling noted earlier, namely the two doubles do not have the same form and the (higher) clitic has a fixed position, as shown by the fact that it is not possible to reverse the order of the two wh-items:

(26) a. *Che a-lo fat sa? (Illasi (VR))
what has-he done what
What did he do?

b. *Ngont fet andà ngo? (Monno (BS))
where do-you go where
Where did he go?

Moreover, the distribution of wh-doubling of this type can also be described as an implicational scale similar to the one in (5):[32]

(27) If only one *wh-* behaves like a clitic it is either *what* or *where*.

(28) Elements like *who* and *how* can also display clitic-like properties but this is less frequently the case. Moreover, the presence of clitic/tonic pairs for *who* and/or *how* in a language implies that both *where* and *what* also behave as such.

(29) The *wh*-element corresponding to *why* never behaves as a clitic, and is always expressed by a compound[33]

(30) What/where who/how *why/*which X
→ doubling

[32]Among the authors who made this observation see Poletto (2000), Nunez (2004). The type of doubling discussed by Fanselow and Cavar (2001) is not amenable to the analysis I present here.

[33]While I think that the generalization on WHY is quite robust, I do not know whether the generalization on wh-phrases is simply due to lack of data. Munaro (1999) observes cases of doubling for wh-phrases, although of a different type, which I do not analyze here, namely cases like the ones formalized by Belletti (see Introduction earlier) as having two phrasal doublers. The same type of doubling seems to be possible in German dialects, as pointed out to me by an anonymous reviewer. So it remains to be understood whether the lack of clitic doubling with complex wh-phrases is really intrinsic to the system or a simple chance due to the limited set of data we have. In Poletto and Pollock (2004) we hypothesize that this lack is due to the fact that wh-phrases do not have the double operator structure that wh-words have, but a simple operator followed by a DP structure.

Doubling distributes according to the type of wh-pronouns: if a dialect has doubling with the wh-item WHO, it has doubling with WHAT and WHERE, if it has doubling with HOW it also has doubling with WHAT and WHERE. Doubling of this type has never been observed with WHY and complex wh-items.

The following examples illustrate the point. In the dialect of Illasi, the older generation admits doubling only with the wh-item WHAT, while the young generation (below 40 years of age) also admits doubling with the wh-items WHERE and WHO:

Illasi (VR):

Old Generation

(31) *Ci a magnà ci, la me torta?
who has eaten who the my cake
Who ate my cake?

(32) *Ci alo invidà ci?
whom has-he invited whom
Whom did he invite?

(33) Sa alo magnà che?
what has-he eaten what?
What did he eat?

(34) *Ndo valo (a)ndoe?
where goes-he where?
Where did he go?

Young Generation

(35) Ci a magnà ci, la me torta?
who has eaten who the my cake?
Who ate my cake?

(36) Ci alo invidà ci?
whom has-he invited whom
Whom did he invite?

(37) Sa alo magnà che?
what has-he eaten what
What did he eat?

(38) Ndo valo (a)ndoe?
where goes-he where?
Where did he go?

(39) a. *Parché e-lo partio parché?
why is-he left why
Why did he leave?

b. *E-lo partio parché.
is-he gone why
Why did he leave?

c. *Che elo partio che tozato?
what is-he gone which boy
Which boy has gone?

The dialect of Bormio Superiore (in the Italian speaking part of Switzerland) also allows doubling of "how". The doubling structure with a clitic counterpart is not extended to any other wh-item in any dialect of the data base[34]:

(40) Me tal fet là cumè? (Bormio Superiore (Ticino, CH))
how you-it do there how
How do you cook it?

(41) *Quan ta l vedat quand?
when you it see when
When will you see him?

(42) *Parché ta vet via parché?
why you go away why
Why are you going?

As extensively discussed in Benincà and Poletto (2005), only some wh-items can undergo doubling, not all of them. The wh-items that can undergo doubling are also those which allow wh-*in-situ* or have a double paradigm of wh-pronouns with a clitic and a tonic series.

Examples of the same restriction with wh-*in-situ* are the following. In the dialect of Borgomanero described in Tortora (1997), the only wh that can be left *in situ* in a non-echo question is the wh-item corresponding to WHAT, and in this case the wh-item has a different form with respect to the one occurring in initial position.

(43) a. Kus tal ʃerki? (Borgomanero (NO))
what you look-for
What are you looking for?

b. *Tal ʃerki kus?
you look-for what

c. Tal ʃerki kwe?
you look-for what

d. *kwe tal ʃerki?
what you look-for

[34] The same dialect also allows doubling of the direct object and of the locative wh-item, but not of the subject wh *chi*.

(i) Indua tal metat induè?
where you-it put where
Where are you going to put it?

(ii) Sa ta mangiat cusè?
what you eat what
What are you eating?

In the Bellunese dialects discussed by Munaro (1999) the wh-items that can remain *in situ* are those corresponding to WHAT, WHO, WHERE and HOW.[35]

(44) a. *Ché a-tu fat? (Tignes d'Alpago (BL))
what have-you done
What have you done? (Munaro 1999:3.62)

b. A-tu fat ché?
have-you done what
What did you do?

(45) a. *Chi laore-lo?
who works-he
Who is working?

b. E-lo chi che laora?
is-he who that works
Who is working?

(46) a. Va-lo andè?
goes-he where
Where is he going?

b. ??Andè va-lo?
where goes-he

(47) a. Se ciame-lo comè?
himself calls-he how
What is his name?

b. ??Come se ciame-lo?
how himself calls-he

(48) a. In che botega a-tu comprà sta borsa?
in which shop have-you bought this bag
In which shop did you buy this bag?

b. *A-tu comprà sta borsa in che botega?
have-you bought this bag in which shop
In which shop did you buy this bag?

No dialect that has wh-*in-situ* with subject clitic inversion (as in the examples earlier (44b), (46a) and (47a) applies this strategy to other wh-items, as can be seen from the ungrammaticality of (48b).

To capture this fact, Poletto and Pollock (2004) propose that wh-doubling as well as wh-*in-situ* are related to the existence of wh-clitics. They start from

[35]This dialect has gone through a phase where it had wh-doubling, now it only has wh-*in-situ*. For an analysis of wh-*in-situ* as covert wh doubling with a null clitic see Poletto and Pollock (2004), where it is shown that the behaviour of wh-*in-situ* and wh doubling is the same with respect to a set of phenomena (subject clitic inversion, lack of embedding, etc.) and as such they have to be treated alike.

the observation that wh-doubling and wh-*in-situ* have a lot of properties in common (they are both dependent on subject clitic inversion, they occur with the same set of wh-items and are excluded with the same set of wh-items). Given that, they analyze the wh-items that are *in situ* as having a null clitic counterpart similar to the doubling wh-items which is located in the same structural position where the clitic part of the doubling wh-item is moved. The (either null or lexically realized) clitic is considered part of the complex structure of the wh-item itself and then the two elements are independently moved as I assume here.[36] The property of some wh-items to become clitics is therefore a necessary condition for getting wh-*in-situ* and wh-doubling. So the same dialect can either spell only one of the two pieces or both. So we can have either a visible clitic with a silent XP, or a visible XP part with a silent clitic or both clitic and XP can be spelled out, in which case we have overt doubling. The following examples illustrate the point:

(49) a. (che) fe-f fa (què) ades? (Monno (BS))
what do-you what now
What are you going to do now?

b. (ngo) fet andà (ngont)?
where do-you go where
Where are you going?

c. (ch) e-l (chi) che maja le patate?
what is-he who that eats the potatoes
Who is eating potatoes?

The point I intend to make concerns the diachronic origin of wh-*in-situ* and wh-doubling. Apparently doubling starts out in the environment of non-standard questions as defined by Obenauer (1994, 2004) as questions whose answer is outside the set of canonical answers provided by the context. Obenauer (2004) brings empirical evidence that non-standard questions involve the checking of additional functional projections located in the CP area higher than the position to which the wh-item moves in standard questions.

Therefore, doubling originates precisely when the structure of the NE contains strong functional projections which require checking in the sentence structure. The idea that the structure of NEs parallels the structure of the clause and that movement is required for checking provides an explanation for

[36]Munaro (1999) notes that languages that develop wh-*in-situ* of the type described earlier pass through a stage of wh-doubling.

(i) Che oleu che epia metù che?
what want-you that have-subj put what?
Munaro (1999:2.28, Villabruna, IV, II 1700)

This constitutes additional empirical evidence that the two phenomena are related.

the implicational scales seen earlier. The more functional features there are to check, the more doubling becomes probable.[37]

We can also hypothesize that doubling (hence, stripping) phenomena are found as a (probably possible though not necessary) intermediate step towards the loss of movement of the entire NE to a given checking position. Stripping away and moving only a smaller portion of a bigger constituent is indeed a stage toward not moving the whole XP at all (and checking features simply by virtue of the operation "Agree"). Wh-doubling, which so neatly behaves like wh-*in-situ*, seems to be a step which dialects undergo before losing wh-movement entirely. Given that doubling can also be covert (in the sense that either the clitic or the XP counterpart can be empty), this analysis does not predict that all languages have to undergo an overt doubling stage when they lose movement.[38]

An apparent counterexample to this account of doubling in terms of economy is provided by the observation that doubling is first found with wh-words, while one could think that it should be more frequent with complex wh-items than with wh-words, given that complex-wh items contain a N and are therefore more complex. Recall however that doubling is not connected to the complexity of internal structure of an XP *per se*, but to the number of functional projections that have to be matched and checked between the XP and the sentence structure.

Wh-doubling starts out with wh-words and they are generally more prone to enter a doubling strategy because they are intrinsically pure operators with more operator features. In this sense wh-words are parallel to tonic pronouns while complex wh-phrases are parallel to DPs, therefore wh-words are expected to display doubling more often, as they have more functional features to check. This is precisely the analysis put forth in Poletto and Pollock (2004), who, basing on an idea of Katz and Postal (1964) assume that wh-words are construed as existential operators in the scope of a disjunction operator, while wh-phrases do not contain any existential operator.

In this sense, this hypothesis reverses the idea that elements like WHAT are more prone to enter doubling and become more easily clitics because they are more "void" of content, WHAT has this behavior for the opposite reason, because it has more functional structure, as it has a complex internal operator structure (see Obenauer 1994, 2004; Barbiers, Koeneman and Lekakou (2008) on this).

4. NEGATIVE CONCORD

In this section I describe a case of doubling of a purely functional element, namely sentential negation. Following Zanuttini (1997) I assume that in the NIDS

[37]This idea is not new in the literature, for instance it can be found in Cardinaletti and Starke's (1999) treatment of pronominal forms.

[38]In the first stage of the development the *in situ* element is interpreted as having a null clitic companion, and then the null clitic is deleted at a later stage of development so that the *in situ* strategy becomes standard for all wh-items.

there are four functional projections where a negative morpheme can occur:

(50) [$_{NegP1}$ non [$_{TP2}$ [$_{NegP2}$ mia [$_{TP2}$ [$_{NegP3}$ nen [$_{Asp}$ perf. [$_{Asp}$ gen/progr. [$_{NegP4}$ no]]]]]]]]

The negative markers occurring in each position in the above structure are of a different etymological type, I present the properties of each type in turn:

Elements located in NegP1 are always heads and often also display clitic properties. They are always in front of the inflected verb. In all dialects they are obligatory with postverbal negative quantifiers (sometimes also with preverbal negative quantifiers).[39] They cannot occur with true imperative forms:

(51) a. No sai. (Cencenighe Agordino (BL))
(I) not know
I do not know.

b. No l' è lugà nogugn.
not he is come nobody
No one came.

c. Nisun no vien più casa mia. (Venice)
nobody not comes more home my
No one ever comes to my place.

d. *no va.
not go+imperative
Don't go.

Elements occurring in NegP2 are also often phonologically reduced, but are probably weak pronouns, not clitics. Items occurring in this position originally indicated a small quantity, (they derive from the word meaning "step" "pa", "crumble" "brisa", "mina/miga/minga". They are generally located in front of the past participle. Negative concord is not obligatory but possible with postverbal negative quantifiers. They can be used with true imperative forms:

(52) a. Al sei bic. (Livigno (SO))
I-it know not
I do not know.

b. No l' è mina vegnù. (Loreo (RO))
not he is not come
He has not come.

c. A n è mina riva nisun.
it not is not come nobody
No one came.

[39]Note incidentally that the case in which the preverbal negative marker co-occurs with a preverbal negative quantifier is also a counterexample to the empirical generalization that the head is always higher than the XP, in this case the negative quantifier precedes the negative marker.

d. Magnelo mina?
eat-it not
Isn't he eating?

NegP3 originates from the element meaning NOTHING and is often located lower than adverbs like ALREADY but higher than ALWAYS. They are always specifiers and can move to the SpecC position and be followed by a complementizer, they can occur with postverbal negative quantifiers (although with some restrictions) and although in several dialects they occur in imperative clauses, in others they are substituted by a NegP4:

(53) a. A l' avia già nen volu 'ntlura ... (Piemontese)
he it had already not wanted then
Already at that time he had not wanted to... (Zanuttini (1997) 3:(29))

b. A l' ha nen dine sempre tut.
he he has not said-us always everything
He did not always tell us all. (Zanuttini (1997) 3: (32))

c. A parla nen cun gnun.
he speaks not with nobody
He does not speak with anybody. (Zanuttini (1997) 3: (55))

Neg4 is the same morpheme that is used for pro-sentence negation, "no". It is always a specifier, in the dialects where it is the only negative marker. It cannot occur with postverbal negative quantifier (when used alone). It can be used in imperative forms:

(54) a. Su no. (Milan)
(I) know not
I do not know.

b. L' è rivà nisun.
it is come nobody
No one came

c. Piof pu.
rains more
It stopped raining.

d. L' a mangià no.
he has eaten not
He is not eating.

e. Vusa no!
shout.IMP not
Don't shout!

The examples earlier show that there are indeed four distinct types of negative markers. Each type of negation is found as the only sentential negative marker

in several dialects, but in some dialects they can be combined with each other. The possible combinations found are the following:

a. NegP1 is compatible with all other negation types:

(55) a. a n al so brisa. (Bologna)
I not it know not
I don't know.

b. I ne sà nia. (S.Leonardo (BZ))
I not know not
I don't know.

c. No credo che podia parlar con elo no. (Cembra (TN))
not believe that could talk to him not
I do not believe that he could talk to him.

b. NegP2 is also compatible with all other types of negation, more interestingly whenever it occurs with other negative markers NegP2 always has a presuppositional value, as already noted by Zanuttini (1997).

(56) a. Fa pa nen sulì. (Lanzo (TO))
do not not that
Don't do that. (Zanuttini (1997, p. 46))

b. Nol lo ga mina fato nò. (S.Anna (Ve))
not-he it has not done not
He didn't do this at all.

c. NegP3 and NegP4 are not found together.[40]
d. As shown above NegP4 can occur with NegP1 and NegP2, but whenever it does it instantiates Focus, as the intonation also attests.

Applying the analysis of doubling as checking of several functional features, we can hypothesize that negative elements can also encode presupposition and focus in addition to marking sentential negation and therefore the sentential negative marker can also have an internal structure with several FPs.[41]

If this view is correct, we can conclude that the splitting procedure can be adopted by purely functional XPs as negation as well, so the lexical part of

[40]The reason why the two negations do not co-occur has probably to do with the fact that NegP3 starts out from a lower position and then raises to NegP3 crossing the position of NegP4. NegP3 elements are in fact originally arguments, which are then turned into sentential negation by movement.

[41]That the negative marker has internal structure is already present in Pollock (1989) where he analyses French negation "ne ... pas" as a head and a specifier internal to the NegP.

the constituent does not really play a role in doubling, in fact it is not even necessary for a doubling procedure to be established. On a par with the cases of DP and wh-doubling, we can assume that the fact that negation also displays doubling is related to the number of functional projections which have to be checked. The internal layering of the NegP mimics the external projections in the clausal structure, and the checking procedure can obtain either by moving the whole NegP or by only moving a portion of it following the procedure that has been described for DPs in Section 2. In the case of DPs, I have proposed that the feature that causes splitting in Italian varieties can either be Topic or Focus (which results in doubling of full pronouns), Gender (which results in doubling of full pronouns and DPs) Number (which results in the doubling of full pronouns, DPs and Quantifiers) or can be generalized to any functional structure, (hence we get generalized doubling of all possible elements). In the case of wh-doubling the functional structure resulting in the doubling configuration is the one created by wh-words with two Operator projections: the Disjunction operator and the Existential operator. Which features could be responsible for the splitting and doubling procedure in the case of Negation? As seen earlier, the set of possible features must contain at least a presuppositional and a Focus feature. I would like to propose that the negative marker also contains an existential operator (as the morphology suggest for words like *nessuno*, "nobody" where the negative element is combined with the indefinite determiner). If the idea that the internal structure of an element and the clause structure where the element is located are parallel is correct, then the Focus feature inside the negative marker should correspond to the highest feature, being Focus a typical left peripheral projection. However, what we have seen here is that the negative marker related to Focus is the one located at the end of the clause. I would like to propose that the sentence final position of the negative marker *no* is not to be interpreted as low negation, but on the contrary, that the negative marker *no* is the highest negative marker which moves to Focus in the left periphery of the clause, followed by remnant movement of the whole remnant IP to its specifier as illustrated in (58).

(57) $[_{SpecXP}\ [_{IPi...}\ vusa\ t_{ij}\ [_{SpecFocus}\ no_j\ t_i]]]$

This explains why *no* also occurs after all arguments, which are usually located inside the VP. Therefore, the internal structure of the negative marker contains the following FPs:

(58) $[_{Focus}\ [_{Presupposition}\ [_{Existential}]]]$

The realization of Focus corresponds to the negative marker *no*, the one of the Presuppositional Phrase to those negative markers etymologically deriving from elements indicating a small quantity and the existential to the one

homophonous with the element corresponding to NOTHING. If Zanuttini (1997) is correct, the type of negation located immediately above TP (and AgrS) corresponds to a polarity phrase, therefore the internal structure of the negative marker (which corresponds to the projection the negative marker checks in the sentential structure) is the following:

(59) $[_{\text{Focus}}\ [_{\text{Polarity}}\ [_{\text{Presupposition}}\ [_{\text{Existential}}]]]$

Although I will not go into the matter here, I only point out that the relation between Focus and Negation, Quantifiers and Negation and the fact that in some contexts negation is presuppositional is captured in this framework by the fact that they have exactly the same projections in their internal structure, thus reinforcing the idea of minimality by deriving the classes of elements that are potential intervener in a minimality configuration by assuming that the reason why this is so is that they are construed in the same way.

5. CONCLUSION

In this chapter I have explored the possibility of analyzing doubling as a general procedure for minimizing (re)-merge, hence a procedure, which, contrary to pied piping, moves outside the DP only the highest functional portion of an XP leaving the lower portion of the structure (including the lexical item) below. This procedure can be applied to all types of categories with more than one feature to check (including functional XPs), and in fact the literature reports cases of doubling not only of DPs and wh-items, but also of verbs and prepositions.

This accounts for the fact that doubling constructions are so pervasive in dialects: each category with at least two functional features to check in the IP or in the CP can be subject to the stripping procedure which originates doubling constructions.

Moreover, this analysis has the advantage of not requiring any special structure like a "big DP". Languages with doubling have exactly the same layering as languages with no doubling. This in turn means that complex XPs are not a peculiarity of doubling languages, all languages can have DPs endowed with more than one feature, only the splitting procedure, i.e., the first movement of the lower portion to a high position internal to the DP, is language-specific and is a property of the highest specifier, the edge, of the DP phase. If doubling is related to the amount of pied piping a language allows for, in the sense that the more a language allows for pied piping, the less it displays doubling, one could see doubling and pied piping as being related in an inverse proportion. However, even at a first look, things do not see to be as simple as that, because that there is no unique condition on the amount of structure that can be dragged along with the relevant subpart containing the feature to check in cases of

wh-movement, other A'-movements or A movement in each language. Therefore, although this analysis of doubling relates the splitting procedure at the basis of the doubling strategy to lack of pied piping, much more work remains to be done in order to understand what the exact connection between the two phenomena is. Moreover, is the amount of doubling/pied piping also connected to other syntactic properties? Another side of the same coin is the problem of how the splitting and stripping procedure is restricted in order not to overgenerate wildly. This is an empirical question that cannot be solved here, but that must be taken into account in future research if the line of thought presented here is to be pursued.

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2

DOUBLING OF CLITICS AND DOUBLING BY CLITICS: THE CASE OF NEGATION☆

M. Rita Manzini

ABSTRACT

Clitics, beside doubling a phrasal constituent, can double other clitics. The two cases to be studied here, based on Italian dialect data, involve copying of the negative clitic on either side of a subject clitic, and copying on either side of an object clitic. In all of the cases we consider, the doubling of the negation clitic is sensitive to the so-called person split, roughly between first/second person and third person. We also consider potentially problematic cases where one of the apparently negative copies surfaces in positive contexts. Our analysis is based on the assumption that clitics are based-generated in the position where they surface — being connected to their copies by the interpretive calculus at the LF interface, as in so-called representational models. More to the point, we abandon the idea that sentential negations instantiate a specialized functional category Neg, where the clitic corresponds roughly to the negation operator. Rather, we propose that negations, including both

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clitics and adverbs are nominal elements, anchored as such at the argumental structure of the verb. Because we treat the so-called sentential negation as a nominal, argumental element, we are led to conclude that from an interpretive point of view, doubling of sentential negations is effectively an instance of so-called negative concord; we deal with the latter by assuming that negations are negative polarity items, rather than negative quantifiers.

1. DOUBLING OF n ON EITHER SIDE OF A SUBJECT CLITIC

In this section, we consider cases of doubling of the clitic negation on either side of a subject clitic, as seen for instance in the Northern Tuscan dialect of *Viano* in the second person singular in (1ii). In the other persons, reported in (1) under the corresponding roman numbers, the negative clitic simply follows the subject clitic. The examples in (1ii) show that the doubling of the negative clitic is entirely indifferent to the composition of the object clitic string.

(1) *Viano* (Tuscany)

i. a nə dɔrmə.
I not sleep
I don't sleep.

ii. a. a n tə nə dɔrmə.
SCl not you not sleep
You don't sleep.

b. n tə (nə) mə camə.
not you not me call
You don't call me.

c. n tə nə l camə.
not you not him call
You don't call him.

d. n tə n tə lavə.
not you not you wash
You don't wash yourself.

e. n tə ŋ gə l dɛ.
not you not there it give
You don't give it to him.

iii. i/ la nə dɔrmə.
he/she not sleeps
S/he doesn't sleep.

iv. a nə dor'mjaŋ.
we not sleep
We don't sleep.

v. nə dur'mi.
not you.sleep
You don't sleep.

vi. i/ la nə 'dɔrmənə.
they.m/they.f not sleep
They don't sleep.

The pattern in (1) connects to the fact that cross-linguistically a negative clitic can appear either before or after the subject clitic (Parry 1995, 1997; Zanuttini 1997; Manzini and Savoia 1998, 2005; Poletto 2000), as illustrated here in (2)–(3) again with dialects of Northern Tuscany. To be more precise, in a dialect like *Vagli* in (2), the negative clitic follows the subject clitic, while in a dialect like *Sillano* in (3) it precedes the differentiated subject clitic and it follows invariable *e*.

(2) *Vagli di Sopra* (Tuscany)

i nun dɔrmɛ
tu n dɔrmɛ
i/ ɛ nun dɔrmɛ
nun sə dɔrmɛ
nun durmitɛ
i nun 'dɔrmənə
I not sleep etc.
I don't sleep. etc.

(3) *Sillano* (Tuscany)

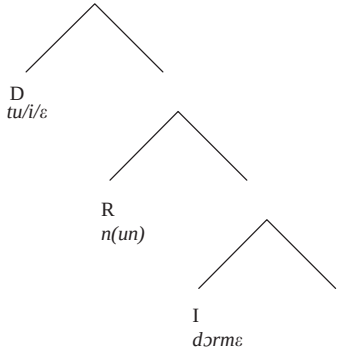
(e) n(o) i dɔrma
(e) non tu dɔrma
(e) no llə dɔrma
(e) non dor'mjaŋ
(e) non durmiddə
(e) no llə dɔrməŋ
SCl not I sleep etc.
I don't sleep. etc.

Poletto (2000) accounts for data similar to (2)–(3) by assuming that both subject and negation clitics have more than one position available to them. To begin with, in (3) the invariable subject clitic is higher than the inflected one, since the negation occurs between them. Furthermore, the negation in (3) is higher than the negation in (2) since the former precedes the inflected subject clitic, while the latter follows it. This yields a hierarchy roughly of the type SCl (invariable) — Neg — SCl (inflected) — Neg.

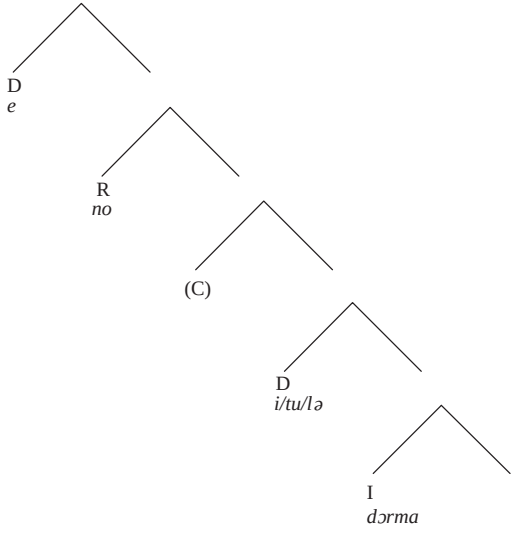
We adopt the conclusion that the two subject clitics in (3) correspond to two different subject clitic positions, which we take to be superordinate to the I and C positions of the verb. Similarly we accept that there are two different positions for the negations preceding the inflected subject clitics in (3) and following

them in (2); again we assume that the two relevant positions are within the C and I domain respectively. Following the intuition of Chomsky (1995) as to the nature of the EPP argument, we notate the subject clitic as D. More importantly, we do not identify the position of the negative clitic with a dedicated functional projection Neg, though nothing would prevent us in principle from doing so. Rather, given the existence of an independent hierarchy for pronominal clitics, we simply assume that the negation fits into it — and specifically corresponds to the R slot of Manzini and Savoia (2007), generically suggesting Referentiality, which occurs immediately after the subject clitic and immediately before object clitics. On these grounds we assign the structures in (4) and (5) respectively to, say, the second person singular of the paradigms in (2) and (3).

(4) *Vagli di Sopra*

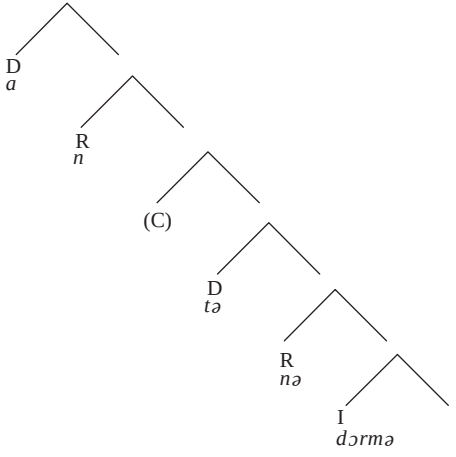


(5) *Sillano*



The structures in (4)–(5) amount to proposing that *Vagli* and *Sillano* differ as to whether the negation inserts in the domain immediately above C, as in *Sillano*, or in the domain immediately above I, as in *Vagli*.[1] If the C- and I-domain positions of the negation in (4) and (5) are instantiated at once, we derive the doubling of *Viano* in (1ii), as illustrated in (6).

(6) *Viano*



The question now arises as to why the pattern in (6) is restricted to the second person singular. A connection can be established with another pattern which singles out second person clitics in their interaction with the negation. As illustrated in (7) with *Càsola*, again a Northern Tuscan dialect, invariable subject clitics precede the negation, as expected; on the other hand inflected subject clitics split, in that only second person one follow the negation,

[1]An interesting question, raised by reviewer A., is whether the positional difference between I and C negations corresponds to an interpretive difference. All evidence points to a different conclusion, namely that the interpretive value of the negation remains the same, though its lexicalization varies according to a number of ultimately interpretive differences (including in particular the shape of the event, as defined by the nature of the arguments satisfying the predicate).

Specifically, again answering reviewer A's query, we can exclude that the presuppositional vs. non-presuppositional distinction of Zanuttini (1997) applies to the two negations. In general, it seems to us that such a distinction is difficult to maintain, given that all instances of negations, and more generally of focus, must have a presupposition as part of their interpretation. But even if such a distinction could be made to stick in theoretical terms, Zanuttini (1997) applies it to contrasts in the lexicalization of negative adverbs (and in their position) which are unrelated to the contrasts observed here. Thus argument structure, which is a crucial factor in the phenomena studied here, is irrelevant for the contrast of, say, standard Italian between the purely clitic negation and the doubling of the clitic negation by the negative adverb *mica* (non-presuppositional and presuppositional respectively for Zanuttini (1997)). The reader is referred to Manzini and Savoia (2005) for an alternative treatment of the latter.

while third person one precede it (Parry 1995, 1997; Zanuttini 1997; Manzini and Savoia 1998, 2005; Poletto 2000).

(7) *Càsola* (Tuscany)

a	n		ðɔrm	
	n	tə	ðɔrm	
i/la	nə		ðɔrm	
a	nə		ðurmi'aŋ	
a	n	və	ður'mi	
i/la	nə		'ðɔrmənə	
SCl	Neg	SCl	sleep	etc.
I don't sleep.				etc.

In Poletto's (2000) theory, where data of the type of (7) are also considered, the relative order of subject clitics and the negation depends on a clitic hierarchy of the type described earlier, roughly SCl(invariable) — Neg — SCl(third) — Neg — SCl(second) — Neg. Under this account, the negation of *Càsola* in (7) would be the middle one, since it precedes SCl(second) but follows SCl(third). This hierarchy could also correctly derive the doubling of *Viano* in (1), where SCl(second) is flanked by two copies of Neg.

Notice that both *Càsola* in (7) and *Viano* in (1) lack inflected clitics for the first person. Therefore we may equally well describe the facts by saying that in *Càsola* in (7) the negation precedes all inflected first and second person subjects and follows third person ones; similarly in *Viano* in (1) doubling opposes all inflected first and second person subjects to third person ones. In other words, both types of languages can be described as instantiating a classical person split between first/second person and third person.

The reason why the person split interacts with the negative clitic, will obviously depend on the nature of both. In connection with the slightly different domain of data represented by the interaction of the person split with the adverbial negation, Manzini and Savoia (2002, 2005) suggest that the so-called adverbial negation is neither adverbial nor, strictly speaking, negative; rather, so-called negative adverbs are nominal elements interpreted as negative polarity items. They furthermore suggest a characterization of first and second person arguments as 'discourse-anchored' and third person arguments as 'event-anchored'. These conclusions will be briefly reviewed before proceeding to the analysis of the data at hand; we shall return on the negation vs. negative polarity item issue in Section 4.

1.1. Background: The Adverbial Negation

While in standard Italian or in the Tuscan dialects exemplified so far, negation is expressed by a negative clitic, it is well-known that in French or in many Northern Italian dialects the clitic negation is obligatorily doubled by a negative adverb; in other Northern Italian dialects, or in colloquial French,

the negation consists only of a negative adverb (Parry 1995, 1997; Zanuttini 1997; Manzini and Savoia 1998, 2005; Poletto 2000).

Now, the negative adverb (whether doubled or not by a clitic) can be lexicalized by elements such as *nɛinta* in (8a), or *nɛŋ* in (8b) which are at least etymologically connected with the negative polarity item/ negative quantifier 'nothing'. In dialects like those in (8) the connection is not simply etymological; rather, the relevant lexical items have both the adverbial value of a sentential negation and the argumental value — so that the examples in (8) are actually ambiguous. Specifically, since the verb 'eat' can be construed both transitively and intransitively the negative item can fill the internal argument slot, or can have a reading equivalent to a sentential negation.

(8) a. *Oviglio* (Piedmont)
u n maɲdʒa nɛinta.
he not eats nothing/not
He eats nothing/ he doesn't eat.

b. *Montaldo* (Piedmont)
i mɔɲdʒ nɛŋ.
I eat nothing/not
I eat nothing/ I don't eat.

The other basic type of negative adverbs in Italian varieties is at least etymologically related to bare Nouns. This includes generic nouns of the type *rɛŋ* (<Latin *rem* 'thing'), in turn also attested as negative polarity items (as in French *rien* 'nothing'); and it includes 'minimizers' — i.e., Nouns denoting smallest possible unit of something — as in the types *mica* (of standard Italian) or *briza* 'crumb', *bu(ka)* 'piece', *pa* 'step', etc. Noting this correspondence, Meyer-Lübke (1899, §693–694) proposes that what we describe as sentential negation adverbs originate in a partitive construction. In support of his proposal he quotes Old French examples such as (9) where the 'negative adverb' *mie*, effectively a bare Noun, overtly co-occurs with the partitive.[2]

(9) de s'espee ne volt mie guerpir.
of his sword not he.wanted not to abandon
He didn't want to abandon his sword. (Chanson de Roland 465)

Northern Italian dialects provide evidence in favor of a non-purely etymological connection between negation and partitive assignment to the internal

[2]Reviewer A. reminds us that there is also evidence from Germanic that the source of sentential negation can be a negative quantifier. Roberts and Roussou (2003, p. 155) recognize 'minimizers' and generic nouns as other possible sources cross-linguistically.

argument of the verb. Thus in (10) the negation triggers the partitive even in the presence of a definite interpretation. This type of data recalls the phenomenon described by Pesetsky (1982) for Russian, whereby the accusative object in non-negative contexts alternates with an object in the accusative or in the partitive in negative ones.

(10) *Trecate* (Piedmont)
(a mmarju) tʃamum-ru/ na mija.
the Mario call-him of.him not
Mario, we don't call (him).

Taking at face value the fact that *mia* in (10) is a bare N, we expect it to have a referential content. The bare N status of *mia* itself suggests what this referential content may be — namely the only reference independently known to be compatible with bare singular count N's, i.e. that of negative polarity items. To illustrate, while bare singular N's are generally excluded in Romance, as in English, they become possible in the scope of a negative operator, roughly with the value of English *any*. (11) provides an example from standard Italian.[3]

(11) *(Non) si muove foglia.
not NACT moves leaf
Not a leaf stirs.

The coincidence between the so-called negative adverbs in (8) and the argument for 'nothing' suggests for them an analysis analogous to the one outlined for bare N adverbs. In other words 'nothing'-type adverbs are nominal elements and in particular negative polarity items, providing a variable interpreted in the scope of an abstract negation operator.

The dialect of *Quarna Sotto* in (12) is of particular interest here in that it provides a direct link between the adverbial negation and the person split phenomena. This is a language with a bare N negation *mia* and a 'nothing'-type negation *nota* (etymologically a negated Noun, i.e., *ne gutta* 'not a drop'). In general, *mia* co-occurs with third person objects, either in the form of a partitive clitic, as in (12d), or of an accusative lexical object, as in (12e). In turn, *nota* occurs with first and second person objects, as in (12c), and in intransitive contexts, as in (12a). Unaccusatives, as in (12b–b′), appear to be compatible with *nota*, or with *nota* and *mia* splitting according to person.

[3]Here and throughout we gloss *si* as 'non active' (NACT) on the assumption that the non-active label used for the morphology of languages like Greek or Albanian is the best approximation to the range of meanings of *si*.

(12) *Quarna Sotto* (Piedmont)

a. əɣ/ɣɐ drɔmma nota.
he/she sleeps not
S/he doesn't sleep.

b. t i ɲu nota.
you are come not
You didn't come.

b′. i mia ɲu/ i ɲu nota.
he.is not come/ he.is come not
He didn't come.

c. ɐɣ vɔg notɐ-m.
he sees not-me
He doesn't see me.

d. ɐɣ vɔg miɐ-n.
he sees not-of.it/them
He doesn't see (any of) it/ (any of) them.

e. lavu mia ɐʎ ka'miz.
they.wash not the shirts
They don't wash the shirts.

f. ɐɣ beu miɐ d viŋ.
he drinks not of wine
He doesn't drink wine.

Now, person split phenomena are a pervasive pan-Romance phenomenon. In particular, Manzini and Savoia (2005, 2007) show that in the clitic system, first and second person forms are at most differentiated between nominative and non-nominative (in subject clitic languages); third person forms are the only ones to register any difference between accusative and oblique, both in the morphology and in the position of the clitic. What is more, the morphological and positional properties of first and second person clitics, when compared to those of third person ones, are essentially the same as the oblique (dative) and different from the accusative. This in turn is reminiscent of the fact that in many Romance dialects first and second person full pronouns are part of (or exhaust) the set of elements that are lexicalized in the dative through the preposition *a*, whether they are direct or indirect objects (yielding the so-called prepositional accusative). Recall also that in person ergativity splits (not relevant for Romance languages) first and second person, as opposed to third person, are incompatible with the ergative Case.

We surmise that though a first or second person element and a third person one can equally serve as arguments of a predicate, they do so through different means. In particular, the position and the morphology of first and second person arguments do not necessarily respond to their anchoring in the event structure (i.e., whether they are the first or second internal argument of a ditransitive,

hence dative or accusative, etc.). In this sense, Manzini and Savoia (2005, 2007) speak of 'discourse-anchored' elements, i.e., elements whose position and morphology responds only to their denotational content. On the contrary, the morphosyntactic properties of third person elements reflect their argumental role (accusative vs. dative marking, specialized non-active marking by *si* etc.). In this sense, Manzini and Savoia (2005, 2007) speak of 'event anchored' elements.[4]

Going back to the distribution of *mia* in *Quarna Sotto,* the example in (12b′) implies the existence of two slightly different grammars. In one of them, which has *mia* in (12b′), *mia* co-occurs with event-anchored (third person) internal arguments — including those promoted to the EPP position. The distribution of *nota* can be characterized as the complement set — i.e., environments where there is no event-anchored internal argument. In the alternative grammar, which has *nota* in (12b′), *mia* selects event-anchored (third person) internal arguments in the accusative/partitive position — i.e., N in Manzini and Savoia's (2007) argumental (clitic) hierarchy; *nota* excludes them.

1.2. Analysis

Let us then return to the negation clitic and to its interactions with the person split. The structures proposed for the negation clitic that follows the inflected subject clitic, as in *Vagli*'s (4), and precedes it, as in *Sillano*'s (5), suggest an account

[4]Reviewer A. offers an alternative characterization of the 1st/2nd vs. 3rd person split in terms of 'deictica' vs. 'anaphora'. This characterization does correctly capture an important property of the overall person split; nevertheless it does not seem to have any immediate relevance for the phenomena considered in the text. In other words, just because of their 'deictic' or 'anaphoric' properties we do not expect a 3rd person complement to display a morphosyntactic encoding of argumental roles (accusative vs. dative marking) whereas 1st and 2nd person ones don't. Similarly, in *Quarna* we do not expect a 1st or 2nd person object to pattern with the absence of an object and against a 3rd person object; and so on. Data like those we are considering (and others, such as the auxiliary selection according to person analyzed by Manzini and Savoia (2007)) require not so much a characterization of the intrinsic denotational properties of 1st/2nd person vs. 3rd person — which is a fairly straightforward matter. Rather, they require a linking of the referential properties of the various persons to their properties with respect to predicate-argument structures.

To the extent that the two sets of properties of the person split obviously coincide, it would appear that they should be reduced to a common basis. Any attempt at doing this goes beyond the scope of the present article, but in the spirit of trying to be as clear as possible about this matter, we may volunteer something more about it. Suppose for instance we conceive of argument slots in predicate-argument structures as variables (Adger and Ramchand 2005). Everything we said is compatible with the idea that only 3rd person arguments really bind these slots — and this is no doubt connected to their ability to bind other arguments in anaphoric relations. As for 1st and 2nd person pronouns we may consider that they satisfy the relevant argument slot through some different formal means — an identity, predicative relation or other. We again insist that connecting the referential to the argumental properties is necessary to an understanding of how the person split operates in morphosyntax. Therefore we retain, as a first approximation, the 'discourse-anchored' and 'event-anchored' characterizations, as opposed to other characterizations hinting at purely referential properties.

Examples (16)(iiia) and (26c–c′) below are also relevant, to the extent that the 3rd person, anaphoric *si* clitic patterns with 1st and 2nd person clitics; see the discussion in the text.

of the alternating pattern of a language like *Càsola* along the lines of (13). In (13a) the negation is inserted within the I domain and therefore follows the third person subject clitic. In (13b), assuming that the position of first and second person subject clitics remains constant, the negation precedes them in that it inserts in the C domain. Now, the pattern in (13), far from appearing arbitrary, can be seen as a more abstract version of the *Quarna* split in (12). In other words, the negation (here the clitic) has two different lexicalizations (or positions) depending on the presence of a first/second or third person argument (here the EPP argument).

(13) *Càsola*

a. $[_D$ i/a $[_R$ nə $[_I$ ðɔrm

b. $[_R$ n [C $[_D$ tə $[_I$ ðɔrm

Viano's (6), repeated here in (14b), is a variant of *Càsola*'s (13b). Thus in (14b) a copy of the C-domain negation is inserted when the subject clitic is first or second person. By contrast, the I-domain copy is the sole lexicalization of the negation with the third person subject clitic in (14a).

(14) *Viano*

a. $[_D$ i/la $[_R$ nə $[_I$ ðɔrmə

b. $[_D$ a $[_R$ n [C $[_D$ tə $[_R$ nə $[_I$ ðɔrmə

In another perspective, *Càsola* and *Viano* in (13)–(14) are sensitive to the same parameter between the I-domain and C-domain lexicalizations of the negation as *Vagli* and *Sillano* in (4)–(5), except that one of the two negations is generalized to the whole paradigm in (4)–(5), while they split according to person in (13)–(14). This connects the C- vs. I-domain distinction to the discourse-anchored vs. event-anchored one. Specifically, discourse-anchoring is associated with the C-domain, as in (13b) and (14b) and event-anchoring with the I-domain, as in (13a) and (14a).

As usual, the challenge to the theory is not so much describing the data, as explaining them. Thus we should be able to predict that the reverse pattern to (13), with the negative clitic preceding the third person subject clitic and following the first and second person one is not attested. Similarly, the reverse pattern to (14) is not found, with the negation doubled on either side of the third person subject clitic and following the second person one. Poletto's (2000) theory makes the correct prediction as to the impossibility of the reverse of (13), since her clitic hierarchy, roughly SCl — Neg — SCl(third) — Neg — SCl(second) — Neg, forces any negation that precedes SCl(third) to also precede SCl(second). However, when it comes to doubling, the same hierarchy can yield the unattested string Neg — SCl(third) — Neg, even in combination with the string SCl(second) — Neg, assuming that the highest and lowest Neg's of the string are instantiated.

Here, starting with the two different positions of the negation in (13), we are able to predict the doubling in (14), as opposed to its reverse. However we have not yet explained why the negation and the subject clitic pattern as in (13),

as opposed to the reverse — since contrary to Poletto (2000), the position of the negation with respect to first/second person clitics and third person ones is not written into a hierarchy. In other words, the question is why the negation cannot be forced into the C domain by an event-anchored (third person) EPP argument, while remaining within the I domain in the presence of a discourse-anchored (second person) one. Suppose that in the same way outlined for negative adverbs, we construe the negative clitic as a nominal element and a negative polarity item. If so, the generalization is that the presence of a discourse-anchored argument (here the EPP argument) provokes the lexicalization of argumental material (the so-called negation clitic) in the C domain, thereby linking discourse-anchoring and the C domain. On the contrary event-anchoring (of the EPP argument) is connected to (the negation in) the I domain.

Much independent evidence suggests that the connections just established are correct. Thus in the imperatives of Southern Italian and Albanian dialects (Manzini and Savoia 2007), discourse-anchored and event-anchored object clitics are found in the C and I domain respectively — the former in mesoclisis, and the latter in enclisis. This type of pattern will be discussed in more detail in Section 2. The higher position of discourse-anchored elements with respect to event-anchored ones is also confirmed for non-related languages (for instance Salish, as discussed by Davis 1999). If this is on the right track, it casts further doubts on Poletto's (2000) hierarchy, where third person is higher than first or second person subject clitic. Crucially, the interactions of the negative polarity clitic with the person split show that it also participates in the definition of predicate-argument structure. If it was simply a logical connective, the reason for such interaction would remain mysterious — or at the very least could not fall under the generalizations just proposed.

2. DOUBLING OF n ON EITHER SIDE OF AN OBJECT CLITIC

In the examples presented so far, the negative clitic systematically precedes object clitics, as is usual in Italian varieties. However cases in which the negative clitic appears inside the object clitic string are noted in the literature, in particular by Parry (1997) for Cairo Montenotte, where the negative clitic precedes third person objects but follows first and second person ones. What is more, Parry (1997) observes that in some dialects of Liguria and Piedmont the negative clitic can appear both to the right and the left of the first and second person clitic. Zanuttini (1997, p. 18) suggests that only languages with the doubling of the negative clitic by an adverbial negation admit of this doubling. In reality, the Northern Tuscan dialects that we exemplify below are a counterexample to this generalization.

Let us begin by considering the relatively simple case of *Bedizzano* in (15) in which only one instance of the negation appears, following first and second person object clitics and preceding third person ones. This positioning of the negative clitic within the object clitic string is insensitive to the person of the EPP argument, as can be seen from the comparison between second and third person of the verbal paradigm in (ii) and (iii) respectively.

(15) *Bedizzano* (Tuscany)

ii. a. tə mə nə camə.
you me not call
You don't call me.

b. tə nə l camə.
you not him call
You don't call him.

c. tə mə nə l/n da.
you me not it/of.it give
You don't give me it/any of it.

d. tə n i l da.
you not to.him it give
You don't give it to him.

iii. a. i ttə/ssə/vvə nə l/n da (prə ɲent).
he you.sg/us/you.pl not it/of.it gives at all
He doesn't give it/any of it to you/us'.

b. i n i ʎ da.
he not to.him it gives
He doesn't give it to him.

c. i n i/sə da kwɛst.
he not to.him/to.us gives this
He doesn't give this to him/us.

Doubling data are provided in (16) for *Colonnata*. The negative clitic follows all subject clitics and precedes third person object clitics, both accusative and dative (as in (iiib)). At the same time, the negative clitic both precedes and follows first and second person clitics as well as the *se*-type clitic (as in (iiia)).

(16) *Colonnata* (Tuscany)

i. a. a n tə nə weðə.
I not you not see
I don't see you.

b. a n tə nə l dag.
I not you not it give
I don't give it to you.

c. a nə l veðə.
I not it see
I don't see it.

ii. a. tə n tə nə lavə.
you not yourself not wash
You don't wash yourself.

b. tə nə l veðə.
you not it see
You don't see it.

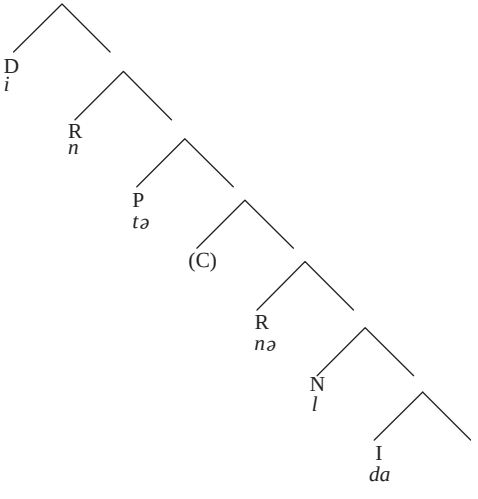
iii. a. i n sə nə lavə.
he not himself not washes
He doesn't wash himself.

b. i n i l da.
he not to.him it gives
He doesn't give it to him.

c. i n tə nə l da.
he not you not it gives
He doesn't give it to you.

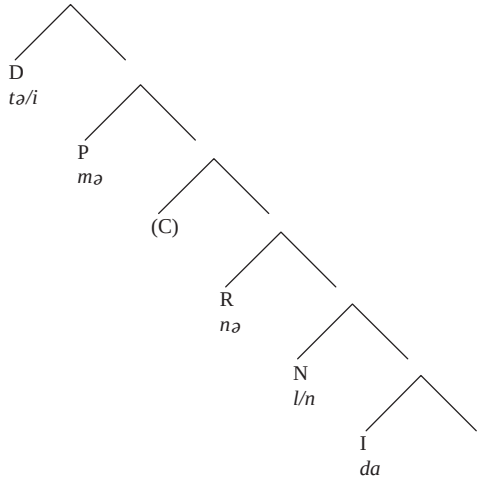
We approach the doubling data of *Colonnata* in (16) assuming that the negative clitic doubles because it inserts both in the C and in the I domain; the possibility for a negative clitic to insert in either domain has been independently motivated in Section 1, and its doubling in both domains allowed us to account for the doubling on either side of a subject clitic in Section 1.2. We can account for the *Colonnata* data if we assume additionally that first and second person clitics — here notated P to suggest Person — insert in the C domain, so that they precede the lower copy of the negation and they follow the higher copy, as in (17). This analysis furthermore requires all subject clitics to be generated within the C domain. Note that we follow Manzini and Savoia (2007) in notating third person accusative clitics as N (cf. the discussion in Section 1.1).

(17) *Colonnata*



If we apply the approach in (17) to the non-doubling data of *Bedizzano* we obtain structures like (18), which display the person split between third person (N) clitics in the I domain and other clitics in the C domain, so that the former follow and the latter precede the negation in the I domain.

(18) *Bedizzano*



The question is whether the structures in (17)–(18) have explanatory value. The relevant generalization appears to be the one formulated in the conclusions of Section 1.2, namely that event-anchored clitics are associated with the I domain, while discourse-anchored ones are associated with the C domain. In (17), the negation splits as object clitics do, namely one copy in the I domain and one copy in the C domain. Note that in this analysis, all subject clitics are in the C domain — we may take this to be due to their EPP nature, potentially extraneous to the event- vs. non-event-anchored contrast. Recall that in the dialects of Section 1, all inflected subject clitics also occurred in the same domain (the I domain in that case) — and it was the negation that eventually split between two domains. In other words, the behavior of the negation is closer to that of object clitics than of subject clitics.

In Southern Italian and Albanian dialects where discourse-anchored and event-anchored object clitics occur in the C and I domain respectively in imperatives (Manzini and Savoia 2007), locatives pattern with first and second person. *Bedizzano*'s (iiia) shows that the same is true of *se*, which descriptively is the third person reflexive, but according to Manzini and Savoia (2007) is the free variable of the argumental clitic system. Therefore the split must involve something like the present notion of discourse- and event-anchoring rather than just the opposition of first and second person vs. third person.

It is important to recall that what we are seeking to analyze is finely structured parametric space. What we are finding is a set of universal categorical distinctions. One such distinction is between C and I domain. This interacts with the person split either directly, so that event-anchored complement clitics have an I lexicalization and discourse-anchored ones have a C lexicalization — or indirectly, so that the C negation associates with discourse-anchoring of the EPP argument and the I negation with its event-anchoring. Despite the unpredictable way in which the relevant distinctions will show up in a given language, what we are finding is that the patterns they give rise to may not be reversible. Thus it is always discourse-anchored elements that are higher than event-anchored ones — more precisely, that trigger the lexicalization of the C domain (for instance by the negative polarity clitic) as opposed to the lexicalization of the I domain in combination with event-anchored elements.

The fact that negative clitic doubling interacts with LF interface notions such as that of person split, excludes that it could be a purely morpho(phono)logical phenomenon. For instance, the copying and displacement processes targeted by Distributed Morphology (Halle and Marantz 1993) or more recently by Harris and Halle's (2005) theory of metathesis affect clitic material entirely comparable to negative *n*. Therefore, since the negative clitic is clearly part of the clitic cluster, there is no principled reason why its copying (or displacement) should not be handled at MS/ PF as that of argumental clitics routinely is. However if the discussion that precedes is correct, the notions necessary to account for the present data are syntactic/ LF notions, such as those of person split or I vs. C domain. To be more precise, it is possible to import the primitives necessary to state the correct distribution of the negative clitic (at least first/second vs. third person) at the PF/MS interface. The problem however is one of explanatory adequacy. On the one hand, a theory where the relevant notions are available in more than one component must surely count as more complex than a theory where they are handled in a unified (morpho-syntactic) component. More importantly, if the interaction between the person split and the placement of the negation is to be understood in terms of the lexicalization of the relevant clitics in the I and C domains, then this essential aspect of our explanation cannot be reproduced at MS/PF at all. In our view, this type of consideration argues against any attempt at reducing negative doubling to an MS/PF process, and it also indirectly casts doubts on MS/PF accounts of pronominal clitics — whose parallelisms with negative clitics seems to call for a unified analysis.

2.1. Trebling and More

In (19) we report data similar to those in (15), but taken from a dialect (*Càrcare*) of the type studied by Parry (1997), with the negative clitic doubling a negative adverb — identical to the argument for 'nothing'. It will be noted that the sentential negation adverb is in complementary distribution with other negative adverbs, as in (19iib–c), and arguments, as in (19iiib), and appears in fact to be altogether optional, as in (19iiic). About this last example, we assume that (true) optionality simply reflects the presence of different grammars in the

competence of the same speaker. As for the question of 'negative concord', i.e., the possibility (or impossibility) of combining two or more given negative forms with a single negation meaning, we shall return to it in Section 4.

What is relevant here is that in (19) the negation is expressed by a triplet consisting of a negative adverb or phrasal argument doubled by a pair of clitics. The position of these is the same observed in (16); thus they precede and follow P clitics and *si*-type clitics, and precede accusative/partitive ones. Subject clitics generally precede the higher copy of the negative clitic. However the latter can either follow or precede the second person singular subject clitic, as in (19iib) and (19iic) respectively. What is more, these two potential positions of the negative clitic can combine, much in the way observed in (1); thus we obtain sentences of the type of (19iia), where three copies of the negative clitic are present, besides the negative adverb.

(19) *Càrcare* (Liguria)

ii. a. ɛŋ t ɛŋ t ɛŋ lɔvi nɛ:nt.
not you not yourself not wash nothing
You don't wash yourself.

b. ɛt ɛŋ m ɛŋ tʃɔmi mɔi
you not me not call never
You never call me.

c. ɛŋ t ɛm ɛŋ lɛ dɔi mɔi.
not you me not it give never
You never give it to me.

iii. a. u ŋ s ɛŋ lɔva nɛ:nt.
he not himself not washes nothing
He doesn't wash himself.

b. u ŋ m ɛŋ dɔ nɛ:nt.
he not me not gives nothing
He gives me nothing.

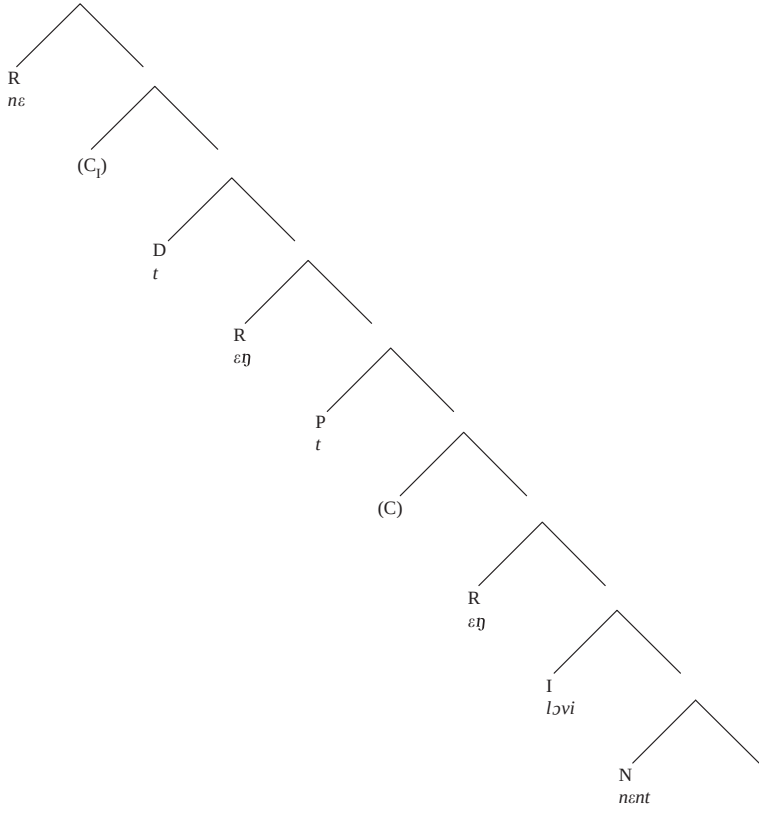
c. u ŋ m ɛŋ lɛ/nuŋ dɔ.
he not me not it/of.it gives
He doesn't give it/any of it to me.

We can extend to dialects of the type of *Càrcare* the same treatment already proposed for *Bedizzano* or *Colonnata*. Specifically the lower negative clitic in an example like (20), appearing after the P object clitic can be lexicalized within the I domain; this implies that the object P clitic itself is found in the C domain. The latter will also host the copy of the negation preceding the P clitic.

An interesting property of *Càrcare* is that the negative clitic can in fact be trebled, with its highest copy appearing in front of the subject clitic. Since the doubling of the negation on either side of the subject clitic is sensitive to a person split in *Càrcare* as in *Viano* in Section 1, it is natural to extend to the cases at hand the analysis proposed in Section 1.2. The problem is that in *Viano* the discourse-anchored subject clitic was in the I domain — so that the copy of the negation that preceded it could

be in the C domain. But since for the reasons just reviewed, the discourse-anchored subject clitic is in the C domain in (19), the highest copy of the negation must be lexicalized in a higher domain yet. In particular, we can assign it to the immediately higher domain than C in a split-C analysis of the type of Rizzi (1997); this is C_I in the theory of Manzini and Savoia (2005, 2007) and in (20) below.

(20) *Càrcare*



It seems to us that there is no way of accounting for the data (or for their variation) in terms of a base-generated head-Spec configuration to which movement subsequently applies. Apart from general concerns regarding the status of the head-Spec configuration (Starke 2004; Chomsky 2008), important counter-evidence is represented by the possibility of having more than one negative clitic, hence more than one potential head of the construction. It is true that doubling could be analyzed as the result of multiple Spell-Out of the copies that a single clitic head leaves in the course of the derivation. However, the distribution of negative clitics is constrained exclusively by the distribution of other material in the clitic string. In no case is there evidence that the surface distribution depends

from the presumed base-generated head-Spec configuration. The latter represents therefore an empirically unmotivated enrichment of the theory. Similarly, an explanation of doubling via copying and multiple Spell-Out presupposes that the placement of the clitic copies can be determined on the bases of general constraints on movement and Spell-Out. Given the data and the analyses that precede, the burden of proof falls on the proponents of such a theory.

3. NON-NEGATIVE n

A potential problem for the analysis of negative clitic doubling comes from the fact that in dialects of Liguria and Piedmont, P clitics can be followed by *n* morphology even in positive contexts. As it turns out, there are indications that in these contexts as well the distribution of *n* is syntactically determined. Thus in *Dego* in (21), the first person singular alternates between *m* if an accusative clitic is present and *m-ɛŋ* in accusative-less contexts. The alternation cannot be phonologically governed, since both the verb in (a) and the accusative in (b) are monosyllabic forms beginning by consonant. A similar contrast is quoted by Parry (1997) for Rocca d'Arazzo.

(21) *Dego* (Liguria)

a. t m-ɛŋ tʃɒmi
you me call
You call me.

b. u m li/ ɾa/ i dɒ.
he me it-m./it-f./them gives
He gives it/them to me.

The *n* morphology that is in complementary distribution with the accusative in (21) furthermore appears after the P clitic in negative contexts, irrespective of the presence or absence of an accusative. Thus in negative contexts *m* followed by *ɛŋ* combines with the accusative as well as with the partitive, as in (22). If we take *ɛŋ* in these contexts to instantiate the negation, then this reproduces the distribution studied for the dialects of Section 2 (without doubling), for instance *Bedizzano*.

(22) *Dego*

a. u m/t ɛŋ li dɒ nɛːnt.
he me/you not it gives nothing
He doesn't give it to me/you.

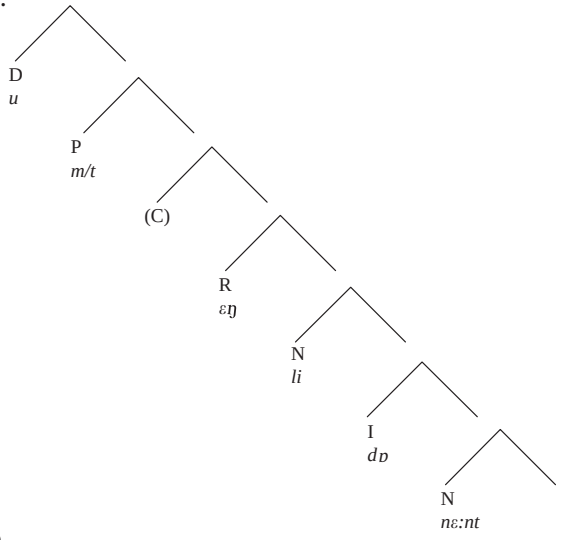
b. u m ɛŋ naŋ dɒ ni'ʃyŋ.
SCl me not of.it gives nobody
Nobobody gives any of it to me.

Following the conclusions of the preceding section, we assume that the negative (polarity) clitic is inserted in the R position of the pronominal clitic string,

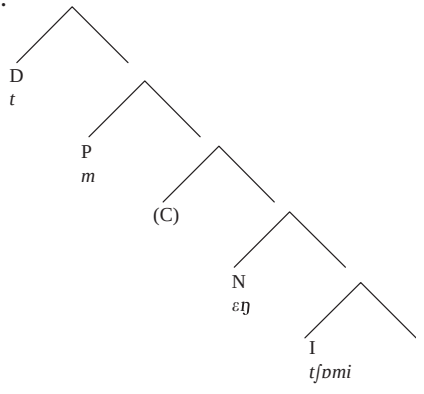
as shown for *Dego* in (23a). On the other hand, the mutual exclusion between the *ɛŋ* segment and the accusative in the positive contexts in (21) suggests a different position for the *ɛŋ* segment — namely the lowest position in the clitic string, otherwise occupied by the elements that *ɛŋ* is in complementary distribution with, i.e., the accusative and partitive. In the notation of Manzini and Savoia (2007), this position is N, as in (23b).

(23) *Dego*

a.



b.



If the occurrences of the *ɛŋ* morphology in the two contexts in (23) involved two different lexical entries, not only their homophony would be coincidental, but also their interaction with the P clitic. On the one hand, following the conclusions of Section 2, negative *ɛŋ* reveals *Dego* to be a person split language, where P clitics insert in the C domain and N clitics in the I domain. On the other hand, positive *ɛŋ* is itself selected by P clitics. This points to the

existence of a single lexical entry; but if so, the different distribution and interpretation of *ɛŋ* in negative and positive contexts remain to be accounted for.

Before considering these questions, we shall introduce evidence from the dialect of *Oviglio*, where the complementary distribution between *n* morphology and the accusative is observed in negative contexts. In *Oviglio*, what appears to be the higher copy of the negative clitic follows an already familiar pattern, appearing after subject clitics, except for the second person one, which it precedes, as in (24A). In turn, what appears to be a lower copy of the negative clitic, *nuŋ*, inserts after P clitics. However, this differs from the negative clitics considered in Section 2 in that it is in complementary distribution with the accusative and partitive, as in (24B). What is more, the data of, say, *Bedizzano* show that it is the lower negative clitic (the one inside the object string) that is obligatory in the absence of doubling. On the contrary, in the *Oviglio* dialect it is the higher *n* clitic that is obligatory in non-doubling examples. In all cases the negative clitic or clitic pair is obligatorily doubled by the sentential negation adverb *næint(a)* 'nothing'.

(24) *Oviglio* (Piedmont)

A.

a	n		drɔm	næinta
a	n	t	drɔmi	mai
u	n		drɔm	næinta
a	n		drumuma	næinta
i	n		drɔmi	næinta
i	n		drɔmu	næinta
SCl	not	SCl	sleep	not/never

I don't sleep. etc.

B. i. a. a n t nuŋ tʃam næinta.
I not you not call nothing
I don't call you.

b. a n t ɛl dag næint.
I not you it give nothing
I don't give it to you.

ii. a. a n t um nuŋ tʃami næinta.
SCl not you me not call nothing
You don't call me.

b. a n t um ɛl dai næint.
SCl not you me it give nothing
You don't give it to me.

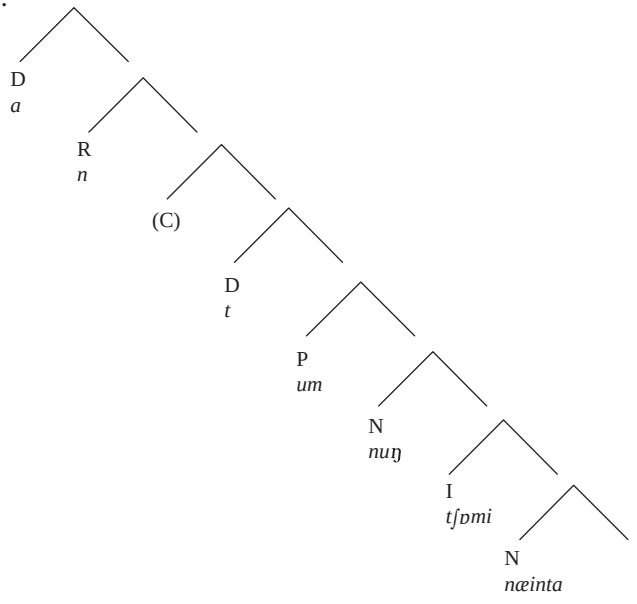
iii a. u n t nuŋ tʃama næinta.
he not you not calls nothing
He doesn't call you.

b. u n ɛl tʃama næinta.
he not him calls nothing
He doesn't call him.

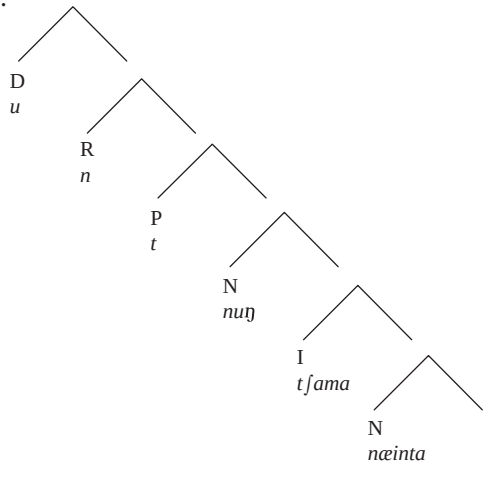
The distribution of the *n* clitic is sensitive to the familiar person split, whereby it appears before P subject clitics but after third person ones. Under the analysis of Section 1, the position following third person clitics reflects the lexicalization of the negation clitic within the I domain, as in (25b). The position before the P subject clitic reflects the lexicalization of the negation in the C domain, as in (25a). In both cases the complementary distribution between *nuŋ* and accusative clitics can be accounted for if *nuŋ* inserts in the N position.

(25) *Oviglio*

a.



b.



A further twist on this patterns is that the *nuŋ* negative form coincides with the partitive, as seen for instance in (26a). More precisely, partitive *nuŋ* has an *n* alternant appearing in front of (auxiliary) verbs beginning by vowel, as in (26a′). Similarly, while *nuŋ* lexicalizes the lower negation in (26b–c) in front of verb beginning by consonant, it does not surface in front of (auxiliary) verbs beginning by vowel, as in (26b′–c′). Incidentally, (26c–c′) establish that the NACT clitic, despite its association with the third person, behaves like discourse-anchored ones. In other words it is not a pure person split that is relevant, but a more abstract one, such as the one encoded here through the notions of discourse- and event-anchoring.

(26) *Oviglio*

a. u nuŋ da doi a pr eŋ.
he of.them gives two to each
He gives two of them to each one.

a′. a n o dahtʃ du a pr eŋ.
I of.them have given two to each
I have given two of them to each one.

b. a m nuŋ ɕoŋ næint la'va.
I myself not am nothing washed
I haven't washed myself.

b′. a n t o næint tʃa'ma.
I not you have nothing called
I haven't called you.

c. u ɕ nuŋ drɔm næinta.
it NACT not sleeps nothing
One doesn't sleep.

c′. u ŋ ɕ ɛ næint la'va.
he not NACT is nothing washed
He hasn't washed himself.

There are several reasons not to treat the coincidence of the negation and the partitive as a pure case of homophony. One of them is the complementary distribution between the negation and the partitive (more generally the N argument, including the accusative). Another reason is the otherwise unexpected restriction to contexts before verbs beginning by consonant. Suppose then we provide a single lexical entry for *nuŋ*. All of the evidence we have presented suggests characterizing it as the partitive. This characterization is supported by the fact that — in contrast with the dialects of Sections 1–2 — it is the higher copy of the negation that is obligatory in the absence of doubling; thus the hypothesis that *nuŋ* is itself a negative polarity item is not necessary for the negative interpretation of the sentences where it occurs.

If *nuŋ* is the partitive, its distribution in negative contexts can be accounted for by assuming that it must be lexicalized in the scope of the negation, if the internal argument is a discourse-anchored element. Indeed in Section 1.1 we observed that the negative adverb *mia* of *Quarna* selects for N objects — lexicalized as partitives when they are clitics. Similarly, in *Oviglio* the negation requires the object to be an N — inserted in the form of the partitive *nuŋ* when only discourse-anchored elements are otherwise present. In non-negative contexts, *nuŋ* is inserted under the ordinary circumstances that require a partitive form.

On the basis of *Oviglio*, we can also return to the slightly more complex case of *Dego*. Evidently, *Dego* must lexicalize N by means of *ɛŋ* when the internal argument is discourse-anchored — and it must do so in positive contexts. The problem is that in negative contexts, *ɛŋ* coincides with the negative polarity clitic; indeed its position in negative contexts is not that of an N clitic, but that of the ordinary negation clitic, i.e., R. Now, anticipating the discussion of Section 4, a negative polarity item is essentially an indefinite, i.e., a free variable, which gets existentially closed, and assumes its negative value by being interpreted in the scope of a negation (or other modal) operator. Suppose then *ɛŋ* is such an element. By definition, in positive contexts the negative operator is not present, and *Dego*'s *ɛŋ* is simply read existentially.

The correlation between the positive and negative reading and the N and R positions can again be clarified in relation to the discussion in Section 4, where we conclude that the negation associates not with one of the ordinary argument slots of the predicate, but with its event argument. Assuming that N is a position reserved for the internal argument, it is evident that the sentential negation reading will not be available for it. Vice versa the negative reading will be forced in the R position, say, by the unavailability of the internal argument role for it.[5]

The various dimensions of language variation implicit in the accounts for *Dego* or *Oviglio* can also be realized independently of one another — which is an important argument in favor of their actual existence. Thus P clitics ending with *n* morphology in non-negative contexts are found in dialects which, at least descriptively, do not have any negative clitics, as in *S.Bartolomeo* in (27). The distribution of *n* is syntactically determined by the presence vs. absence of an accusative as shown in (27a) vs. (27b). The sentential negation, involving only a negative adverb, is displayed in (27c).

(27) *S.Bartolomeo Pesio* (Piedmont)

a. u m-ɛŋ dɒ su'si.
he me gives this
He gives me this.

[5]Manzini and Savoia (2007) assign the R position to the accusative only in languages (like French) where the accusative appears highest in the clitic string. It is interesting to note that the potential incompatibility between the clitic negation and the accusative clitic in the R position can produce a reordering of the accusative clitic in negative contexts, among others in dialects of Corsica, as argued by Manzini and Savoia (2005).

b. u m lu dɒ.
he me it gives
He gives it to me.

c. i lu tʃam ɲeŋ.
I him call nothing
I don't call him.

The way we looked at the complementary distribution of the *eŋ* morphology with accusatives in a dialect like *Dego* is that *eŋ* inserts in N in sentences where the internal argument is otherwise lexicalized by a P element. Data like those of *S.Bartolomeo* indicate that this type of distribution is independent of *eŋ* expressing the negation. In other words, though the two interpretations can coexist in the same lexical item, as in *Dego*, one is independent of the other. Not only are there very many languages in which only the negative interpretation is attested, there are also dialects like *S.Bartolomeo* in which only the non-negative one arises.[6]

Similarly, the coincidence of what are descriptively the partitive and the negation is not an isolated phenomenon. Thus in *Càrcare* the partitive, illustrated in (19iiic), coincides with the lexicalization of the negation in modal contexts, such as the negative imperative (morphosyntactically an infinitive) in (28).

(28) *Càrcare*
nuŋ ʃtɔ-lɛ a tʃa'mɛ.
not stay him to call
Don't call him.

On the basis of the proposals advanced so far, it is natural to assume that the same lexical element, associated with the internal argument, is involved in both (28) and in the partitive. We may further speculate that when it is lexicalized in the I domain, as in (19iiic), its interpretation is that of the partitive. In modal contexts, on the other hand, it must be lexicalized in one of the domains of the articulated C field, since it precedes the verb, itself in C or higher. There, it will be read as a polarity specification, as in (28).

The presence of elements identical to what we have characterized as copies of the negation in positive contexts could at first suggest that they correspond to non-interpretable material, whose relevance is purely prosodic or computational. In reality the data reviewed in this section, far from supporting this conclusion, provide evidence in favor of the idea that the negation is nominal

[6]Manzini and Savoia (2005) argue that the difference between negative and non-negative *n* segments resides in the fact that they are inserted as sentential constituents in negative contexts, but as morphological constituents of the P clitic in positive contexts. As far as we can tell, the best evidence that *n* segments may turn up as word-internal constituents is provided by the data of *Felizzano* (Manzini and Savoia 2005), not reviewed here.

(and argumental) in nature. Thus we account for the fact that what appears to be a lower copy of the negation clitic can coincide with the partitive (*Oviglio, Càrcare*) or can lexicalize the same N slot as it does (*Dego, S.Bartolomeo*).

Vice versa if the negation copies corresponded to the multiple Spell-Out of the head of a specialized Neg category, their presence in non-negative environments, and more to the point, their coincidence (lexical or distributional) with the partitive could not be accommodated. Similarly, a prosodic analysis of doubling could not account for the cases in which the so-called negation copy coincides with a clearly contentful element, such as the partitive. In either case, all of the lexical coincidences examined in this section would have to be treated as cases of homophony, obscuring the patterns that connect them.

4. NEGATIVE CONCORD

The discussion that precedes crucially involves the assumption that a negative clitic is a nominal element that introduces a variable within the scope of a negative (or other modal) operator — i.e., a negative polarity item. On this point we differ from much literature which takes the clitic to instantiate the negative operator (Rizzi 1982; Longobardi 1992 on Italian). But if the negative clitic is a negative polarity argument, it is evident that it must itself be read in the scope of a sentential negation operator. The latter is therefore not introduced by any morpholexical constituent, but rather is semantically implied by the presence of the negative polarity clitic (or other negative polarity material). Furthermore since the negative polarity clitic has exactly the same status as any other polarity argument in the sentence, it is evident that each time it co-occurs with one of them, this configures a case of 'negative concord' under which all variables are read in the scope of a single negation operator.

Let us begin by recalling that the most immediate argument in favor of the polarity status of *n*-words in Romance (Rizzi 1982; Longobardi 1992; Acquaviva 1994 on Italian) comes from the fact that they occur in modal (irrealis) environments without any implication of negative meaning. Strikingly, the argument holds not only for *n*-phrasal units but also for *n*-clitics whose non-negative occurrences have been studied in the literature as instances of 'expletive' negation (Belletti 2000).[7] The argument that is often advanced in favor of a negative quantifier status for *n*-words, namely that they appear in fragments (Zanuttini

[7]Reasons of space prevent us from arguing in any detail for this conclusion. However remarks by reviewer A prompt us to comment on a possible source of confusion. Arguments by the typological literature that 'in questions, negation is neutralized […]: Can you hear nothing? and Can you hear anything? have identical truth conditions' (Haspelmath 1997, p. 121) are orthogonal to the arguments being advanced in the text — and whether they stand or not further scrutiny (Weiss 2002) is very interesting in itself but not relevant for present purposes.

[See opposite page for footnote 7 cont.]

1997), depends on the fact that fragments are the result of ellipsis — and that they interpretively correspond to a full sentential structure, obviously capable of hosting an abstract negative operator.

Next, what we have argued for so far is no more (and no less) than the conclusion that the negative polarity clitic (or adverb) belongs to the ordinary nominal structure of the sentence. The negation operator, as already mentioned at the beginning of this section is implied by the negative polarity items present in the sentence — and correspondingly introduced at LF. However, none of the visible *n*-elements instantiates it, or a category Neg. Such a category has been explicitly argued against — in that it would hinder in particular any attempt at predicting the positioning of the negative clitic within the pronominal string.

Let us then return to simple examples of the type in (2)–(3) or (7), where the sentential negation is represented by a single negation clitic. Their LF includes a negative operator Neg in whose scope the negative polarity item represented by the *n*-clitic is interpreted, as in (29). If we consider that negative polarity items are indefinites, i.e., free variables (Heim 1982), we may very well assume that the variable introduced by the so-called negative clitic is existentially closed (Acquaviva 1994) in the scope of Neg.

(29) a. *Vagli*
[Neg [$_D$ i/ ɛ [$_R$ nun (x) [$_I$ dɔrmɛ

b. *Sillano*
[Neg [$_R$ no (x) [$_D$ llə [$_I$ dɔrma

Consider then the case routinely described in terms of doubling of a clitic negation by an adverbial one, as illustrated here for instance by the paradigm in (24A). As indicated at the outset, this must be a case of negative concord

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Consider Italian (i). It seems fairly clear that there are two truth-conditionally different readings associated with the absence of the negative clitic *non* and its presence, indeed as reflected by the English translation. Yet the Italian *non* 'not' sentence is compatible with both (non truth-conditionally equivalent) readings.

(i) Volli farlo prima che le mie forze (non) me lo consentissero.
I.wished to.do.it before that my energies (not) to.me it would.allow
I wished to do it before my energies allowed/did not allow me to.

For *n*-words, an appropriate context is represented by hypotheticals, where the two English sentences in (ii) are clearly non-truth-functionally equivalent. The Italian sentence in (iii) is ambiguous between (iia) and (iib) — at least for speakers (like the author) who easily admit the licencing of *nessuno* by the conditional.

(ii) a. If nobody arrives, tell me
b. If anybody arrives, tell me

(iii) Se nessuno arriva, dimmelo (subito).
if N-one arrives tell.me.it (straight.away)

under the present view. For, if the clitic cannot be construed as the negative operator, the relevant sentences are like any other sentences including two *n*-words with the reading of a single negation. Under the set of assumptions introduced here, the so-called negative concord is in fact the expected state of affairs. Quite simply, the variables introduced by the clitic and by the adverb are both interpreted in the scope of the same Neg (and existential closure) operator(s), as in (30). Thus we predict that there is a single instance of the negation at the interpretive level.

(30) *Oviglio*
[Neg [$_D$ a [$_R$ n (x) [$_D$ t [$_I$ drɔmi [$_N$ næinta (y)

In turn, doubling of a negative clitic by another is identical in all relevant respects to its doubling by an adverb. Thus, consider (1) again, with simple negation in the third person (1iii) alternating with the doubling of the clitic in the second person (1ii). The two relevant LFs are provided in (31). (31a) contains a single variable, very much like (29), while (31b) is comparable to (30). In all cases the presence of a single negation operator returns a single negation ('negative concord') reading.

(31) *Viano*
a. [Neg [$_D$ i/ la [$_R$ nə (x) [$_I$ dɔrmə.
b. [Neg [$_D$ a [$_R$ n (x) [$_D$ tə [$_R$ nə (y) [$_I$ dɔrmə.

Negative concord, though necessary to the interpretation of sentences like (30) or (31b), is not sufficient to derive it. There is another crucial component that enters into the doubling reading for sentences like (30) or (31b), as opposed to the ordinary 'negative concord' one — and that is that the two negations (be they two clitics or a clitic and an adverb) are understood as instantiating the same argument, not two different arguments. Manzini and Savoia (2007) deal with this doubling interpretation in connection with pronominal clitics. In particular, if doubling is not a morphophonological or computational (i.e., multiple Spell-Out) effect, then the fact that the different instances of a doubled pronominal clitic express the same argument must depend on interpretation at the LF interface. Indeed the doubling interpretation can be formalized through the notion of chain, which in the so-called representational model, in the sense of Brody (2003), is an LF primitive, and not a product of the derivation. Thus the theta-calculus at the LF interface will force all of the different instances of a doubled pronominal clitic (or of a clitic and its doubling full noun phrase) to be in a chain relation — i.e., to fill the same argument slot.

If the so-called negation is a nominal, argumental element, the same solution can be applied to the cases at hand. However, in order to apply it, we need to settle a matter that has been left open so far — namely what kind of

argument slot the negative material fills. For Manzini and Savoia (2002, 2005), interactions of the sentential negation with the internal argument of the verb such as those reviewed in Section 1.1 (the different lexicalization of the negation according to the person reference of the internal argument, the genitive of negation, the ambiguity between adverbial and argumental reading of 'nothing') motivate the assignment of the negation to the internal argument slot.

This conclusion is supported by the fact that from a purely truth-functional perspective, negating the internal argument, e.g., in *I ate nothing*, is equivalent to negating the sentence, e.g., in *I didn't eat.* However the pragmatic implications are different in the two cases — corresponding to the common intuition of a difference between negating an argument (internal or otherwise) and negating the sentence. What is more, even identical lexical items have different syntactic (i.e., positional) properties according to whether they are construed as sentential negations or as constituent negations. Thus in the examples in Section 1.1 negative adverbs are not ordered freely with respect to the argumental string; rather they systematically precede phrasal objects. Similarly, in (12b′) the sentential negation adverb *mia* is in a position following the inflected verb and preceding the participle, where (as in English) no complement of the verb can be found. These facts are correctly encoded by the adverbial hierarchies of Cinque (1999), Zanuttini (1997) — but the latter presuppose that sentential negations lexicalize a category Neg, in terms of which the hierarchies are stated.

Manzini and Savoia (2005) take this state of affairs into account. Thus so-called negative adverbs (and potentially adverbs in general), being nominal in nature, project ordinary nominal categories; however their domain of attachment tells them apart from phrasal complements. The latter inhabit the lowest, predicative domain (i.e., VP). Adverbs however insert in an E domain (suggesting Event) higher than V. In other words, an explicit connection is established between the so-called negation adverbs and the Event properties of the sentence. Though this point is not elaborated upon by Manzini and Savoia (2005), it of course reminds us that there is a tradition in linguistic studies identifying the sentential negation with a negative quantification over the Davidsonian event argument of the sentence (Acquaviva 1994).[8]

This line of thought is entirely compatible with what we have said so far. In fact, all that we have concluded is that the so-called sentential negations are negative polarity items with a nominal, argumental status. If we conceive of the event argument as an ordinary argument slot in the argument structure of the predicate (Higginbotham 1985), we can construe the so-called negation as a visible instantiation of the event argument. If so, the two negative polarity items in (30) or (31b) individuate the same event argument slot; in other

[8]Reviewer A convinced us that reference to this line of thought was unavoidable, even in a cursory treatment of the semantics of negation.

words, the two variables *x* and *y* effectively reduce to a single argument within a chain (-like) construct.

Summing up so far, the (rough) semantics that we have postulated for the so-called sentential negation delivers 'negative concord' as a consequence, without any need for further assumptions. In turn, the latter is a prerequisite for the chain(-like) reading which underlies phenomena usually described in terms of copying. In the present approach there is in fact no copying (either morphophonological or syntactic) but independent insertion of lexical items — which are then identified by the argument calculus at the LF interface. The two approaches are equivalent in the interpretive component, as far as we can tell, since the chain relation, whether derived through movement or primitive, holds at the LF interface. The reason why the present analysis is to be preferred is the one we have sought to advance throughout this chapter — in short, any attempt at forcing copying into a PF phenomenon (multiple Spell-Out, metathesis, or other) can only capture its complex interactions with interpretively-based notions such as that of person split etc. by stipulation. Furthermore, if these interactions are dealt with at the level at which they belong, i.e., the LF interface, morpholexical-level facts can also be handled in a more revealing fashion — specifically without recourse to systematic homonymy.

Though this perspective was illustrated here with negative doubling, it applies to the pronominal domain as well (Manzini and Savoia 2007). It is not any single fact that is compelling in our view, but rather the accumulation of apparently unrelated facts all pointing in the same direction.

Finally, for the sake of completeness, we consider how the present approach can account for cases where two *n*-words cannot combine under a negative concord reading. These cases are potentially problematic to the extent that, as argued earlier, negative concord is the natural state of affairs predicted by the present theory. Specifically, negative polarity clitics generally combine with other negative polarity elements; however, negative polarity adverbs are often in complementary distribution with them, as has been noted in passing for *Càrcare* in (19). Very much the same conclusion can be drawn with respect to *Oviglio* in (24A), where 'never' in the second person is in complementary distribution with the 'nothing'-type sentential negation adverb present in all other persons.

In reality the evidence, in at least some dialects, is more complex than this. A good example is *Dego* in (32). The *nɛnt* sentential negation is in complementary distribution with a negative argument in the simple sentence in (32a); in other words we have no attestations of (32c). However, *nɛnt* can combine with a negative argument in the present perfect in (32b), which we take to involve a bi-sentential structure (Kayne 1993; Manzini and Savoia 2007).

(32) *Dego*

a. i ŋ maɲdʒu ɲɛnte.
they not eat nothing
They eat nothing.

b. i n aŋ nɛnt maɲ'dʒɔ ɲɛnte.
they not have nothing eaten nothing
They have eaten nothing.

c. *i ŋ maɲdʒu nɛnt ɲɛnte.
they not eat nothing nothing
They eat nothing.

Manzini and Savoia (2005) argue that the mutual exclusion of so-called sentential negation adverbs and negative polarity arguments in (32c) is formally similar to the mutual exclusion between, say, morphologically and interpretively related elements in the pronominal clitics domain — perhaps most famously the dative-accusative mutual exclusion that gives rise to the Spurious *se* phenomenon of Spanish (Manzini and Savoia 2007 and references quoted there). Concretely, we propose that inserting a negative polarity argument associated with the internal argument slot is sufficient to prevent the lexicalization of the so-called sentential negation adverb in that it lexicalizes all of its relevant properties at least within the predicative/eventive domain. At the same time it is perfectly possible to have the same properties lexicalized twice in two different sentences, by the sentential negation adverb and the negative polarity argument, as in (32b); or to have them lexicalized in two different domains within the same sentence, by the clitic negation in the inflectional domain and by the negative/polarity argument in the predicative domain, as in (32a).

The idea that the lexicalization of the negative polarity adverb is subsumed by that of the negative polarity argument can be given a more precise interpretive content. At LF the negative polarity argument implies the presence of a sentential Neg operator, in whose scope it is read, as in (33a). In turn it is natural to read the latter as taking the event in its scope, roughly as in (33b) — and as indicated in (33a) by the presence of a negative polarity clitic. In this sense, the negative polarity argument can subsume the negative polarity adverb (within a given domain) — but not vice versa, given that no negative polarity adverb can ever imply the negative polarity reading of the internal argument.

(33) *Dego*

a. [Neg [i [ŋ (x) [maɲdʒu [ɲɛnte (y)

b. There is no event of them eating anything.

If the distribution of the so-called sentential negation adverbs with respect to other negative polarity elements is sensitive to their domains of insertion, we expect a similar effect to be observable with negative clitics as well. Indeed complementary distribution is observed in many Italian dialects, including the standard, in the structural configuration in which a negative argument or adverb would precede the clitic, as in the case of a preverbal subject, as in (34a). This property is parametrized; thus the co-occurence of the negation clitic with

a negative/polarity preverbal subject is attested in Old Italian texts, as noted by Meyer-Lübke (1899, §695), who quotes the example in (34b).

(34) a. Nessuno (*non) dorme.
nobody not sleeps
Nobody sleeps.

b. Gente neuna non v' arrivava. (*Novellino* 55)
people none not there arrived
Nobody arrived there.

In (34a) we can apply essentially the same analysis as we already proposed for (32c). Manzini and Savoia (2005), Poletto (2000) agree that the position of the preverbal subject in null subject and clitic subject languages must be in the C field. Inserting the negative polarity subject in the C domain or higher subsumes all properties otherwise lexicalized by the clitic in the inflectional domain. The clitic then will not need to be inserted — and will not be allowed to on economy grounds.[9] It is evident that the line of reasoning deployed for (32) and (34) can in principle be extended to mutual incompatibilities between any two negative polarity items; thus we will say that the lexicalization of one subsumes (even partially) the lexicalization of the other (within a given domain) and hence excludes it. In any event, the general interpretive mechanism of negative concord laid out in (29)–(30) need not be affected.

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[9]If we backtrack to so-called sentential negation adverbs, we may wonder whether the incompatibility with left periphery arguments/adverbs holds of them as well. Indeed Manzini and Savoia (2005) provide examples of languages where the sentential negation adverb displays no incompatibility of the type in (32c) with postverbal arguments/adverbs; yet it is in complementary distribution with a preverbal negative polarity subject.

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3

DOUBLING VS. OMISSION: INSIGHTS FROM AFRIKAANS NEGATION

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ABSTRACT

This chapter focuses on a doubling structure that surfaces in Afrikaans, namely the well-known "double *nie*" Negative Concord structure found in sentential negation contexts. A lesser-known fact is that this doubling structure in fact alternates with negative structures in which only a single *nie* is realised. What this chapter aims to do is, firstly, offer a systematic description of the empirical facts and then, secondly, account for the observed distribution. It is proposed, firstly, that both the doubling and the omission structures involve two instances of the element that surfaces twice in doubled structures, and, secondly, that the omission structures are the consequence of a seemingly generally more active OCP-like (haplological) deletion operation which takes place after Spell-out. More specifically, the proposal is that the second of the two phonologically identical elements that (i) surface adjacent to one another at PF and (ii) are assigned to the same phonological phrase will undergo deletion, thereby delivering the omission structures. Aside from offering a systematic description and explanation of previously un(der)studied Afrikaans facts, this chapter therefore also aims

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to make a case for the more general idea that "syntactic" haplology in the context of alternating doubling and omission structures may emerge as a useful diagnostic to establish the structural make-up of otherwise opaque/ambiguous structures.

1. INTRODUCTION

An often noted fact about Afrikaans is that it is a Negative Concord (NC) language which, quite unusually among languages of this kind, employs two superficially identical negators (*nie* … *nie*) wherever a negated structure does not involve specially designated n-words (e.g., *niks* — "nothing", *nooit* — "never"). This is illustrated in (1):

(1) Ek ken nie daardie man nie.
I know not that man not
I don't know that man.

A further notable, but not often noted fact about Afrikaans NC is that it is not always the case that both *nie*s are actually realised in negative structures: there are cases where two *nies* systematically fail to occur despite the fact that a single negation reading of the sort illustrated in (1) is intended. Consider (2) and (3) by way of example:

(2) Hy verstaan dit nog nie (*nie).
he understand[1] it still not not
He still doesn't understand it.

(3) a. Ek weet nie (*nie).
I know not not
I don't know.

b. Ek weet NIE nie (nie).
I know not not not
I don't not know, i.e. I do know.

In (2), the second *nie* is obligatorily absent, meaning that just a single overtly realised negator is sufficient to produce a negative reading in this case. In (3), the situation is slightly different: as (3b) shows, a second or even third *nie*

[1]Agreementless glosses throughout the chapter reflect the absence of verbal agreement on the verbs concerned.

is not impossible, but this necessarily results in a double negation reading; to obtain a single negation reading, just a single *nie* is required, as shown in (3a). In both (2) and (3), then, Afrikaans does not appear to be behaving in the manner that one would expect an NC language to do. The question that therefore arises is how we can account for the correlation between the number of *nie*s and the semantics of the associated sentences. The purpose of this chapter is twofold. Firstly, it aims to offer a systematic description and analysis of the data and secondly, it aims thereby to illustrate the valuable role that careful investigation of alternations such as those illustrated (henceforth: *doubling* vs. *omission alternations*) can play in the understanding of the structural make-up of otherwise opaque or ambiguous structures.

The chapter is structured as follows: Section 2 presents the descriptive facts, while Section 3 focuses on their analysis and Section 4 concludes.

2. THE AFRIKAANS NEGATION FACTS

To establish a clearer picture of the empirical facts with which we are concerned, let us consider the data in (4–5):

(4) a. Ek verstaan nie.
I understand not
I don't understand.

a′. … dat ek nie verstaan nie.
that I not understand not
… that I don't understand.

b. Ek het nie verstaan nie.
I have not understood not
I didn't understand.

b′. … dat ek nie verstaan het nie.
that I not understood have not
… that I didn't understand.

(5) a. Ek ken nie min mense nie.
I know not few people not
I don't know few people. (i.e. I know a lot of people)

a′. … dat ek nie min mense ken nie.
that I not few people know not
… that I don't know few people.

b. Ek ken min mense nie.
I know few people not
There are few people I don't know.

b′. … dat ek min mense nie ken nie.
that I few people not know not
… that there are few people I don't know.

Comparing (4a) and (4a′), we see that the simple-tense containing matrix clause features only a single *nie*, while two *nie*s surface in the corresponding embedded clause. In the compound-tense counterparts of these structures (cf. (4b) and (4b′)), by contrast, two *nie*s are required in both matrix and embedded contexts. In (5), we see a slightly different alternation. As comparison of (5a) and (5b) shows, the presence vs. absence of a second *nie* in this case correlates with an interpretive difference: where the second *nie* is present, negation outscopes the quantified object phrase (¬ > few), but where it is absent, the reverse scope relations obtain (few > ¬). In the latter case, we therefore once again observe a circumstance under which a single *nie* produces a negative reading. As was the case for (4), two *nie*s are, however, required in the embedded counterparts of both structures, and this requirement holds more generally of all embedded clauses: in contrast to matrix clauses, they must always contain two *nie*s. The fact that native-speakers unerringly produce (5a′) and (5b′) when asked to give the embedded-clause counterparts of (5a) and (5b) respectively strongly suggests that the objects in (5a) and (5b) are in fact located in different positions: the object in (5a) clearly follows the first *nie* as it does in (5a′), while the object in (5b) precedes this *nie* just as its counterpart in (5b′) does. The same is true of the structures in (6):

(6) a. Ek ken nie daardie man nie.
I know not that man not
I don't know that man (new information).

a′. … dat ek nie daardie man ken nie.
that I not that man know not
… that I don't know that man.

b. Ek ken daardie man nie.
I know that man not
I don't know that man (old information).

b′. … dat ek daardie man nie ken nie.
that I that man not know not
… that I don't know that man.

In this case, the interpretive difference between the (a) and (b) examples is significantly more subtle than in (5), but the generalisation about structures of this type is that the object in (a)-type structures tends to be interpreted as part of the information focus, either independently as new/focused information or as part of an all-rhematic structure of the kind that may serve to

answer questions such as *What happened?*; By contrast, the object in (b)-type structures is necessarily interpreted as old information and, as such, structures of this kind are never felicitous as responses to thetic questions. More generally, inspection of matrix clause pairs of the kind illustrated in (5) and (6) leads to the conclusion that objects in *nie*-doubling structures (cf. the (a) examples) tend to differ interpretively from those apparently featuring *nie*-omission (cf. the (b) examples) in roughly the manner that Diesing's (1992) Mapping Hypothesis would lead us to expect. In other words, *nie*-doubling vs. omission would seem to signal the absence vs. presence of scrambling in Afrikaans, a point to which we return in Section 3.4.[2] For the moment, however, our main concern is the fact that the data in (4–6) suggest that both semantic(-pragmatic) (i.e., scrambling vs. non-scrambling) and non-semantic factors (i.e., matrix vs. embedded clause-type, simple vs. compound tense) can play a role in conditioning the presence vs. absence of the two *nie*s typically associated with Afrikaans NC.

It should be noted, though, that there are also structures in which "too few" *nie*s are always mandatory where a single negation meaning is intended. Consider (7–8) in this connection:

(7) a. Ek verstaan hom nie.
I understand him not
I don't understand him.

b. Ek verstaan waarskynlik/ moontlik/ sonder twyfel nie.
I understand probably possibly without doubt not
I probably/possibly/undoubtedly don't understand.

(8) a. Ek weet nie wat hy doen nie.
I know not what he do not
I don't know what he's doing.

a′. … dat ek nie weet wat hy doen nie.

b. Ek weet nie wat hy nie doen nie.
I know not what he not do not
I don't know what he doesn't do/isn't doing.

b′. … dat ek nie weet wat hy nie doen nie.

The examples in (7) illustrate two matrix contexts in which only a single *nie* is possible if a single negation reading is intended: matrix clauses featuring pronominal objects like (7a) are only compatible with a second *nie* where

[2]I will remain agnostic in this chapter on the much debated question of whether scrambling is in fact a movement-derived or a base-generated phenomenon (see Richards 2004 for recent discussion). A *scrambled* order should thus simply be understood as one in which the object is located to the left of the position in which it surfaces in a structure in which scrambling has not taken place.

the (pragmatically marked) intended meaning is "I don't not understand him", i.e., I do understand him, and the same is true of matrix clauses containing only an intransitive finite verb (cf. (3a)) and of those in which this type of verb is modified by adverbials of the type illustrated in (7b), i.e., a "low" adverb. The examples in (8), in turn, show that structures like (8a) in which the matrix clause is negated exhibit the expected two *nie*s, whereas those like (8b) in which both the matrix and the embedded clause are negated obligatorily feature only three. This state of affairs is replicated when this structure is further embedded within another clause, as shown in (8b′). Worth noting about biclausal structures of the type illustrated in (8a/a′) is that the "agreeing" *nie* in these cases is, as elsewhere, located clause-finally, despite the fact that it is actually the *matrix* clause that is negated. Unlike in more familiar NC languages like French, then, the second negation element in Afrikaans does not superficially appear to be clause-bound.[3]

Given the earlier data, the question that arises is whether Afrikaans is in fact a strict NC language in the sense of Giannakidou (2005). In other words, is it always the case that a semantically inert negation element must, in some sense, be co-present wherever "true" negators appear? I will argue that this is indeed the case; more specifically, I will argue that the presence vs. absence of the "second" *nie* in Afrikaans (i.e., doubling vs. omission) is entirely predictable once one takes into account (a) the syntactic structure of negative-containing sentences and (b) the way in which these are mapped onto phonological structure. As such, Afrikaans negatives are argued to facilitate specific insights into Afrikaans clause structure and also into how this compares to that of other Germanic languages and languages more generally.

3. THE ANALYSIS

3.1. Background

Somewhat surprisingly given how frequently Afrikaans's distinctive negation pattern is mentioned in the descriptive literature, it has not until recently received much attention in the generative literature (Waher 1978, 1983, 1988; Den Besten 1986 and Robbers 1992 represent some early exceptions). In recent years, three distinct minimalist analyses have, however, emerged — Oosthuizen (1998), Molnárfi (2002, 2004) and Bell (2004a, b), all three of which focus on the nature and distribution of Afrikaans's "un-Germanic" clause-final negator, the "second" *nie* (henceforth: nie_2). Evaluation of these proposals falls outside the scope of this chapter, but we will at relevant points

[3]Thanks to an anonymous reviewer for raising this point.

in the exposition of the Afrikaans facts highlight where Molnárfi and Bell's proposals encounter difficulties that Oosthuizen's does not. The analysis proposed below therefore takes Oosthuizen (1998) as its starting point.

3.2. Distinguishing the Two Negators

As is the case in other NC languages, the two negators in Afrikaans's NC structures have very different functions: the first negator is the "true" negator (i.e., the contentful negation element), while the second (*nie*$_2$) is most commonly viewed as a scope-marking element (i.e., a functional element; although see below for critical discussion of this view). This distinction also obtains when a negative structure contains two *nie*s: the first (*nie*$_1$) is the "true" negator, while the second is the "scope-marker". Crucially, therefore, Afrikaans differs from Romance-style NC systems in which the first element is the "true" negator, but the second is usually viewed as a reinforcer (contemporary spoken French being a well-known exception to this generalisation). Synchronically, this would seem rather clearly not to be the case for *nie*$_2$, but see below (and also Roberge 2000 for a diachronic proposal that suggests an initially reinforcing origin for *nie*$_2$).

There is a range of evidence in favour of treating the two *nie*s as distinct, accidentally homophonous elements. We highlight the fact that omitting the first negator always results either in ungrammaticality or a change in meaning, whereas omitting the second negator (*nie*$_2$; henceforth glossed *NEG* to reflect the fact that it does not contribute independent negative meaning to structures in which it occurs) results in a structure that sounds like the final negator was mistakenly omitted, or as if the speaker is a non-native (native English speakers, for example, very commonly omit *nie*$_2$), or, in appropriate cases, as if the structure in question constitutes a newspaper headlines (*nie*$_2$ is conventionally omitted in this context). Further, only the first negation element can be modified, as illustrated below:

(9) a. Jy et glad/ hoegenaamd/ absoluut/ geheel en al nie$_1$ op nie$_2$.
you attend altogether at-all absolutely whole and all not up NEG
You aren't remotely paying attention.

b. *Jy let nie$_1$ op glad/ hoegenaamd/ absoluut/ geheel en al nie$_2$.

Also notable in this regard is the existence of various lexicalised reinforced negatives, all of which involve the first negator:

(10) a. Hy sal (so nimmer as te) nooit$_1$ saamkom nie$_2$.
he will so never as to never along-come NEG
There's no way he'll ever come along.

b. Hy is geensins oortuig nie$_2$.
he is no-sense convinced NEG
He isn't remotely convinced.

Furthermore, it is only the first negator that can be reinforced by an "extra"/emphatic *nie* (cf. Zeijlstra's 2006 Emphatic Double Negation: crucially, to obtain this reading, the "true" negative element in such structures — cf. *nooit* in (11a) — must be stressed, while the following *nie* (*nie*$_2$) is not.):

(11) a. Ek lees NOOIT nie$_2$ sulke nonsens nie$_2$.
I read never not such nonsense NEG
I NEVER read such nonsense.
[SA = Ek lees nooit sulke nonsens nie$_2$.]

b. *Ek lees nooit sulke nonsens nie$_2$ nie.

As it does not contribute independent negative meaning and is also omissible without resulting in either ungrammaticality or meaning-change, it is clear that the "extra"/reinforcing negator in these examples must be *nie*$_2$. As hinted earlier, it is therefore not the case that the second negator in Afrikaans consistently fails to play a reinforcement role.

A final observation about the relative "reinforceability" of *nie*$_1$ and *nie*$_2$ is that the first, but not the second *nie* can be replaced with a more emphatic negator, both in formal (cf. (12)) and more colloquial (cf. (13)) registers; by contrast, the second *nie* cannot:

(12) a. Ons is nie$_1$ beïndruk nie$_2$.
us is not impressed NEG
We are not impressed.

b. Ons is geensins beïndruk nie$_2$.
us is no-sense impressed NEG
We are not remotely impressed.

c. *Ons is nie$_1$ beïndruk geensins.

(13) a. Hy is nie$_1$ 'n goeie mens nie$_2$.
he is not a good person NEG
He isn't a good/nice person.

b. Hy is g'n 'n goeie mens nie$_2$.
he is none a good person NEG
He is not a good person.

c. *Hy is nie$_1$'n goeie mens g'n.

Two further pieces of evidence distinguishing the two *nie*s draw on parallels which these elements respectively do and do not show with the strong and weak elements discussed in Cardinaletti and Starke (1996): while the first negator can be co-ordinated, the second cannot, as shown in (14), and while the first negator can be stressed, the second cannot, as (15) shows:

(14) a. Ek sal niks en niemand hiermee vertrou nie_2.
I will nothing and no-one here-with trust NEG
I won't trust a soul with this.

b. *Ek sal niks hiermee vertrou nie_2 en niemand.

(15) a. Ek weet NOOIT/ NIE_1 wat hy doen nie_2.
I know never not what he do NEG
I NEVER know what he's doing./ I DON'T know what he's doing/ he does.

b. *Ek weet nooit/nie_1 wat hy doen NIE_2.

Taken together, the evidence discussed here therefore points to an analysis in terms of which the two *nie*s are fundamentally very different (*contra* Molnárfi 2002, 2004).

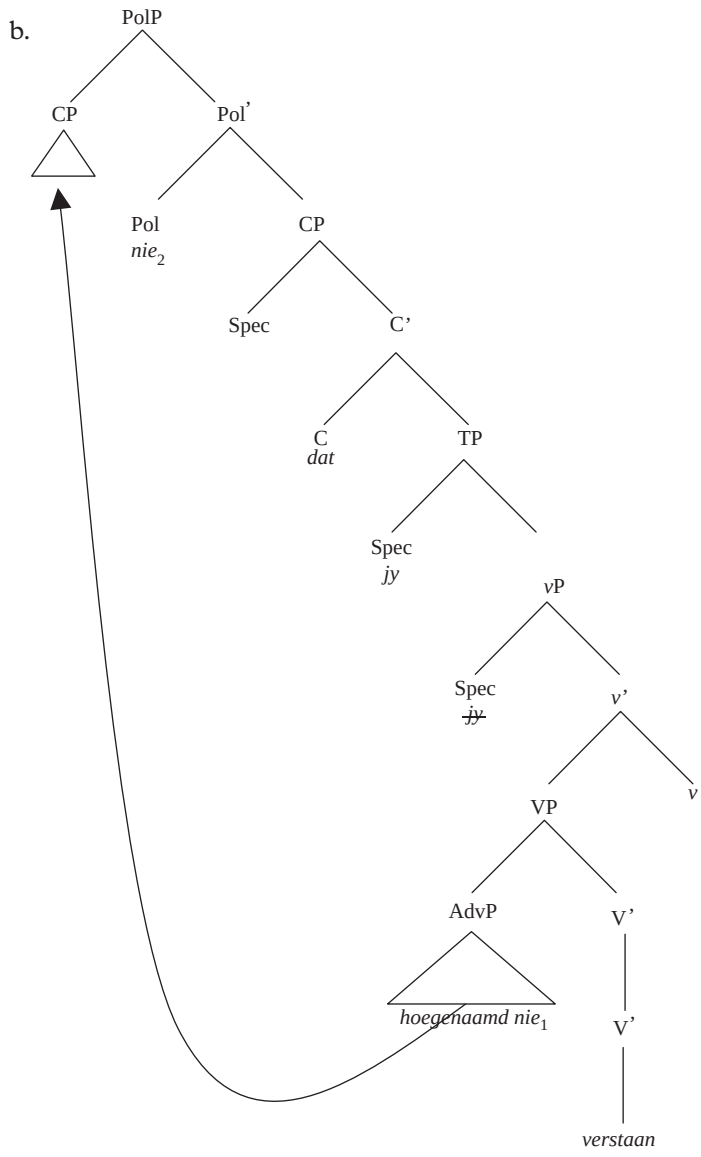
3.3. *Nie*$_1$ is a Neg-Head and *Nie*$_2$ is a (CP-related) Polarity-Head

Oosthuizen (1998) proposes capturing the difference between the two elements by assigning *nie*$_1$ the status of a Neg-head, which is merged relatively low in the clause, while viewing *nie*$_2$ as a Pol(arity)-head, which is merged at the clause-edge, above CP (cf. Laka 1990, 1994 for the proposal that PolP may surface either above or below IP, subject to parametric variation). I will adopt this proposal here, with minor modifications. The modifications are as follows: where Oosthuizen postulates a NegP just above AgrOP to host *nie*$_1$, I assume that there is no need to postulate a distinct NegP and that *nie*$_1$ in fact adjoins to the outer edge of either VP or *v*P (see Section 3.4.3 for further discussion).

To see how the proposed analysis works, consider the example in (16) (~~strikethrough~~ indicates a lower copy that is not spelled out):

(16) a. Ek kan sien [dat jy hoegenaamd nie_1 verstaan nie_2].
I can see that you totally not understand NEG
I can see that you don't understand at all.

b.



Here (16b) illustrates just the embedded structure indicated in square brackets in (16a). For expository purposes, I abstract away from various details of Afrikaans clausal structure. The noteworthy aspects of the structure are as follows:

i. the "true" negator — *nie*$_1$ modified by the intensifier *hoegenaamd* — is a VP-adverbial, labelled AdvP to reflect the fact that negation phrases are a species of adverbial with no special status (cf. also Zeijlstra 2004 for

Germanic more generally).[4] Like other "low" adverbials, they therefore adjoin at specific adjunction points along the "main spine" of the clause. Empirical evidence suggests that this adjunction point is low, but nevertheless higher than the merge position of both internal arguments[5]; hence the assumption, for the moment, that the negative adverbial is adjoined to the outer edge of VP (cf. Section 3.4 below for further discussion).

ii. *nie*$_2$ is a polarity-head merged above CP. Following Oosthuizen, I assume that Afrikaans negated clauses are headed by a Polarity Phrase (PolP) which specifies the polarity of the clause in question as negative. I adopt the Probe-Goal system of Chomsky (2000 *et seq*.) in terms of which this Pol-head bears an unvalued pol-feature ([Pol: __][6]) and therefore acts as a probe for valued [pol]-features (e.g., [Pol: neg]) in its c-command domain, establishing an Agree relationship with them. I also assume that Pol is associated with an EPP-feature (Move diacritic), which requires movement of the goal-containing category to its specifier. Although the goal in this case is arguably the negative adverbial, *hoegenaamd nie*$_1$, the entire CP undergoes raising to Spec-PolP, i.e., Pol's EPP-feature is satisfied by clausal pied-piping of the kind that has also been proposed for a range of other left-periphery-related domains.[7,8]

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[4]The evidence that has previously been adduced in favour of the idea that Afrikaans clause structure includes a NegP which specifically attracts negative elements (cf. Haegeman 1995, p. 179, who follows Robbers 1992) turns out to be significantly more complex than usually thought.

[5]The following examples illustrate that the neutral position for *nie*$_1$ is in fact to the left of both internal arguments wherever we are dealing with a ditransitive verb (cf. (i)); when the indirect object surfaces to the left of *nie*$_1$ as in (ii), it receives the same non-rhematic interpretation associated with scrambling more generally:

(i) …	dat	ek	nie$_1$	vir	Jan	boeke	koop	nie$_2$.
	that	I	not	for	Jan	books	buy	NEG
… that I am not buying books for Jan.								(all-rhematic)
(ii) …	dat	ek	vir	JAN	nie$_1$	boeke	koop	nie$_2$.
	that	I	for	Jan	not	books	buy	NEG
… that I am not buying Jan (specifically) books.								

[6]Note that the notation employed here represents attribute-value pairs. Thus [Pol: __] signifies that the attribute *Pol* is not associated with a value, while [Pol: neg] signifies that the attribute *Pol* is associated with a negative value, i.e., it is valued. An unvalued feature is uninterpretable at PF and LF and will therefore cause a derivation to crash.

[7]Cf. amongst others Horvath (2005) on clausal pied-piping generally; Hermon (1985), de Urbina (1990), Richards (1997), Bhatt (1999) and Simpson and Bhattacharya (2000, 2003) on clausal pied-piping in *wh*-interrogative contexts; Hallman (2004) on V2 and V-final orders in Germanic; Holmberg (2001, 2005), Aboh (2004) and Munaro and Poletto (2004) on clause-final clause-typers in (at the clausal level) otherwise head-initial languages, and also Kandybowicz (2006) on polarity-related clausal pied-piping in Nupe, which bears a striking resemblance to that proposed for Afrikaans here.

[8]An anonymous reviewer asks why movement to Spec-PolP should be necessary. I assume obligatory movement vs. obligatory non-movement to be a point of parametric variation, i.e.,

[See page 114 for footnote 8 cont.]

This proposal would seem to have numerous advantages. Firstly, the proposed analysis allows Afrikaans to be viewed as a language whose negation/polarity behaviour emerges as rather similar to that which has been identified in other natural languages (cf. amongst others Laka 1990, 1994; Holmberg 2001, 2005; Ouali 2003, 2005, 2006; Déchaine and Wiltschko 2003; Munaro and Poletto 2004; Kandybowicz 2006; Vicente 2006), always a desirable result in the generative context.[9] Secondly, the proposed analysis also seems to make sense when viewed from the perspective of the specific diachronic circumstances that led to the rise of this structure in Afrikaans: there seem to be very good reasons for viewing *nie*$_2$ as an element that originally served primarily

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a point on which languages may differ without the difference having any semantic import and with both options being "equally cheap". This last assumption follows straightforwardly if the crucial consideration for all languages is that the computational system should consistently receive unambiguous structure-building instructions: in this context, the presence of a movement diacritic (however one labels it) is no more "costly" than the absence of a movement diacritic as both scenarios entail an equally clearcut set of instructions to the computational system (Move! Vs. Don't Move!), which is not assumed to have a "counting" facility to keep track of individual operations performed any more than it has such a facility in other contexts. Against this background, the question why Afrikaans has movement to Spec-PolP while English lacks it therefore reduces to an arbitrary fact about a parametric choice that Afrikaans has made and which the computational system then duly "blindly" executes: the *convention* in Afrikaans is that the Pol-head surfaces finally, although it could equally have surfaced clause-initially as it, for example, does in Tamazight Berber (cf. Ouali 2003, 2005, 2006). There is, then, no more of a semantic difference between the Afrikaans and Berber structures than there is between English and French declaratives with their differently positioned verbs.

[9]An anonymous reviewer queries the desirability of postulating an analysis of Afrikaans negation that ascribes to it properties the same as or similar to those found in other languages, given the fact that Afrikaans NC so evidently differs from familiar NC systems (recall the superficial non-clause-boundedness property highlighted in connection with (8a/a′)). Bell (2004a, b), however, shows that there do appear to be lesser studied NC languages, which he designates *Bipartite Negation with Final Negator* (BNF) languages, which exhibit at least some of the properties of Afrikaans negation. These include African languages like Hausa, Bukusu, Nweh and Dagara and contact varieties like Palenquero and Vernacular Brazilian Portuguese. The full extent to which these systems are truly the same as Afrikaans remains to be determined. Also worth noting in this connection is English negation, which parallels that in Afrikaans in that it always requires an auxiliary to be present wherever a clause is negated. Consider (i–iii) in this connection:

(i) *I not understand.

(ii) I do not understand.

(iii) I DO understand.

As shown earlier, a negator cannot surface without an overtly realised auxiliary, with "dummy" *do* filling in wherever one is absent. The parallel with Afrikaans becomes clear if we consider the role of this *do* in non-negative structures (cf. (iii)): it serves as an emphatic affirmer, i.e., as a polarity-related element. If we view *DO* (i.e., the stressed form which is obligatory in emphatic affirmatives) as the spellout of [Pol: pos] and *do* (i.e., the unstressed form) as the spellout of [Pol: neg] (i.e., a Pol-head which has undergone Agree with a negative element; here: *not*), it could be said that English and Afrikaans in fact both have NC systems which require obligatory realisation of the polarity head (*nie*$_2$ and *do*/auxiliary, respectively). See Biberauer and Roberts (2008, forthcoming) for further discussion of an analysis of English along these lines.

a discourse function, i.e., one that naturally belongs in the CP-domain (cf. Roberge 2000 for detailed discussion of *nie*$_2$'s origins as a discourse-level element, specifically one expressing "resumptive negation"). Further evidence that *nie*$_2$ is located within the CP-domain comes from sluicing. Consider the following examples:

(17) Ek weet IEMAND ken die antwoord, maar ek weet nie$_1$
I know someone know the answer but I know not
wie [~~die antwoord ken~~] nie$_2$.
who the answer know NEG

On the standard analysis of sluicing, it entails TP-deletion (cf. Merchant 2000 and Van Craenenbroeck 2004 for overview discussion). Assuming this also to be the case in Afrikaans, the fact that *nie*$_2$ survives sluicing indicates that it is located higher than TP. Finally, it is also worth noting an interpretive asymmetry in the context of the complements of so-called *restructuring verbs*. Consider the case of *probeer* ("try"), which is able to select both "full"/non-restructuring complements as in (18) and "reduced"/restructuring complements as in (19) (cf. Wurmbrand 2001 for discussion of the various "sizes" of complements selected by restructuring verbs).

(18) a. Ek probeer nie$_1$ om die boek te lees nie$_2$.
I try not C-$_{INF}$ the book to read NEG
I am not trying to read the book. (i.e. matrix negation)

b. Ek probeer om nie$_1$ die boek te lees nie$_2$.[10]
I try C-$_{INF}$ not the book to read NEG
I am trying not to read the book. (i.e. embedded negation)

(19) Ek probeer nie$_1$ die boek lees nie$_2$.
I try not the book read NEG
I am not trying to read the book. (i.e. matrix negation)

As shown earlier, the "size" of *probeer*'s complement directly correlates with its (in)ability to be independently negated: whereas non-restructuring complements can license their own negation, restructuring complements cannot do so. On Wurmbrand's analysis, the former are CPs, headed by the infinitival C-head *om*, whereas the latter are structures lacking a C-layer.[11] If PolP must be projected in order to license clause-level negation in Afrikaans, the

[10]The scrambled variant of this structure and also of the restructuring structure in (19) — i.e., *Ek probeer om die boek nie*$_1$ *te lees nie*$_2$ and *Ek probeer die boek nie*$_1$ *lees nie*$_2$ — are also available, but we ignore these possibilities here as they do not impinge on the interpretive difference under discussion.

[11]Cf. also Hinterhölzl (2005) who distinguishes the "sizes" of these complements in "Split CP" terms.

unavailability of embedded-clause negation in restructuring complements follows directly: these clauses simply are not "big enough" to license negation.

Focusing more specifically on language-specific aspects of the structure of Afrikaans negation, the proposed analysis also facilitates a simple explanation of *nie*$_2$'s lack of modifiability and "emphaticization": since the head which is ultimately spelled out as *nie*$_2$ is an EPP-bearing probe, its specifier needs to be filled by the goal-bearing XP it attracts, not by a non-selected modifying element. Similarly, *nie*$_2$'s unstressability arguably falls out from the fact that *nie*$_2$ will never be located in a position to which phrasal, much less sentential stress can be assigned: it will never be the most deeply embedded element (cf. Cinque 1993; Zubizaretta 1998) nor will it ever be at the relevant "edge" for edge-alignment-based accounts of stress assignment (cf. Selkirk 1995; Truckenbrodt 1995 and see also below) nor can it ever be at the left edge of a "spellee" (i.e., the constituent sent to Spellout upon completion of a phase) in theories that assume this to be the crucial stress-determining configuration (cf. Kahnemuyipour 2005). Finally, two less-frequently mentioned, but nevertheless otherwise puzzling facts about *nie*$_2$'s distribution fall out straightforwardly if we view this element as a polarity marker: firstly, the fact that it is not, *contra* the quite widespread view that it constitutes a scope-marking element, consistently the element signalling scope-marking facts. Consider (20) in this connection:

(20) a. Hy sê nie$_1$ dat hy kom nie$_2$.
he say not that he come NEG
He isn't saying that he is coming.

b. Hy sê dat hy nie$_1$ kom nie$_2$.
he say that he not come NEG
He says that he isn't coming.

In (20), *nie*$_2$ consistently surfaces clause-finally, with *nie*$_1$ appearing to determine the scope of negation. On the polarity view of *nie*$_2$'s function, this state of affairs emerges as unsurprising. The second otherwise puzzling aspect of *nie*$_2$'s distribution (originally noted by Oosthuizen 1998, p. 79) that receives an explanation under the analysis outlined here is that this element is, in colloquial usage, permitted to surface in structures lacking a negator. Consider (21) in this connection:

(21) a. Ek kan my nouliks/ skaars inhou nie$_2$.
I can me barely in-hold NEG
I can barely contain myself., i.e. I'm very excited.

b. Ek weier om saam te kom nie$_2$.
I refuse C-$_{INF}$ together to come NEG
I refuse to come along.

If *nie*$_2$ were simply a scope-marking negation element, dependent on a "true" negator, the data in (21) would be mysterious. On the view that *nie*$_2$ is in fact a polarity element, this mystery, however, disappears: investigation of structures which permit the realisation of *nie*$_2$ in the absence of a "true" negator reveals that the element they necessarily feature is one belonging to the class of (non)veridical operators, i.e., the class that Giannakidou (1999 *et seq.*) identifies as necessary to license a polarity item. *Nie*$_2$ is therefore possible in (21a) thanks to the presence of the approximative adverb, *nouliks*, (cf. Horn 2002 for recent discussion) while factive *weier* in (21b) is a negative one-way implicative (cf. Kiparsky and Kiparsky 1971 and also Nairn et al. 2006 for recent discussion). That these elements are indeed the crucial licensers as far as *nie*$_2$ is concerned is clearly shown by the following minimally different structures, each of which replaces the putative licenser with an element not associated with (non)veridicality:

(22) a. Ek kan my (maklik) inhou (*<u>nie</u>$_2$).
I can me easily in-hold NEG
I can contain myself.

b. Ek onderneem om saam te kom (*<u>nie</u>$_2$).
I under-take C-$_{INF}$ together to come NEG
I undertake to come along.

In sum, then, a wide range of data appear to corroborate the analysis of *nie*$_1$ and *nie*$_2$ proposed here.

One specifically *nie*$_2$-related question that we have not addressed so far, but that undoubtedly deserves special attention in view of the availability of a superficially simpler analysis, relates to the analysis of *nie*$_2$ as the head of a *head-initial* PolP in the CP-domain. As argued earlier, there appears to be strong evidence in favour of the view that PolP in Afrikaans is CP-related; what has not been shown, however, is that this PolP needs to be head-initial — can it not simply be head-final, thereby precluding the need for clausal pied-piping? Leaving aside the loss of the parallels with other "clausal pied-piping" languages mentioned earlier, there are at least two considerations that suggest that the answer is no.

The first of these is primarily theoretical. CP is clearly head-initial in Afrikaans (and Germanic generally) — cf. the various examples in this chapter of clauses featuring an overt complementiser. If *nie*$_2$ is, as argued earlier, located within the head-initial CP-domain, it is not obvious how PolP could be head-final: to the best of my knowledge, there is no language in which there is variation in respect of the headedness of projections within "articulated" CPs; if PolP in Afrikaans is in fact head-final, this is, however, precisely the assumption that would have to be made for Afrikaans.

The second relevant consideration, an empirical one, would seem to argue even more strongly in favour of the rejection of a head-final PolP: as noted by

Oosthuizen (1998) and illustrated in (23), it is possible for elements to "leak" past *nie*$_2$:

(23) a. Sy het tydens die vergadering niks gesê nie$_2$.
she have during the meeting nothing said not
She said nothing during the meeting.

b. Sy het niks gesê nie$_2$ tydens die vergadering.
she has nothing said NEG during the meeting
She said nothing during the meeting.

On the view that PolP is both CP-related and head-final, structures like the (b)-examples in (23) should not be possible as *nie*$_2$ should always surface clause-finally. A restricted (and poorly understood) range of structures of this type is, however, attested in spoken Afrikaans. Ignoring the evidence pointing to the CP-relatedness of Afrikaans PolP highlighted earlier and postulating — as, for example, Bell (2004a, b) has done — that PolP is in fact a clause-internal projection located lower down in the clausal architecture also will not "rescue" the head-final view on *nie*$_2$: the fact that "low" adverbials like the temporal PP in (23b) may surface post-*nie*$_2$ indicates very clearly that even a maximally lowly adjoined head-final PolP will not be able to account for the "leaking" data (and, clearly, such an analysis would also pose rather serious problems for the manner in which *nie*$_2$ is interpreted: it is very evidently not generally associated solely with the contents of VP). By contrast, a head-initial, clausal pied-piping proposal of the kind advocated here has open to it the possibility that certain elements may be "stranded" when pied-piping takes place (cf. what we see in the context of *wh* PP-fronting in English). I leave the details of this type of analysis for future research, but cf. Biberauer (2003) and Biberauer and Roberts (2005) for discussion of how "leaking" phenomena might be accounted for in a phase-based framework. For present purposes, it seems fair to conclude that the proposal that *nie*$_2$ may in fact head a head-final PolP seems to face both empirical and theoretical problems. We will therefore proceed on the basis of the assumptions outlined in this section.

Let us now consider how these enable us to account for the doubling and omission structures that surface in negation contexts.

3.4. Accounting for the Alternation of Doubling and Omission Structures

3.4.1. Omission As Deletion

The starting point for our analysis is that also assumed by Den Besten (1986), Robbers (1992) and Bell (2004a, b), namely that *nie*$_2$ is always syntactically present in every negation structure. In other words, Afrikaans is indeed a strict NC language. If this is correct, the fact that not every Afrikaans sentence contains two negation elements has to be understood as the consequence of some kind of deletion operation. Clearly, then, the question is what kind of operation this is.

According to Den Besten (1986, p. 202), the realisation of adjacent *nie*s is regulated by a filter taking the form in (24):

(24) *nie nie

In terms of (24), then, two *nie*s cannot surface adjacent to one another. Closer investigation, against the background of what we have established in Sections 3.1 and 3.2 about the nature of Afrikaans's two *nie*s reveals that nie_2 is the "missing" *nie* in each case: consider, for example, the fact that the absence of the relevant *nie* does not affect the negative semantics of the resulting structure and also the fact that the *nie* that is present can be strengthened in the various ways discussed in Section 3.2.

(25) a. Ek verstaan NIE.
I understand not
I DON'T understand.

b. Ek verstaan hoegenaamd nie.
I understand totally not
I don't remotely understand.

c. Ek verstaan geensins (nie_2)/ *NIE_2
I understand no-sense NEG
I don't remotely understand.

As shown earlier, it is possible to stress the single *nie* in (4a) (cf. (25a)), it is possible to modify it (cf. (25b)) and it is also possible to replace this *nie* with a stronger negative (cf. *geensins* in (25c)). That nie_1 has in fact been replaced by *geensins* in this last example and that the *nie* that surfaces in this structure is nie_2 is clearly shown by the fact that (a) it cannot be stressed and (b) it can, colloquially, be omitted without resulting in an ungrammatical or non-negative sentence; the resulting structure will simply be viewed as "missing something" in the same manner as nie_2-lacking ones discussed in Section 3.2.[12]

3.4.2. Attempting a Haplological Analysis of the Distribution of NIE_2

3.4.2.1. Doubling and omission in single negation structures. Having established that it is in fact nie_2 which is missing in omission structures, let

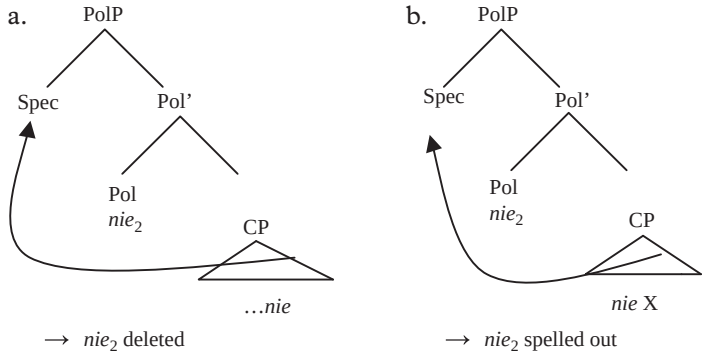
[12]This example, then, shows that the reinforcing function that nie_2 sometimes plays (cf. (11)) is limited to contexts in which it genuinely surfaces as an "extra" element over and above the "true" negator and its associated nie_2: in (25c), this is clearly not the case as the structure features only a single *nie*. It should also be noted that the fact that native-speakers judge structures like (25c) to be "missing something" in just the way they do when non-natives omit final nie_2 further underlines the correctness of viewing Afrikaans as a strict negative concord language which employs a deletion-under-adjacency filter of roughly the kind sketched out by Den Besten: as soon as nie_1 is replaced by a phonetically distinct "true" negator which would not be subject to the haplological filter (*geensins* in this case), nie_2 surfaces, as one would have expected in a strict negative concord language.

us attempt to refine Den Besten's filter proposal so that we can test whether it will enable us to account for the doubling and omission structures in Afrikaans. Consider the haplology mechanism in (26):[13]

(26) Afrikaans Syntactic Haplology mechanism (Take 1)
Nie$_2$ is subject to PF deletion whenever it is sent to Spellout in a position where it will end up (following copy deletion) being the element which is spelled out immediately adjacent to another *nie*
i.e. … nie nie$_2$ → nie ~~nie~~$_2$

What (26) predicts is that *nie*$_2$ will be deleted wherever raising to Spec-PolP (under the influence of Pol's EPP-feature) involves raising an XP of which the rightmost ultimately spelled-out element is either *nie*$_1$ or *nie*$_2$; conversely, *nie*$_2$ will be spelled out wherever the rightmost ultimately spelled-out element is something other than a *nie*. This is schematically illustrated in (27):

(27)

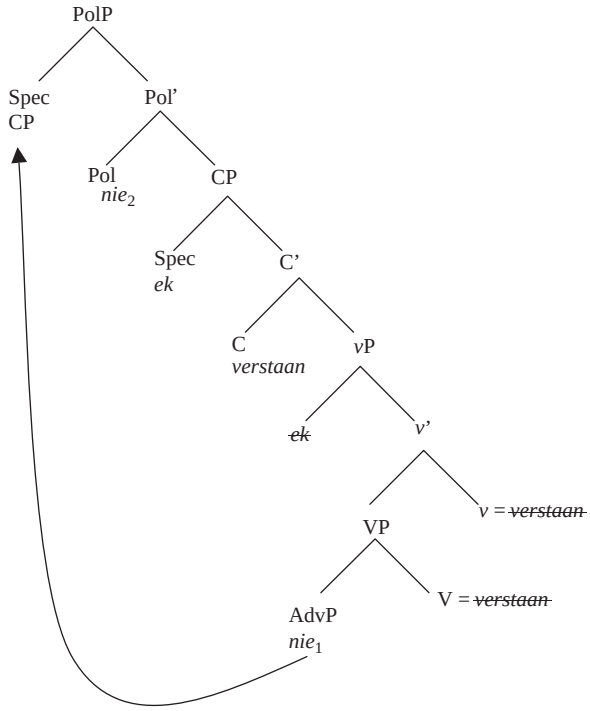


Let us investigate how this proposal fares in accounting for the doubling and omission structures presented thus far. Consider, firstly, a structure in which *nie*$_2$ systematically fails to surface, unmodified intransitive verb-featuring (4a)/(25), just discussed. (26) predicts that *nie*$_2$ will undergo OCP-style deletion whenever it ends up being spelled out adjacent to a *nie* (only the first of two phonologically identical elements survives OCP-induced deletion; cf. Leben 1973). Inspection of the (partial) structure in (28) reveals that this is indeed the configuration underlying (4a)/(25) (~~strikethrough~~ once again indicates copy-material that is suppressed under Chain Reduction (see below). Obviously, the CP-complement of *nie*$_2$ is also deleted as the CP is spelled out

[13]Cf. Neeleman and van de Koot (2005) for overview discussion of syntactic haplology and its relation to the Obligatory Contour Principle/OCP Effects that have frequently been noted in phonology.

in its moved position; for presentational reasons, ~~strikethrough~~ has, however, not been employed in this case.):

(28)



On standard assumptions about the structure of West Germanic V2 clauses (cf. Den Besten 1977/1983) which are also well motivated for Afrikaans (cf. Biberauer 2003), *verstaan* undergoes raising to C. At PF, it will therefore be spelled out in this position, with lower copies (in T, *v*, and V) being suppressed/deleted in accordance with some chain reduction mechanism (cf. Nunes 2004 on the operation Chain Reduction). Crucially, supression of the copy of *verstaan* in V means that the rightmost overtly realised element in the CP which underwent raising to Spec-PolP will be *nie*$_1$, i.e., it creates the environment in which (26) will apply. The non-occurrence of *nie*$_2$ in structures like (4a)/(25) is therefore accounted for.

Contrast the embedded and compound-tense counterparts of (4a)/(25) given in (29):

(29) a. … dat ek nie$_1$ verstaan nie$_2$. (=(4a′) above)
… that I not understand NEG
… that I don't understand.

b. Ek het nie$_1$ verstaan nie$_2$. (=(4b) above)
I have not understood NEG
I didn't understand.

In both of these cases, both *nie*s are overtly realised. This follows straightforwardly from (26) if we take into account the fact that both of these structures feature a verb (*verstaan*) which is standardly thought to remain in V (cf. Vikner 2005 for recent convincing argumentation that West Germanic verbs do not undergo raising in non-V2 contexts): *verstaan* is therefore the rightmost ultimately spelled-out element in the CP that raises to Spec-PolP, with the result that nie_1 and nie_2 do not end up in the OCP configuration, allowing both to survive.[14] More generally, (26) predicts that all structures in which the lexical verb has remained *in situ* — thus, all non-V2 embedded clauses and compound-tense structures — will consistently feature two negators. This prediction is correct, as inspection of all the relevant types of examples in this chapter will reveal (cf. also Donaldson 1993 for an overview of negative doubling structures in Afrikaans).

Furthermore, (26) also predicts that structures in which the VP contains overtly realised material will feature two negators. We would therefore expect transitive structures to contain two *nie*s. Investigation of amongst others the examples in (2) and (5b), however, reveals that this is not always the case: only one *nie* is realised in structures featuring pronominal objects (cf. (7a)) and the same is true for those featuring full DPs which receive some kind of "old information" interpretation (cf. amongst others (6b)). Significantly, as noted earlier, these very structures are the ones typically analysed as involving either defocusing scrambling movement out of the VP (cf. amongst others Diesing 1992) or base-generation above VP-adverbials (cf. amongst others Neeleman and Weeman 1999). Regardless of which of these analyses is correct, it is clear that they both entail the assumption that "old information" transitives differ from their "new information" counterparts in respect of the positioning of the object: whereas "new information" objects are VP-internal, their "old information" counterparts are VP-external. That nie_2 should be present in the former, but not the latter case therefore falls out straightforwardly from (26): it is only in the "new information" case (where the object is VP-internal) that the object will intervene between nie_1 and nie_2, thereby allowing both to be pronounced.

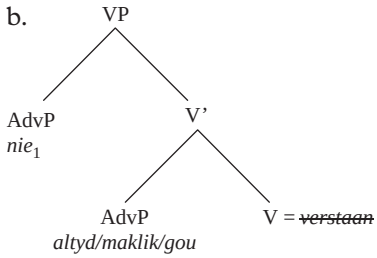
So-called *VP-adverbs* represent another type of material that (26) leads us to expect to play a role in determining the presence vs. absence of nie_2 in simple-tense intransitive matrix clauses (non-V2 embedded and compound-tense clauses always feature two *nie*s for the reasons given earlier and non-intransitives will feature two *nie*s wherever the VP contains material over and above nie_1): if it

[14]Note that the analysis proposed here would also be compatible with an analysis which assumes V-raising to a higher verbal head, e.g., *v* or T. If *v*P and TP are head-final, a raised verb will still intervene between nie_1 and nie_2, thereby leading us to expect the observed *nie*-doubling structure. If *v*P and TP are head-initial, as numerous researchers have assumed since Zwart (1993), we would also have to assume that the VP- and *v*P-material that surfaces to the left of the verb undergoes raising into a higher domain (to ensure that the verb is spelled out to the right of all material other than nie_2). In this case too, then, we would expect two *nie*s to be spelled out as the raised verb will still intervene between (raised) nie_1 and nie_2. *Nie*-doubling vs. omission therefore cannot serve as an independent V-movement diagnostic.

is indeed the case that "true" negators are, as we have been assuming, adjoined at the outer VP-edge, we would expect other VP-adverbs, i.e., elements which are also traditionally assumed to be adjoined to the VP-edge, to be able to intervene between *nie*$_1$ and *nie*$_2$, thereby ensuring that both *nie*s are produced.[15] This is indeed the case, as illustrated in (30):

(30) a. Ek verstaan nie$_1$ altyd/ maklik/ gou nie$_2$.
I understand not always easily quickly NEG
I don't always understand/I don't always understand easily/quickly.

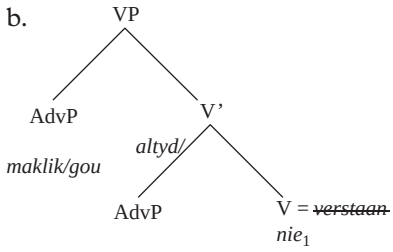
b.



As the relative ordering of the adverbials in (30a) indicates, it is possible for VP-adverbs to follow *nie*$_1$. If we assume the usual adjunction site for these adverbs to be the edge of VP, it becomes possible to account for the presence of two *nie*s in the structures concerned: under those circumstances, these VP-adverbs will be spelled out to the right of *nie*$_1$, with the consequence that (26) cannot apply. Significantly, however, VP-adverbs do not *always* surface in structures featuring two *nie*s — cf. (31):

(31) a. Ek verstaan altyd/ maklik/ gou nie$_1$
I understand always/ easily/ quickly not
"I always/easily/quickly don't understand"

b.



[15]Note that there is in fact some dispute in the literature as to the exact adjunction site of the adverbs traditionally designated *VP-adverbs*. Thus numerous authors (cf. amongst others Adger and Tsoulas 2000 and Göbbel 2007) have proposed that these adverbs are in fact low *vP-adverbs*. If this were also to be the case in Afrikaans, these adverbs and *nie*$_1$ could therefore be competing for the lowest adjunction site within *v*P. We return to this matter in Section 3.4.3.

As (31) shows, VP-adverbials may also *precede* nie_1. Crucially, however, the relative scope relations between the negator and the adverbs are reversed in this case (cf. parallel differences which emerge in the context of quantified object-containing structures such as (5)). I take this as evidence that "true" negators and VP-adverbs belong to the same general adverb domain, within which they may adjoin freely. If nie_1 is indeed merged "low", one would expect it (a) consistently to *follow* "higher" adverbs, both those usually assumed to be associated with the TP-domain and those generally thought of as CP-related and (b) to surface in isolation in contexts where "higher" adverbs surface in the absence of overtly realised VP-internal material. These expectations are borne out, as illustrated in (32):

(32) a. Ek verstaan eerlikwaar/ waarskynlik/ moontlik $\underline{nie}_1$.
I understand honestly probably possibly not
I honestly/probably/possibly don't understand.

b. *Ek verstaan $\underline{nie}_1$ eerlikwaar/waarskynlik/moontlik $\underline{nie}_2$.

Taken together, the adverb data therefore support the proposal that nie_2-deletion is conditioned by an "exposed" left edge of VP, i.e., one where nie_1 ends up being the rightmost spelled-out element.

Fronting structures represent a further context in which nie_1 may be "exposed" in this manner. Consider (33–34) in this connection:

(33) a. Hy lees $\underline{nie}_1$ die *Tèlegraph* $\underline{nie}_2$.
he read not the Telegraph NEG
He doesn't read the *Tèlegraph*.

b. Die *Tèlegraph* lees hy $\underline{nie}_1$.
the Telegraph read he not
The *Tèlegraph*, he doesn't read.

(34) a. Wie lees $\underline{nie}_1$ die *Tèlegraph* $\underline{nie}_2$?
who read not the Telegraph NEG
Who doesn't read the *Telegraph*?

b. Wat lees Jan $\underline{nie}_1$?
what read John not
What doesn't John read?

c. Waarom verstaan jy $\underline{nie}_1$?
why understand you not
Why don't you understand?

In (33a), we see the now familiar "new information" structure featuring a VP-internal object, which therefore precludes the application of (26). By contrast, the object-fronting structure in (33b) behaves exactly like the scrambling structure, with movement of the object out of the VP resulting in nie_1 being "exposed"

at the right edge of the constituent (CP) which raises to Spec-PolP; *nie*$_2$ is therefore deleted. In (34a), we see that fronting of a *wh*-subject does not result in *nie*$_2$-deletion when VP-internal material is present, as expected. By contrast, fronting of a *wh*-element that would otherwise have constituted the only material internal to VP *does* trigger *nie*$_2$-deletion, once again as expected. In sum, then, (26) would seem to be able to account for the doubling and omission patterns presented in Section 2 in which only a single semantic negation is involved.

3.4.2.2. Doubling and omission in multiple negation structures. This leaves the multiple negation structures in (8) to be accounted for. The relevant data are repeated here as (35):

(35) a. Ek weet nie wat hy doen nie.
I know not what he do not
I don't know what he's doing.

a′. … dat ek nie weet wat hy doen nie.

b. Ek weet nie wat hy nie doen nie.
I know not what he not do not
I don't know what he doesn't do/isn't doing.

b′. … dat ek nie weet wat hy nie doen nie.

As (35b) shows, structures involving two negated clauses differ from those in which just one clause is negated in that they systematically lack the expected number of negators. Furthermore, this discrepancy is not "remedied" in embedded contexts as was consistently shown to be the case in single negation-containing structures — contrast (35b′) with the examples in (4–6), for example. The question is why this should be.

Note, firstly, that doubling is obligatory in structures featuring clausal complements (cf. (35a/a′)). This indicates that these complements cannot have raised from their base-position as is sometimes assumed: if raising had occurred, *nie*$_1$ would have been "exposed" at the edge of VP in (35a), with the result that it would have been spelled out adjacent to *nie*$_2$, thereby creating the deletion environment specified in (26). With this much in place, we can begin to understand why multiple negation structures like (35b/b′) only contain three *nie*s: in this case, we are in fact dealing with two PolPs as schematised in (36):

(36) $[_{PolP}\ [_{CP}$ Ek weet nie$_1$ $[_{PolP}\ [_{CP}$ wat hy nie$_1$ doen$]$ nie$_2$$]$ nie$_2$$]]$

As shown in (36), the verb in multiple negation structures like (35b/b′) takes a PolP-complement which is structured in the usual way, i.e., it consists of a CP which has undergone movement to Spec-PolP under the influence of Pol's EPP-feature. The matrix clause is, however, also a PolP, with the consequence that the entire matrix CP, including the PolP-complement selected by the matrix

verb, undergoes raising to the specifier of matrix PolP. This, then, creates a scenario in which two *nie*s are ultimately spelled out adjacent to one another. (26) therefore applies, with the result that the second of these *nie*s — matrix nie_2 — is deleted. To sum up, then, (26), in combination with independently motivated assumptions about the "West Germanic" nature of Afrikaans clause structure would appear to make the correct predictions vis-à-vis the presence vs. absence of *nie*-doubling in all of the structures considered so far.

3.4.2.3. Further doubling and omission patterns: A remaining puzzle. The question that now arises is whether (26) can in fact account for all doubling and omission phenomena in Afrikaans. As examples like (37) show, this is not the case.

(37) a. Hy sing $\underline{nie}_1$.
he sing not
He doesn't sing.

b. Hy sing $\underline{nie}_1$ (*$\underline{nie}_2$).
he sing not NEG

c. Hy sing $\underline{NIE}_1$ $\underline{nie}_1$.
he sing not not
He doesn't not sing., i.e. He does sing.

As (37c) reveals, it is not impossible for two *nie*s to surface adjacent to one another: two *nie*s can co-occur if they are both "true" negators. At first sight, this might seem to follow straightforwardly from (26), which states that nie_2 is deleted whenever nie_1 is spelled out adjacent to it; (26) does not specify that the second of two adjacent nie_1s should also undergo deletion. What needs to be remembered, though, is that (26) applies at the stage where the feature-bundles operated on by Narrow Syntax have been converted into phonological form, i.e., OCP-style deletion takes place *after* the *Vocabulary Insertion* stage assumed in Distributed Morphology (cf. Halle and Marantz 1993, *et seq.*). At the stage at which (26) applies, it will therefore no longer be possible to distinguish nie_1 and nie_2 on the basis of their distinct featural make-up as they will simply be lexical items with identical segmental characteristics. How, then, can PF determine when adjacent *nie*s are admissible and when they are not?

One possibility suggested by consideration of the examples in (37) might be that stress differences provide the crucial distinguishing factor: the adjacent nie_1s in (37c) are evidently non-identical in stress profile, whereas the proscribed nie_1–nie_2 structure in (37b) arguably features two *nie*s that are at least potentially indistinguishable on stress or other grounds. If (26) takes place following sentence-level stress assignment (i.e., relatively late in the PF process; see below), we might be able to account for the discrepancy in (37). That this is not the crucial consideration is, however, clearly shown by two independent empirical facts. Firstly, stressing nie_1 in (37b) (i.e., **Hy sing* $\underline{NIE}_1$ $\underline{nie}_2$) does not result in a grammatical structure; it simply results in a string which, if it is to

be viewed as grammatical, must be interpreted like (37c), i.e., as one featuring two "real" negators — *Hy sing* $\underline{NIE}_1$ $\underline{nie}_1$. Secondly, structures such as those in (38) also clearly show that adjacent *nie*s are permitted even where stress does not serve a distinguishing function:

(38) a. Ek wil mense wat $\underline{nie}_1$ omgee $\underline{nie}_2$ $\underline{nie}_1$ sien $\underline{nie}_2$.[16]
I want people who not care NEG not see NEG
I don't want to see people who don't care.

b. Ek sien $\underline{nie}_1$ die tweede '$\underline{nie}_1$' $\underline{nie}_2$.
I see not the second nie NEG
I don't see the second *nie*.

In (38a), we see a nie_2–nie_1 sequence being spelled out despite the absence of a stress difference, while (38b) shows that the reverse, i.e., the ordering proscribed by (26), is also possible. That adjacent nie_1–nie_2 is not systematically ruled out is also very clearly shown by the following example, which shows that not just two, but three *nie*s may be spelled out adjacent to one another:

(39) Hy sing $\underline{NIE}_1$ $\underline{nie}_1$ $\underline{nie}_2$.
he sing not not NEG
He doesn't not sing.

This structure in fact represents the standardly correct counterpart of (37c), the latter structure being one that is very commonly heard in spoken Afrikaans, particularly, but not exclusively, that produced by non-natives — in other words, (37c) represents the same kind of structure as the nie_2-lacking structures discussed in Section 3.2. For present purposes, the crucial point is that these structures differ from superficially very similar nie_1–nie_2-containing ones like (37b) in that they, unlike (37b)-type structures, represent structures sanctioned by PF: whereas the deletion algorithm in (26) automatically deletes the second *nie* in (37b)-type structures, it does not do so whenever a structure contains adjacent nie_1s as is the case in (37c). And (39) shows that three adjacent *nie*s are also permitted. Clearly, therefore, (26) will need to be refined in order to capture the empirical facts. The following section proposes a way in which this might be achieved.

3.4.3. Refining the Haplological Analysis

If (26) is to be rescued, it will need to be refined in such a way that PF will be able to "see" the difference between *nie*s requiring deletion and those which must survive. What the discussion earlier has shown is that the deleted

[16]Here the second nie_1 may be stressed, but it need not be.

nie is always nie_2 (recall that "missing" *nie*s do not result in the loss of negated meaning). What we therefore need to understand is how PF can identify a nie_2 requiring deletion, without actually being able to distinguish nie_1 and nie_2 on the basis of their distinctive featural make-up.

Inspection of the more general circumstances under which identical material *is* able to surface in adjacent positions is helpful in this regard.[17] Consider (40) and (41) which illustrate relevant examples from both English and Afrikaans:

(40) a. Die rede dat hy weg <u>is</u>, <u>is</u> dat hy moeg was.
the reason that he away is is that he tired was
The reason that he's away is that he was tired.[18]

b. Dat ek dit al gedoen <u>het</u>, <u>het</u> hom verstom.
that I it already done have have him amazed
That I've already done it amazed him.

c. Die <u>by</u> <u>by</u> die blom is yslik.
the bee by/ at the flower is huge
The bee next to the flower is huge.

(41) a. He will be <u>in</u> <u>in</u> a minute

b. <u>Will</u> <u>Will</u> (i.e. someone called Will) come along?

c. He has learned a lot in his Oriental <u>Studies</u> <u>studies</u>

As (40a,b) show particularly clearly, identical elements are allowed to surface adjacent to one another when they are not part of the same intonational phrase. As inspection will reveal, the same is true for all the other examples. What the examples suggest, then, is that the structural configuration in which OCP-style deletion takes place more generally seems to be subject to (at least) two conditions:

a. that the two phonologically identical elements (two identical prosodic words/ω) be linearly adjacent following Vocabulary Insertion and
b. that these elements be located within the same phonological phrase (φ).

Let us investigate whether these conditions also apply to Afrikaans negation.

[17] I leave aside here reduplication, which is famously quite productive in Afrikaans (cf. Botha 1988). The way (26) is stated, it is clear that it applies *after* Vocabulary Insertion and therefore cannot "look inside" the structure of individual lexical items. As such, reduplicated lexical items automatically fall outside the scope of this mechanism.

[18] Cf. also the English *The thing **is is** that …* phenomenon (cf. Massam 1999). Although the structure in question is prescriptively proscribed, it is very prevalent in many spoken varieties of North American and British English and the crucial point for our purposes is that there is no OCP-style mechanism operative at PF which precludes the possibility of the two *is*es being realised adjacent to one another.

If clause (b) above is also relevant to doubling and omission in the negation domain, (26) will need to be reformulated along the lines of (42):

(42) Afrikaans Syntactic Haplology mechanism (Take 2)
Nie$_2$ is subject to PF deletion whenever it is sent to Spellout in a position where it will (a) end up (following copy deletion) being the element which is spelled out immediately adjacent to a *nie* and (b) be part of the same prosodic phrase (φ) as a *nie*.
i.e. [$_{\varphi}$… *nie nie*$_2$] → *nie ~~nie~~*$_2$

To determine whether (42) can in fact capture the Afrikaans negation facts, we will first need to clarify the manner in which prosodic phrases are assumed to be constructed. I adopt Truckenbrodt's (1995) syntax-PF mapping assumptions (cf. also Selkirk 1995), which are presented in (43):

(43) A. ALIGN-XP, R: ALIGN (XP, R; P, R)
"For each XP, there is a Phonological phrase (P) such that the right edge of XP coincides with the right edge of P"
B. ALIGN-XP, L: ALIGN (XP, L; P, L)
"For each XP, there is a Phonological Phrase (P) such that the left edge of XP coincides with the left edge of P"

For Truckenbrodt, A above applies to consistently right-recursive (i.e., head-initial) languages, while B applies to consistently left-recursive (i.e., head-final) languages. For the purposes of this discussion, I will abstract away from the vexed question of how "headedness" should be captured (via a Head Parameter, as traditionally assumed, or via differences in movement operations, as in LCA-based approaches or via some combination of (aspects of) these two); all that matters here is that PF be able to "recognise" the position of a head in a given syntactic structure as either initial or final *relative to the material contained within the phrase associated with that head.* In other words, all that is required in the present context is that PF be able to determine *surface* head-positioning; syntax-internal "headedness" is irrelevant. Thus PolP, which is head-initial in the usual (syntax-internal) sense (cf. Section 3.3) is in fact head-final as far as PF is concerned because the string that PF operates on is one in which the head of Pol follows all the material contained in the phrase that it heads. Consider (44) by way of illustration (~~strikethrough~~ once again signifies lower copies which are deactivated at PF and therefore not pronounced):

(44) a. Ek het nie$_1$ sy redenasie verstaan nie$_2$.
I have not his reasoning understood NEG
I didn't understand his reasoning.

b. [$_{PolP}$[$_{CP}$ Ek het [$_{TP}$ ~~ek~~ [$_{vP}$ ~~ek~~ [$_{VP}$ nie$_1$ [$_{DP}$ sy redenasie] verstaan] v] ~~het+T~~]] nie$_2$].

For expository purposes, (44b) once again reflects relatively conservative assumptions about West Germanic clause structure. Thus (i) VP, *v*P and TP are

all assumed to be head-final in the syntax (X is merged so that it follows its complement) and (ii) V is not assumed to raise (cf. the discussion in Section 3.3). Auxiliary *het* ("have") is indicated as having been merged in T as there appear to be good reasons to assume that temporal auxiliaries in Afrikaans do not raise from *v* (cf. amongst others the fact that they, unlike their Dutch and German counterparts, are not sensitive to thematic — i.e., *v*P-related — distinctions like unaccusativity). On the assumption, then, that the mapping algorithm in (43) does indeed pay attention only to "PF headedness" (and not to syntax-internal headedness), it will apply in the following way in Afrikaans:

a. A will apply to NP, DP, CP and most PP and
b. B will apply to VP, *v*P, TP and PolP.[19]

With our mapping assumptions in place, we can briefly confirm that they make the correct predictions as far as the permissibility of the structures in (40–41) are concerned. Consider (45–46) where **bolded** brackets indicate a syntactic phrase-edge which also maps onto a prosodic phrase-edge:

(45) a. Die rede dat hy weg <u>is</u>, <u>is</u> dat hy moeg was.
the reason that he away is is that he tired was
The reason that he's away is that he was tired.

a′. $[_{CP}[_{DP}$ Die rede $[_{CP}$ dat hy weg is**]]** is $[_{CP}$ dat …

b. Dat ek dit al gedoen <u>het</u>, <u>het</u> hom verstom.
that I it already done have have him amazed
That I've already done it amazed him.

b′. $[_{CP}[_{CP}$ Dat ek dit al gedoen het**]** het **[**$_{TP}$ … hom verstom]**]**

c. Die <u>by</u> <u>by</u> die blom is yslik.
the bee by/at the flower is huge
The bee next to the flower is huge.

c′. $[_{DP}$ die $[_{NP}$ by **]** $[_{PP}$ by die blom**]]** is …

(46) a. He will be <u>in</u> <u>in</u> a minute.

a′. $[_{TP}$ He will $[_{VP}$ be $[_{PP}$ in**]** $[_{PP}$ in a minute**]]]**

b. <u>Will</u> <u>Will</u> come along?

b′. $[_{CP}$ Will $[_{TP}$ $[_{DP}$ Will**]** ~~will~~ $[_{VP}$ come along**]]]**

c. He has learned a lot in his Oriental <u>Studies</u> <u>studies</u>.

c′. … $[_{PP}$ in $[_{DP}$ his $[_{DP}$ Oriental Studies**]** studies**]]**

[19]Note that in assuming that not only lexical, but also functional categories can define φs, I depart from Selkirk (1995), who proposes that only the former may do so. More research is required to determine whether a given category's "visibility" to the mapping algorithm in (43) is universally fixed or subject to parametric variation. As will become clear from subsequent discussion in the main text, at least C's status as a φ-definer appears to be crucial in Afrikaans. Also relevant to this issue is the status of labels like *C, T, D*, etc.

As the '-structures indicate, the phonetically identical elements are separated by prosodic boundaries in each case. In (45a), this is a consequence of the fact that CP and DP are head-initial, with the result that they are mapped onto prosodic phrases (φ) in accordance with A, which in turn ensures that their right edges coincide with the right edge of a φ; the two *is*es in (45a) therefore occupy different φs and can thus be spelled out adjacent to one another. The presence of CP- and NP-boundaries ensures the same outcome for the *het*s and the *by*s in (45b) and (45c), respectively, while PP and DP boundaries produce the necessary separations in the English examples in (46). Apparently, then, the syntactic haplology mechanism outlined in (42) is not one which uniquely applies in Afrikaans; it also seems to play a role in accounting for the possibility of identical adjacent elements in English.

Let us now consider whether (42) can also account for the *nie*-doubling and omission phenomena with which we are primarily concerned in this section.

Consider firstly (38), repeated here as (47) (prosodic phrase-edges once again indicated **boldfaced**):

(47) a. Ek wil mense wat $\underline{\text{nie}}_1$ omgee $\underline{\text{nie}}_2$ $\underline{\text{nie}}_1$ sien $\underline{\text{nie}}_2$.
I want people who not care NEG not see NEG
I don't want to see people who don't care.

a′. … [$_{DP}$ [$_{NP}$ mense **[**$_{PolP}$ [$_{CP}$ wat nie$_1$ omgee**]** nie$_2$]**]]** … **[**$_{vP}$ ~~ek~~ [$_{VP}$ nie$_1$ …

b. Ek sien $\underline{\text{nie}}_1$ die tweede '$\underline{\text{nie}}_1$' $\underline{\text{nie}}_2$.
I see not the second nie NEG
I don't see the second *nie*

b′. **[**$_{PolP}$ [$_{CP}$ Ek sien **[**$_{TP}$ … **[**$_{vP}$ ~~*ek*~~ **[**$_{VP}$ nie$_1$ [$_{DP}$ die [$_{NP}$ tweede 'nie$_1$'**]]** ~~sien~~] sien] ~~sien~~] ~~sien~~]**]** nie$_2$]

As the partial structures indicate, the *nie*s that are spelled out adjacent to one another in both of these examples occupy distinct φs and are therefore predicted by (42) not to be affected by OCP-style deletion. In (47a), two φ-boundaries separate the adjacent *nie*s: the rightward boundary imposed by the fact that the negative relative clause (a PolP) is headed by a head-initial DP (containing an NP) and the leftward boundary mapped onto head-final VP. The same is true for (47b), where the "use-mention" *nie*$_1$'s containment within a head-initial NP and DP places it within a φ which excludes the final Pol-head. (42) therefore makes the correct predictions as far as these examples are concerned.

The cases of multiple negation-containing (37c) and (39) are slightly more complicated and deserve special attention. Let us firstly consider their single negation-containing counterpart, (48a), an omission structure for which we had an account under (26)) prior to the introduction of the prosodic phrase-mate condition in (42):

(48) a. Hy sing $\underline{\text{nie}}_1$.
he sing not
He doesn't sing.

b. **[**$_{\text{PolP}}$ [$_{\text{CP}}$ hy sing **[**$_{\text{TP}}$ ~~hy~~ **[**$_{\text{vP}}$ ~~hy~~ **[**$_{\text{VP}}$ nie$_1$~~sing~~] ~~sing~~+v] ~~sing~~+v+T]**]** nie$_2$]

If the structure underlying (48a) is indeed that indicated in (48b), the deletion algorithm in (42) would predict that two *nie*s should be spelled out: *nie*$_1$ and *nie*$_2$ are, after all, located in distinct prosodic phrases, leading us to expect **Hy sing nie*$_1$ *nie*$_2$. This structure is, however, ungrammatical, with the result that we can conclude that there must either be a problem with the structural assumptions reflected in (48b) or with the deletion algorithm in (42). In view of the fact that the latter appears to facilitate insight into contexts in which adjacent *nie*s can be spelled out and also, more generally, where OCP effects (fail to) surface, let us inspect the former possibility. Recall that we established on the basis of scrambling and adverb-related facts that *nie*$_1$ must be adjoined fairly low in the clause structure. Until now, we have simply assumed that this low position is a VP-adjoined one. If *nie*$_1$ were instead to be *v*P-adjoined — and, specifically, adjoined to the lowest specifier of *v* — the structure underlying (48a) would be that schematized below:

(48b′) **[**$_{\text{PolP}}$ [$_{\text{CP}}$ hy sing **[**$_{\text{TP}}$ ~~hy~~ **[**$_{\text{vP}}$ ~~hy~~ nie$_1$ **[**$_{\text{VP}}$ ~~sing~~] ~~sing~~+v] ~~sing~~+v+T]**]** nie$_2$]

At first sight, this change would not seem to alter the fact that the prosodic boundaries imposed by (42) (once again marked **bold**) will place *nie*$_1$ and *nie*$_2$ in *distinct* prosodic phrases. Two *nie*s should therefore still be spelled out. Notice, however, that the troublesome φ-boundary (CP's right edge) in fact forms the right edge of a φ that will not ultimately contain any overtly realised material. In other words, it marks off the right edge of a unit which will not ultimately play a role in the prosodic structure of the unit that is articulated. It therefore seems reasonable to assume that this superfluous prosodic unit will be deleted before PF sends the structure on to the articulatory-perceptual component (cf. also Nespor and Vogel 1986 who argue that empty categories and their projections do not affect φ-formation). Let us assume that this is the case and, more specifically, let us assume the following (incomplete) sequence of PF steps after the computational component has sent the structure constructed during Narrow Syntax to PF:

(49)

(i) "first-pass" formation of φs (essentially) on the basis of the mapping algorithm in (43);
(ii) "filling in" of the phonological specifications of the various feature-bundles operated on by syntax. This step entails both spelling out overtly realised copies and suppressing/deleting lower copies;
(iii) "second-pass" refinement of φs: deletion of all φs lacking overtly realised material; and
(iv) OCP-style deletion of adjacent phonologically identical elements located within the same φ.

Given (49), we can see that omission structures which, like (48a), do not feature any overtly realised material in the VP-domain will always be subject to the "second-pass" φ-refinement operation in (iii). Consequently, *nie*$_1$ and *nie*$_2$ will always end up in the same φ, with the result that (42) applies, thereby delivering the correct result: *nie*$_2$ omission. Crucially, however, this result requires us to view *nie*$_1$, at least in this structure, as a *v*P-adjoined element.

Consider, now, (37b) repeated as (50a), i.e., a structure in which two *nie*s are permitted to surface adjacent to one another:

(50) a. Hy sing NIE$_1$ nie$_1$.
he sing not not
He doesn't not sing.

b. [$_{CP}$ Hy sing **[**$_{TP}$ ~~hy~~ **[**$_{vP}$ ~~hy~~ **[**$_{PolP}$ nie$_1$ nie$_2$] nie$_1$ **[**$_{VP}$ ~~sing~~] ~~sing~~+v] ~~sing~~+*v*+T]**]**

As noted earlier, interpretive and intonational considerations in particular make it very clear that we are dealing with two adjacent *nie*$_1$s in this case. More specifically, the first *nie*$_1$ scopes over the second *nie*$_1$, thereby cancelling it out in the manner of double negatives in non-NC languages. Also noted earlier was the fact that this structure is not in fact prescriptively correct, instantiating the kind of structure that is frequently produced by non-natives in particular, but also in the spoken language by native-speakers. Native-speakers, however, are fully aware that structures of this kind are not in fact "correct" and are consistently able to produce the prescriptively sanctioned form (cf. (37c)/(52) below) when asked to assess (50a)-type structures. It therefore seems reasonable to view (50a) as a structure which was constructed from a Numeration/Lexical Array which does not include the *nie*$_2$ required in Standard Afrikaans (cf. examples in which *nie*$_2$ is omitted by non-natives or "forgetful" natives, which likewise are not constructed from Numerations containing *nie*$_2$). The question that we then need to answer is why two *nie*$_1$s are able to surface adjacent to one another in this case. If the structure underlying (50a) is indeed that presented in (50b), we would expect only one *nie* to be spelled out as all three *nie*s are located in the same prosodic phrase. This cannot, then, be the correct structure. Worth noting about (50a), however, is that it is in fact a contrastive focus structure, which is semantically and, barring only additional meanings that may arise as a consequence of the speaker's failure to employ the most concise formulation available (cf. Grice 1975; Sperber and Wilson 1986; etc.), also pragmatically equivalent to the less complex structure in (51):

(51) Hy sing WEL.
he sing indeed
He DOES sing.

Importantly, *wel* has to be stressed if *Hy sing wel* is to be interpreted in the relevant contrastive focus sense. This is illustrated in (52) (where A and B signify interlocutors in a conversation):

(52) A: Hy sing nie$_1$.
he sing not
He doesn't sing.

B: Hy sing WEL/*Hy sing wel[20]
he sing indeed
He DOES sing.

Similarly, the two *nie*$_1$s in the largely equivalent structure also both need to be stressed; thus *Hy sing* NIE$_1$ NIE$_1$ *(nie*$_2$*)*, with the way in which this structure was previously represented simply having been intended to reflect the fact that the first *nie*$_1$ receives greater emphasis than the second. Recall now that *nie*$_2$ surfaces as an extra element in emphatic structures (cf. (11)). More generally, we may assume that emphasised negators differ from their non-emphasised counterparts in featuring an extra PolP "shell".[21] This would entail that the structure underlying (50b) is in fact (50b′):

(50) b′. [$_{CP}$ Hy sing **[**$_{TP}$ ~~hy~~ **[**$_{vP}$ ~~hy~~ **[**$_{PolP}$ nie$_1$ nie$_2$] [$_{PolP}$ nie$_1$ nie$_2$] **[**$_{VP}$ ~~sing~~] ~~sing~~+v] ~~sing~~+*v*+T]**]**

[20]As *wel* is a positive-polarity-emphasising element, it is in fact always obligatory that some element in the structure in which it occurs be emphasised. Thus:

(i) *Hy sing WEL*
he sing indeed = He DOES sing (contrary to what you said before).
(ii) *HY sing wel*
he sing indeed = HE sings (even if others don't).
(iii) *Hy SING wel*
he sing indeed = He does SING (even if he doesn't play any instruments).

[21]Further investigation of Afrikaans negation structures suggests the correctness of the idea that Pol is not exclusively C-related — in the sense of specifically being clause-related — in this language. Recall, for example, the fact that "extra" *nie*$_2$s may serve a (polarity-)reinforcing function in spoken Afrikaans (cf. (11) above). More generally, it seems that all focusable XPs are compatible with an overtly realised Pol-head. The following examples illustrate:

(i) Nie$_1$ die BOEK nie$_2$, maar die KOERANT wil ek hê.
not the book not but the newspaper want I have
Not the book, but the newspaper is what I want.

(ii) A: Watter ene wil jy hê? Die groene of die rooie?
which one want you have the green or the red
Which one do you want? The green or the red?

B: Nie$_1$ die groene nie$_2$!
not the green NEG
Not the green one!

[See opposite page for footnote 21 cont.]

As (50b′) shows, viewing the adjacent emphatic *nie*$_1$s as elements which are each surrounded by a PolP "shell" enables us to understand why adjacent *nie*$_1$s are possible in this case: as PolP is a head-final phrase, adjacent PolPs will be assigned to separate prosodic phrases, with the result that we expect the *nie*$_2$s that they contain to be deleted, while the contentful negator is spared. (42) can therefore account for non-standard double *nie*-containing structures of the kind illustrated in (50b). Additionally, it can also account for the fact that *nie*$_1$ differs from all other negation elements in being incompatible with an "extra" (emphasising) *nie*$_2$: when *nie*$_1$ is emphasised, this can only be signalled intonationally. This is shown in (53):

(53) a. Hy sing nooit nie$_2$/ nêrens nie$_2$ sulke liedjies nie$_2$.[22]
he sing never NEG nowhere NEG such songs NEG
He NEVER sings songs like that/He doesn't sing songs like that ANYWHERE.

b. *Hy sing nie$_1$ nie$_2$/ NIE$_1$ nie$_2$ sulke liedjies nie$_2$.
he sing not NEG not NEG such songs NEG

c. Hy sing NIE$_1$ sulke liedjies nie$_2$.
he sing not such songs NEG
He DOESN'T sing songs like that.

Furthermore, (42) can also account for the prescriptively correct triple *nie*-containing structure in (54):

(54) a. Hy sing NIE$_1$ NIE$_1$ nie$_2$.

b. [$_{PolP}$ [$_{CP}$ Hy sing [$_{TP}$ ~~hy~~ [$_{vP}$ ~~hy~~ [$_{PolP}$ nie$_1$ nie$_2$] [$_{PolP}$ nie$_1$ nie$_2$] [$_{VP}$ ~~sing~~] ~~sing~~+v] ~~sing~~+*v*+T]] nie$_2$].

As shown earlier, the difference between this structure and (50b) is that the latter lacks the prescriptively enforced clause-final *nie*$_2$. As this element will be assigned to a prosodic phrase distinct from that containing the superficially adjacent *nie*$_1$ (and its associated, but ultimately unrealised *nie*$_2$), (42) predicts correctly that it will be realised overtly.

Overall, then, it seems that (42) offers us an adequate means of accounting for the negation-related doubling and omission structures in Afrikaans. Like (26), it predicts that *nie*$_2$ will always be realised wherever it is not spelled out

(iii) Ek is [nie$_1$ vir 'n oomblik (nie$_2$)/ nie$_1$ in die minste (nie$_2$)] spyt.
I is not for a moment NEG/ not in the least NEG sorry
I am not sorry for a minute/I am not in the least sorry.

[22]It should be noted that these structures are colloquial ones which native-speakers would readily employ in the spoken language, but never in writing.

adjacent to *nie*$_1$. Additionally, however, it enables us to understand the various circumstances under which two or more *nie*s may be spelled out adjacent to one another and also why the structures in question bear the semantics they do. As we have seen above, both adjacent *nie*$_1$- and adjacent *nie*$_1$ and *nie*$_2$-strings are possible in Afrikaans. Neither of these facts falls out straightforwardly from (26), but both can be accounted for if we require adjacent *nie*s to be spelled out in distinct prosodic phrases, as stated in (42). This requirement would also seem to hold more generally of identical adjacent elements, not only in Afrikaans, but also in English and maybe also beyond.

4. CONCLUSION

The empirical focus of this chapter has been the doubling and omission phenomena that surface in the Afrikaans negation context. I have argued that careful investigation of the relevant structures can uncover facts about their structure and about Afrikaans clause structure more generally that would not otherwise be apparent. Thus we have, for example, seen how the presence vs. absence of *nie*$_2$ appears to be conditioned, not by a language-specific, construction-specific haplology mechanism of the kind originally outlined in (26), but instead by an apparently more generally valid PF-deletion mechanism which is specifically guided by a syntax-PF mapping algorithm that has previously been argued to apply crosslinguistically. The systematic manner in which (42) enables one to predict not only the (non-)realisation of *nie*$_2$, but also the (im)possibility of adjacent *nie*s shows that it is correct, as Den Besten (1986) originally implied, to maintain the view that Afrikaans is a strict NC language. This, then, resolves the language's until now rather problematic status in the typological context.

At a more specific level, the presence vs. absence of *nie*$_2$ also serves as a clause-structure diagnostic, giving us insights into the positioning of various non-negative elements ("scrambled" vs. "non-scrambled" objects, adverbs, verbs, etc.) and opening up the possibility of adjudicating the merits of alternative clause-structure proposals (amongst others, whether a consistently head-initial analysis of Afrikaans clause structure is feasible, *contra* Haegeman 1995, p. 300, Note 5). What is already clear at this stage is that:

a. Afrikaans exhibits Germanic-style scrambling, despite its morphological impoverishment (lack of case-marking; cf. proposals dating back to at least Sapir 1921 in terms of which the availability of scrambling is directly tied to the presence of case-marking)
b. adverbs in Afrikaans at least do not occupy fixed specifier positions, as assumed by Cinque (1999) and others
c. particles associated with particle verbs remain VP-internal as these structures necessarily contain two *nie*s (cf. *Hy kom* **nie**$_1$ *in* **nie**$_2$ — "He comes not in NEG", i.e., He doesn't come in)

d. clause-final *nie*$_2$ is not strictly a clause-related element; it is a polarity-head which may also optionally create a "shell" around non-clausal XPs (DPs, PPs, etc.). As Afrikaans is NC at the clausal level, i.e., *nie*$_2$ is obligatory, it simply serves an "agreeing" function in this context. In non-clausal contexts, by contrast, it is only optionally present and can therefore contribute what may in fact be its "original" (i.e., pre-grammaticalisation) meaning, namely polarity-reinforcing emphasis.

Finally, the proposed analysis also appears to facilitate insights at a more general level into the internal workings of PF (see (39)). As discussed in Section 3.4, the haplological mechanism proposed here entails that PF operates in a very specific manner, with certain operations necessarily preceding others. The proposals made here therefore also make a contribution to the current debate about the nature and architecture of PF and, more specifically, about the nature and variety of PF-deletion operations.

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4

TYROLEAN A-BAR MOVEMENT: DOUBLING AND RESUMPTIVE PRONOUN STRUCTURES

Birgit Alber

ABSTRACT

In the Tyrolean dialect of Meran, long movement of relative and wh-pronouns is characterized by doubling of the extracted element (and, in relatives, of the relative complementizer *wos*) in intermediate CP positions. In relatives, in addition, a resumptive pronoun structure can be observed whenever intermediate verbs select for the complementizer *dass*. It is shown that both doubling and resumptive pronoun structures show movement diagnostics: doubling structures are sensitive to islands and exhibit reconstruction effects, resumptive pronoun structures are not sensitive to islands but still show reconstruction effects. Moreover, both structures are marked when a heavy X or XP is doubled or resumed. An analysis in the framework of Optimality Theory is proposed where doubling is triggered by a hearer-oriented functional constraint favoring structures which are easy to process.

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1. INTRODUCTION

In the Tyrolean dialect of Meran, long A-bar movement is characterized by the presence of doubled pronouns in intermediate [Spec, CP] positions both in relatives and interrogatives (1a. and b., respectively). Furthermore, we can observe an apparent optionality between the doubling structure and a resumptive pronoun structure limited to relatives in certain contexts (1a. vs. 2):[1]

(1) a. I kenn es Haus, $\underline{\text{des}}_i$ *wos* du glapsch,
I know the house RP C-rel you think
$\underline{\text{des}}_i$ *wos* die Maria t_i gekaaft hot.
RP C-rel the Maria bought has
I know the house, which you think Maria bought.

b. $\underline{\text{Wos}}$ glapsch du, $\underline{\text{wen}}_i$ *dass* die Maria t_i
Scope marker think you whom C the Maria
onruafn werd?
call will
Whom do you think Maria will call?

(2) I kenn es Haus, $\underline{\text{des}}_i$ *wos* du glapsch, t_i *dass* die
I know the house RP C-rel you think C the
Maria $\underline{\text{'s}}_i$ gekaaft hot.[2]
Maria it bought has
I know the house, which you think Maria bought.

Differently from other kinds of doubling phenomena, in which both elements involved make a semantic contribution, doubling in Tyrolean A-bar movement is an instance of repetition of a semantically superfluous element, hence 'doubling' in the true sense of the word. This type of doubling cannot be reinterpreted as, for instance, an instantiation of two items with different functions (cf. Weiß, this volume). The existence of doubling structures in A-bar movement thus shows that doubling as the repetition of semantically superfluous elements does exist as a phenomenon in need of explanation, as also suggested by many phenomena discussed in other contributions to this volume (e.g., Poletto, this volume).

The core of my proposal, cast in the framework of Optimality Theory (Prince and Smolensky 1993 [2004]), is that doubling is triggered by a constraint requiring the chain created by extraction to be identified. One of the possibilities

[1]RP is short for 'relative pronoun', RSP for 'resumptive pronoun', C-rel for the relative complementizer *wos*.

[2]See Section 2.3 for arguments that movement has taken place in structures of this type.

to identify a chain is to realize phonetically the copies of the extracted pronouns in intermediate chain positions. This constraint is best understood as a processing–optimizing strategy. Doubling is impossible in structures like (2), where the lower clause is introduced by the complementizer *dass*. *Dass* is incompatible with a relative pronoun in its [Spec, CP], so this structure forms an island for movement of the relative pronoun and can only be rescued by a resumptive pronoun structure.

An analysis along these lines explains why doubling is found extensively in dialect systems, though much less so in standard languages. In standard languages, normative pressure to avoid semantically 'superfluous' elements is much higher (see also Weiß 2002 for a similar normative pressure eliminating negative concord structures from standard languages). In addition, normative principles modeling standard languages are often inspired by written usage, where concerns for processability are probably much lower. Dialects, on the other hand, are mostly (sometimes exclusively) oral systems. Since processing a complex sentence is arguably more difficult in oral than in written parsing we expect a predominance of structures facilitating processing in purely oral systems. This would mean that while the pressure of standardization might work against doubling in the standard languages, no such pressure will occur in orally used dialects (but see Fanselow and Mahajan 2000 for doubling structures in Standard German).

2. DATA

The doubling constructions described in this section can be observed in the German dialect of Meran/Merano, Provinz Bozen/provincia di Bolzano, Italy. The Tyrolean dialect of Meran is a Southern Bavarian variety and is currently spoken by approximately 20,000 people in the city of Meran and surrounding areas. Data is based mostly on my own native judgments with occasional verifications with friends and family members. Extending the pool of informants has proved difficult, due to a sociolinguistic situation which leads speakers to maintain either that 'all structures are possible in the dialect, which is not really a language, after all', or to claim generally that 'I would never say things like that'. There are no grammars of the dialect which treat syntax (or even other synchronic aspects of the language) in any detail.

Doubling structures are found under long extraction both in embedded relatives and interrogative clauses, with different characteristics. In Sections 2.1 and 2.2, I will present each clause type in turn. In Section 2.3 the general properties of the doubling structure and the resumptive pronoun structure will be discussed. I will show that doubling and resumption are both sensitive to the heaviness of the extracted element and that in both structures movement takes place.

2.1. Long Extraction of Relative Pronouns

Doubling takes place in relatives under long movement, i.e., whenever a relative pronoun is extracted from a relative clause separated by at least one subordinate clause from the relative head DP, as in example (1a.) above. The structure is insensitive to variation of gender, animacy and definiteness of the head noun. Compare the definite, neuter inanimate head noun of example (1) with the indefinite masculine/feminine head in (3):

(3) A Monn/ a Frau hot ongruafn, $\underline{\text{den}}_i$/ $\underline{\text{de}}_i$ *wos* i
a man/ a woman has called RP C-rel I
glaap, $\underline{\text{den}}_i$/ $\underline{\text{de}}_i$ *wos* die M. t_i kennt.
think RP C-rel the M. knows
A man/a woman has called whom I think Maria knows.

Doubling affects two elements of the structure. On the one hand, as we can see in the above example, the relative pronoun *den*/*de* is repeated in the intermediate [Spec, CP] position embedded under the verb *glaabn* 'think', on the other, the relative complementizer *wos* is repeated in the intermediate C position. To distinguish the two phenomena I will call the former 'doubling' and the latter 'movement-sensitivity of the complementizer'. Discussion in the following sections will mostly concentrate on doubling of the relative (or wh-) pronoun, but the phenomenon of movement-sensitive complementizers itself merits interest. It was first described by McCloskey (1990) for Irish, where, under long movement of relative pronouns, intermediate complementizers assume the form of a relative complementizer, thus proving that cyclic movement has taken place since intermediate traces have conditioned the intermediate complementizers to assume a certain form which is clearly not selected by the intermediate embedding verb. We find the same phenomenon in Tyrolean; although verbs like *glaabn*, 'think', select, if any, the declarative complementizer *dass* (cf. discussion later), under long extraction of relative pronouns as in the example above we can find the complementizer *wos* in intermediate C positions. *Wos* is a complementizer which, under short movement, appears only in relatives and comparatives (Alber 1994). In structures where long movement is involved we find *wos* again only when a relative pronoun is extracted. This means that in these structures the complementizer is not simply sensitive to whether movement has taken place or not, but to which type of movement has taken place; it signals the passage of a relative pronoun through its specifier position (compare long movement of relative pronouns with long movement of interrogatives described in the next section). It does not matter, in this respect, whether intermediate specifiers headed by *wos* are occupied by a doubled relative pronoun or a trace. In fact, either *wos* or the relative pronoun can optionally be omitted, though

omission of both leads to ungrammaticality:

(4) Impossibility of omitting both extracted pronoun and relative complementizer *wos*

a. I kenn es Haus, *(wos) du glapsch, t_i *(wos) die
I know the house C-rel you think C-rel the
Maria t_i gekaaft hot.
Maria bought has
I know the house, which you think Maria bought.

b. I kenn es Haus, *(des$_i$) du glapsch, *(des$_i$) die
I know the house RP you think RP the
Maria t_i gekaaft hot.
Maria bought has
I know the house, which you think Maria bought.

c. I kenn es Haus, *(des$_i$) du glapsch, t_i *(wos) die
I know the house RP you think C-rel the
Maria t_i gekaaft hot.
Maria bought has
I know the house, which you think Maria bought.

Omission of the relative pronoun is somewhat marked when there is a case mismatch between the head of the relative clause and the omitted relative pronoun (see Bayer 1984 for a similar pattern in other Bavarian varieties).

The possibility of a doubling structure in relative clauses depends on the type of verb selecting the subordinate clause out of which the relative pronoun is extracted, i.e., whether the selecting verb belongs to the category of so called bridge verbs or not. In this variety of Tyrolean, as well as in Standard German, bridge verbs such as *glaabn* 'believe, think', *denkn* 'think', *sogn* 'say', *hoffn* 'hope', are characterized by the fact that they can select for either embedded Verb-second clauses or verb final clauses introduced by *dass:*

(5) a. I glaap, er kimp bold.
I think he comes soon

b. I glaap, dass er bold kimp.
I think that he soon comes
I think that he will come soon.

Non-bridge verbs like *megn* 'want' or *verschtian* 'understand' can select only for a *dass*-clause:

(6) a. *I mechet, er kimp bold.
I want he comes soon

b. I mechet, dass er bold kimp.
I want that he soon comes
I want him to come soon.

I interpret the difference between the two verb types in the following way: bridge verbs can either select for the complementizer *dass* or for no specific complementizer at all. In the latter case the verb is free to move to C. Non-bridge verbs always select for the complementizer *dass*.

The two selection options of bridge verbs are reflected in the two options that arise under long extraction of relative pronouns across this type of verb. When the subordinate clause out of which the relative pronoun is extracted is introduced by a bridge verb both a doubling structure and a resumptive pronoun structure are possible:[3]

(7) Extraction across subordinates introduced by a bridge verb:

a. Doubling strategy and relative C *wos*
I kenn es Haus, $\underline{des}_i$ *wos* du glapsch, $\underline{des}_i$ *wos*
I know the house RP C-rel you think RP C-rel
die M. t_i gekaaft hot.
the M. bought has
I know the house, which you think Maria bought.

b. Resumptive pronoun strategy in the presence of the complementizer *dass*[4]
I kenn es Haus, $\underline{des}_i$ *wos* du glapsch, $\underline{t}_i$ *dass*
I know the house RP C-rel you think C
die M. $\underline{'s}_i$ gekaaft hot.
the M. it bought has
I know the house, which you think Maria bought.

If, on the other hand, the subordinate clause is introduced by a non-bridge verb, only the resumptive pronoun strategy can be chosen:

(8) Extraction across subordinates introduced by a non-bridge verb:

a. Doubling strategy and relative C *wos*: not possible
*I kenn es Haus, $\underline{des}_i$ *wos* du mechesch,
I know the house RP C-rel you want
$\underline{des}_i$ *wos* die M. t_i kaaft.
RP_i C-rel the M. buys

[3]In some sense, this pattern is similar to that of doubling structures in interrogatives in Standard German, where doubling is possible only with bridge verbs (Fanselow and Mahajan 2000; cf. examples and discussion below). Standard German, however, lacks the possibility of a resumptive pronoun structure with non-bridge verbs or bridge verbs selecting *dass*.

[4]It seems to me that neither the resumptive pronoun structures in (7b.) nor those in (8b.) exhibit the typical 'repair flavor' associated with so-called 'intrusive' pronouns (Chao and Sells 1983, Sells 1984). One speaker I have questioned actually prefers (7b.) over (7a.). See Section 2.5 for the reasons to assume that movement is involved in the resumptive pronoun structure.

b. Resumptive pronoun strategy in the presence of the complementizer *dass*
I kenn es Haus, des$_i$ *wos* du mechesch, t$_i$ *dass*
I know the house RP C-rel you want C
die M. 's$_i$ kaaft.
the M. it buys
I know the house, which you would want Maria to buy.

Typologically, Tyrolean appears to be a rare case, as far as the distribution of resumptive pronouns is concerned. In fact, in most languages, resumptive pronouns cannot co-occur with an overt antecedent (Boeckx 2003, Salzmann 2006), while in Tyrolean they are compatible with an overt relative pronoun (and an overt wh-element, when extraction out of islands takes place, see Section 2.3). It is interesting in this respect that geographically close neighbors to Tyrolean, the romance varieties of Ladin seem to allow for the same pattern, even in short relatives (Gasser 2000):

(9) l pê che le boteghier, a chël$_i$ *che* Michil ti$_i$ é de
It seems that the vendor to RP C Michil him is of
debit, manac'es da le ploré.
debt threatens to him denounce
It seems that the vendor, with whom Michil is in debt, threatens to take legal steps against him.

The possible strategies of long extraction in Tyrolean relatives can be summarized as follows:[5]

(10)	DP, RP$_i$	*wos* ..... glaapsch, [RP$_i$	*wos*... t$_i$ ...]	bridgeV + unselected C
	DP, RP$_i$	*wos* ..... glaapsch, [t$_i$	*dass*... RSP$_i$...]	bridgeV + dass
	DP, RP$_i$	*wos* .... mechesch, [t$_i$	*dass*... RSP$_i$ ...]	non-bridgeV + dass

Long extraction of relative pronouns with doubling is possible only in the presence of a bridge verb. We can assume that in this case the bridge verb does not select for any particular C, thus 'freeing' the CP region for the presence of the doubling pronoun and the relative complementizer *wos*. If, however, the bridge verb selects the complementizer *dass*, the doubling structure is no longer possible and a resumptive pronoun strategy is chosen. Non-bridge verbs always select for *dass*, hence doubling is never possible and the resumptive pronoun

[5]There is one more possibility to construct long distance relatives, namely *wo*-relativization involving a resumptive pronoun. This structure resembles closely that described for Zürich German by van Riemsdijk (2003, to appear) and Salzmann (2006) and for Standard German by Salzmann (2006, p. 407). Since the properties of this construction seem to be the same as those described for Standard German (e.g. occurrence only in long distance relatives), I assume that an analysis in terms of prolepsis, as proposed by Salzmann, is possible.

structure remains the only possible option under long extraction (see the discussion in Section 4).

2.2. Long Extraction of Interrogative Pronouns

In long extraction of interrogative pronouns doubling is the only possible strategy both with bridge verbs and with non-bridge verbs; the resumptive pronoun structure is excluded in both cases:[6]

(11) Doubling strategy both with bridge verbs and non-bridge verbs

Wos		glapsch/	mechesch	du,	wen$_i$	*dass*	die
scope marker		think/	want	you	whom	C	the
Maria	t_i	onruaft?					
Maria		calls					

Whom do you think Maria called? / Whom do you want Maria to call?

(12) Resumptive pronoun strategy impossible both with bridge verbs and non-bridge verbs:

*Wos/wen$_i$		glapsch/	meschesch	du,	t_i	*dass*	die
scope marker/whom		think/	want	you		C	the
Maria	'n$_i$	onruaft?					
Maria	him	calls					

In (11) above, the head of the extraction chain is realized by *wos*, which, in this case, is a scope marker specific to interrogatives, similar to the scope marker *was* used in interrogatives in Standard German. The structure with a scope marker is preferred, though long extraction of the wh-pronoun is marginally possible:

(13) Extraction without scope marker:

?Wen		glapsch/	mechesch	du,	wen$_i$	*dass*	die
scope marker		think	want	you	whom	C	the
Maria	t_i	onruaft?					
Maria		calls					

Whom do you think Maria called? / Whom do you want Maria to call?

We can see that (11) is indeed a case of doubling if we extract across one more intermediate subordinate, where the wh-pronoun is repeated at least in the

[6] Differently from varieties closer to Standard German (cf. McDaniel 1989, Fanselow and Mahajan 2000) in Tyrolean interrogatives both long wh-extraction and the scope marking construction are possible across non-bridge verbs.

lower embedded clauses:

(14) Extraction across two subordinates:
Wos glapsch du, $\underline{\text{wen}}_i$ *dass* der Hons sog, $\underline{\text{wen}}_i$ *dass*
sc.m. think you whom C the Hons says whom C
die Maria t_i onruafn soll?
the Maria call should
Whom do you think Hons will say that Maria should call?',

As in relatives, in any CP projection of the sentence either the extracted wh-pronoun or the complementizer *dass*, but not both, can optionally be omitted. Moreover, the wh-pronoun has to be realized at least once per extraction chain.

With respect to the doubling strategy, long extraction of wh-pronouns can thus be summarized as follows:

(15) Scope m. .... glaapsch, $\underline{\text{wh}}_i$ *dass* ... $\underline{\text{wh}}_i$ *dass* ... t_i ... bridge verb
Scope m. .... mechesch, $\underline{\text{wh}}_i$ *dass* … $\underline{\text{wh}}_i$ *dass* ... t_i ... non-bridge verb

To sum up, modulo optionality of the wh-pronoun, doubling occurs in long extraction of wh-pronouns irrespective of the type of embedding verb, while the resumptive pronoun structure is excluded in either case.

I will propose in the analysis below that the possibility of wh-pronouns to cross an intermediate *dass*-clause is due to the fact that *dass* is the default complementizer for both embedded declaratives and embedded interrogatives, as the following examples show:

(16) a. I woas, *dass* er in Hons gsechn hot.
I know that he the Hons seen has
I know that he has seen Hons.

b. I woas net, $\underline{\text{wen}}_i$ *(dass)* er t_i gsechn hot.
I know not whom that he seen has
I don't know whom he has seen.

2.3. Properties of Doubling and Resumptive Pronoun Structures

Both doubling structures and resumptive pronoun structures seem to be sensitive to heaviness of the extracted element. According to the discussion so far, doubling should be possible in the following relatives, while it is actually rather marginal. The examples are ordered in a hierarchy of increasing clumsiness,

with the last two structures boardering on unacceptability:

(17) Doubling in long extraction of complex XPs: ordered by decreasing acceptability

a. ??Wos/[Prum]$_i$ glapsch du, [prum]$_i$ *dass* dr Hons t_i net
sc.m./[why] think you [why] C the Hons not
kemmen isch?
come is
Why do you think Hons did not come?

b. ??Des isch die Fraindin, [mit der]$_i$ *wos* sie glap,
this is the friend with RP C she thinks
[mit der]$_i$ *wos* die M. t_i spieln tat.
with RP C the M. play would
This is the friend with which she thinks that Maria would play.

c. ??Des isch 's Madl, [wegn den]$_i$ *wos* sie glap,
this is the girl because RP C she thinks,
[wegn den]$_i$ *wos* die M. t_i net kimp.
because RP C the M. not comes
This is the girl because of which she thinks that Maria doesn't come.

d. ?*Wos/[Wellawegn]$_i$ glapsch du, [wellawegn]$_i$ *dass* dr Hons t_i
sc.m./why think you why C the Hons
net kemmen isch?
not come is
Why do you think Hons did not come?

e. ?*Des isch der Pua, [in Votr von den]$_i$ *wos* i
this is the boy the father of RP C I
glaap, [in Votr von den]$_i$ *wos* i t_i gsechn hon.
think the father of RP C I seen have
This is the boy the father of which I think I have seen.

It is not entirely clear what kind of heaviness is at play here. I have the impression that simple phonetic heaviness does play a role, since extracted phrases which are monosyllabic seem to allow doubling more readily than polysyllabic phrases (compare especially examples a. and d. above, where d. is clearly worse than a., although the meaning and, arguably, the syntactic category of the extracted element are the same). The contrast phrases vs. heads, on the other hand, does not appear to be crucial, since e.g., example b., containing a full PP sounds better than example d. In this respect, Tyrolean differs from the doubling structures described in Fanselow and Mahajan (2000) and Nunes (2004), where copying seems possible with elements interpretable as heads and excluded with phrases.

Resumptive pronoun structures are marked as well, when the extracted element is heavy. Sometimes this is due to the fact that no resumptive pronoun is available for the extracted element, but even for structures containing complex

DPs, the resumptive structure is only one of two possibilities, the other one being 'normal' extraction with gaps:

(18) Long extraction of complex DP: resumptive structure and extraction without doubling

a. Des isch der Pua, [in Votr von den]$_i$ *wos* i
this is the boy the father of RP C I
glaap, t_i *dass* i 'n gsechn hon.
think C I him seen have
This is the boy the father of which I think I have seen.

b. Des isch der Pua, [in Votr von den]$_i$ *wos* i glaap, t_i
this is the boy the father of RP C I think
dass i t_i gsechn hon.
C I seen have
This is the boy the father of which I think I have seen.

When PPs undergo long movement in a structure where we would expect resumption, we can observe two interesting facts. First, the extracted PP can be resumed by a pronominal adverb (if the preposition belongs to the set of prepositions allowing for pronominal adverbs):[7]

(19) Long extraction of heavy XPs: resumptive structures with pronominal adverb

Des isch die Fraindin, [mit der]$_i$ *wos* sie glap, t_i *dass*
this is the friend with RP C she thinks C
die M. domit$_i$ spieln tat.
the M. do+P play would
This is the friend with which she thinks that Maria would play.

Note that resumption is possible in this case although pronominal adverbs normally can refer only to inanimate nouns.

Second, the extracted PP can also be resumed by a PP containing a copy of the preposition and a resumptive pronoun:

(20) Long extraction of heavy XPs: resumptive structures with pronominal adverb

Des isch die Fraindin, [mit der]$_i$ *wos* sie glap, t_i *dass*
this is the friend with RP C she thinks C
die M. [mit ihr]$_i$ spieln tat.
the M. with RSP play would
This is the friend with which she thinks that Maria would play.

[7]The following two examples, as the previous ones, maintain the marked flavor that accompanies structures where heavy elements are repeated. They share with the example in (18) the possibility to occur without a resumptive element, i.e., forming a chain of the type [mit der]$_i$ ... t_i *dass* ... t_i.

This last example shows that at least in Tyrolean resumptive structures cannot be analyzed as stranding part of the extracted element (Boeckx 2003), considering that the whole PP is repeated. Rather, the PP in base position must be considered to be a spell-out of the copy left behind by the extracted pronoun.

Summarizing, we can say that repetition of a heavy extracted element, be it under doubling or resumption seems to be marked. The preferred strategy in these cases appears to be 'normal' extraction, where intermediate chain links as well as the extraction site are represented by traces. For reasons of space I cannot undertake a detailed analysis of these structures here. What these examples show, though, is that heaviness of the extracted constitutent is able to block both the doubling structure and the resumptive pronoun structure and thus extraction creating a chain with traces remains then the only possibility.

We will now turn to examine both the doubling and the resumptive pronoun structure with respect to their sensitivity to movement effects. It will be shown that the doubling structure is sensitive to islands and shows reconstruction effects. The resumptive pronoun structure does not obey locality constraints but still exhibits reconstruction effects. Taking reconstruction to be the crucial diagnostic for movement I will interpret both structures as involving movement.[8]

Doubling structures are sensitive to islands, as the following examples show:

(21) No extraction possible out of islands in doubling structures

a. Adjunct island
*es Haus, des$_i$ *wos* i glaab, des$_i$ *wos* si froa sain
the house RP C I think RP C they glad are
nochdem si t_i gekaaft hom.
after they bought have

b. Complex DP-island: no extraction possible: relatives
*es Haus, des$_i$ *wos* a Totsoch isch, des$_i$ *wos* die
the house RP C a fact is RP C the
Maria t_i gsechn hot.
Maria seen has

c. Complex DP-island: no extraction possible: interrogatives
*Wos$_i$ hot dr Hons gsog, wen$_i$ *dass* a Totsoch
sc.m. has the Hons said whom C a fact
isch, (wen$_i$) *dass* die M. t_i gsechn hot.
is whom C the M. seen has

Moreover, doubled elements undergo reconstruction. In relatives, principle A effects and variable binding can be observed and idioms can be reconstructed

[8]Cf. among others Boeckx (2003) and Salzmann (2006) for proposals that resumptive pronoun structures can involve movement.

into their base position:[9]

(22) Reconstruction in doubling structures: relatives

a. principle A effects: [dr Petr]$_2$=sich$_i$
[s' Gred ibr sich$_2$]$_1$ des$_1$ *wos* die A. glap, des$_1$
the rumor about himself RP C the A. thinks RP
wos [dr Petr]$_2$ t$_1$ gheart hot.
C the Peter heard has
The rumor about himself which Anna thinks that Peter has heard.

b. variable binding:
[s' Gred ibr seine$_2$ Fraind]$_1$, des$_1$ *wos* die A.
the rumor about his friends RP C the A.
glap, des$_1$ *wos* jeder Mensch$_2$ t$_1$ oschtraitn tat.
thinks RP C every man deny would
The rumor about his friends, which Anna thinks that everybody would deny.

c. reconstruction of idiom:
die Iberzaigung$_i$, de$_i$ *wos* die Maria glap, de$_i$ *wos*
the opinion RP C the Maria thinks RP C
der Hons t$_i$ zum Ausdruck bringen werd.
the Hons to expression bring will
The opinion that Maria thinks that Hons will express.

Resumptive pronoun structures, on the other hand, are not sensitive to islands, as the following examples show, where a relative pronoun is extracted from an adjunct island and a complex DP:

(23) No island effects in resumptive pronoun structures: relatives

a. Adjunct islands:
es Haus, des$_i$ *wos* i glaab des$_i$ *wos* si froa
the house RP C I think RP C they happy
sein, t$_i$ nochdem si 's$_i$ gekaft hom.
are after they it bought have

b. Complex DP island:
es Haus, des$_i$ *wos* a Totsoch isch, t$_i$ *dass* die
the house RP C a fact is C the
Maria 's$_i$ gsechn hot.
Maria it seen has

[9]We cannot test reconstruction in doubling structures involving interrogatives since such an example would require extraction of a heavy XP (like [welches Gred ibr sich]) and the doubling of heavy XPs is at best marginal (see above). Principle B and C effects are absent in doubling relatives, as is the case in Standard German for relative structures (principle C) and regular A-bar movement in general (for principle B) (see Salzmann 2006).

In interrogative structures, which usually do not involve resumptive pronouns, a resumptive pronoun can be used to rescue a structure where the wh-element is extracted out of an island:[10]

(24) No island effects in resumptive pronoun structures: interrogatives

a. Adjunct islands:
[Welches Haus]$_i$ glapsch du, t_i *dass* i mi frain
which house think you C I myself enjoy
tat, t_i wenn der Peter' s$_i$ kaafn tat.
would if the Peter it buy would

b. Complex DP-island:
[Welches Haus]$_i$ denksch du t_i *dass* a Schkandal
which house think you a scandal
isch, t_i *dass* er' s$_i$ so tuier verkaaft hot.
is C he it$_i$ so expensively sold has

Although structures containing a resumptive pronoun do not seem to obey locality restrictions, they show reconstruction effects. Thus we see principle A effects in relatives where extraction occurs across *dass* triggering a resumptive pronoun structure:

(25) Reconstruction in resumptive pronoun structures: extraction across *dass* in relatives

a. principle A effects: [dr Petr]$_2$=sich$_i$
[s' Gred ibr sich$_2$]$_1$ des$_1$ *wos* die Anna mechet, t_1
the rumor about himself RP C the Anna wants
dass [dr Petr]$_2$'s$_1$ net heart.
C the Peter it not hears
The rumor about himself which Anna would want Peter not to hear.

b. variable binding:
[s' Gred ibr seine$_2$ Fraind]$_1$, des$_1$ *wos* die A.
the rumor about his friends RP C the A.
mechet, t_1 *dass* jeder Mensch$_2$ es$_1$ oschtraitet.
wants C every man it denies
The rumor about his friends, which Anna would want everybody to deny.

c. reconstruction of idiom
[die Iberzaigung]$_i$, de$_i$ *wos* die Maria mechet, **t$_1$** *dass*
the opinion RP C the Maria wants C
dr Hans sie$_i$ zum Ausdruck bringt.
the Hans it to expression brings
This is the opinion that Maria would want Hans to express.

[10]The resumptive pronouns appearing in interrogatives where extraction crosses an island do not sound any more intrusive to me than the resumptive pronouns in the relatives discussed so far.

Reconstruction is not possible only in resumptive pronoun structures with embedded *dass*, but even when the resumptive pronoun is located inside an island (see Salzmann 2006 for a detailed discussion of reconstruction into islands, a phenomenon claimed in the literature not to exist, cf. McCloskey 2006 for an overview):

(26) Reconstruction in resumptive pronoun structures: reconstruction into islands

a. adjunct island: principle A effects: [dr Petr]$_2$=sich$_i$ (relatives)
[s' Gred ibr sich$_2$]$_1$ des$_1$ *wos* die Anna froah
the rumor about himself RP C the Anna glad
isch, t$_1$ nochdem [dr Peter]$_2$'s$_1$ ogschtritn hot.
is after the Peter it denied has

b. adjunct island: principle A effects: [dr Petr]$_2$=sich$_i$ (interrogatives)
[Welches Gred ibr sich$_2$]$_1$ glapsch du, t$_1$ *dass*
which rumor about himself think you C
i mi frain tat, t$_1$ *wenn* [dr Petr]$_2$'s$_1$
I myself enjoy would if the Peter it
oschtraitn tat?
deny would

c. complex DP island: principle A effects: [dr Petr]$_2$=sich$_i$ (relatives)
[Es Gred ibr sich$_2$]$_1$ des$_1$ *wos* a Totsoch isch, t$_1$
the rumor about himself RP C a fact is
dass [dr Petr]$_2$'s$_1$ ogschtrittn hot.
C the Peter it denied has

d. complex DP island: principle A effects: [dr Petr]$_2$=sich$_i$ (interrogatives)
[Welches Gred ibr sich$_2$]$_1$ glapsch du, t$_1$ *dass*
which rumor about himself think you C
a Schkandal isch, t$_1$ *dass* [dr Petr]$_2$'s$_1$ net oschtraitet?
a scandal is C the Peter it not denies

Finally, we can demostrate that reconstruction is possible in resumptive pronoun structures even into intermediate positions (Salzmann 2006):

(27) Reconstruction in resumptive pronoun structures: reconstruction into intermediate positions:

a. extraction across *dass* in relatives: principle A effects:
[dr Petr]$_2$=sich$_i$
[Es Gred ibr sich$_2$]$_1$ des$_1$ *wos* [dr Petr]$_2$
the rumor about himself RP C the Peter
mechet, t$_1$ *dass* die Anna 's$_1$ net heart.
wants C the Anna it not hears
The rumor about himself which Peter would want Anna not to hear.

b. adjunct island: principle A effects: [dr Petr]$_2$=sich$_i$

[es	Gred	ibr	sich$_2$]$_1$	des$_1$	*wos*	[dr	Petr]$_2$
the	rumor	about	himself	RP$_1$	C	the	Peter
froah	isch, t$_2$	*wenn*	die Anna	's$_1$	net	heart.	
glad	is	if	the Anna	it	not	hears	

Summarizing, we see that both doubling structures and resumptive pronoun structures in Tyrolean display movement properties. Doubling structures are sensitive to islands and exhibit reconstruction effects. Resumptive pronoun structures are not sensitive to islands, but still show reconstruction effects. Reconstruction in resumptive pronoun structures can be observed when relative pronouns cross an intermediate *dass*-clause, but also when the resumptive pronoun is located in an adjunct island or a complex DP island. Finally, we can construct cases where the extracted element is reconstructed into an intermediate position of the movement chain. I conclude from these facts that:

i. movement takes place both in doubling structures and in resumptive pronoun structures.
ii. resumptive pronoun structures can void islands while doubling structures cannot.

With respect to Tyrolean long A-bar movement as described in Section 2, we can thus assume that we are dealing with the following structures:

(28) a. Relatives:
Doubling: RP$_i$ *wos* … RP$_i$ *wos* … t$_i$
Resumptive pronoun structure: RP$_i$ *wos* … t$_i$ *dass* … RSP$_i$

b. Interrogatives:
Doubling: wh$_i$ … wh$_i$ *dass* … t$_i$

3. PREVIOUS ANALYSES OF DOUBLING STRUCTURES

Phenomena which, under long A-bar movement, involve structures similar to the Tyrolean patterns, i.e., doubling of an extracted pronoun, movement-sensitive complementizers in intermediate positions and/or resumptive pronoun structures, are reported for other varieties of German (Fanselow and Mahajan 2000), Frisian (Hiemstra 1986, as reported in Nunes 2004), Afrikaans and Romani (cf. Nunes 2004, pp. 38ff. and references cited therein), São Tomense creole (Hagemeijer 2000, as cited in Adger and Ramchand 2005) and the Celtic languages (McCloskey 1990, 2002; Rouveret 2003; Adger and Ramchand 2005). Afrikaans, Frisian, Romani and the varieties of German described in Fanselow and Mahajan (2000) share with Tyrolean the property that the extracted element itself is doubled in intermediate positions; the other languages cited above are similar to Tyrolean in that intermediate complementizers are sensitive to

movement in the sense that they assume a specific form when a relative pronoun or wh-element undergo long extraction and pass through their specifier position, but the extracted element itself is not doubled. At least from the data cited in the literature it would seem that only Frisian joins Tyrolean in allowing both the doubled relative pronoun or wh-element and an overt complementizer to be present. The languages that have been best studied with respect to the phenomenon of movement-sensitive complementizers are the Celtic languages. Tyrolean differs from them not only in that in an intermediate CP position both a doubled pronoun and a complementizer of the same type[11] can be present, but also with respect to the distribution of doubling of extracted pronouns and movement-sensitive complementizers, on the one hand, and resumptive pronoun structures on the other. In Irish, optionality between movement-sensitive complementizer structures and resumptive pronoun structures can be observed in most contexts (McCloskey 1990, 2002). Tyrolean, on the other hand, seems to be more similar to Scottish Gaelic, where resumptive pronoun structures occur in island-contexts and movement-sensitive complementizer structures otherwise (Adger and Ramchand 2005). It shares with Welsh the characteristic that resumptive pronouns are limited to specific contexts, but in Welsh resumptive pronoun structures are in complementary distribution with extraction patterns without doubling or agreement of C (Rouveret 2003).

In this section I will review the analyses proposed in Fanselow and Mahajan (2000) and Nunes (2004) for the doubling phenomenon and discuss the problems they encounter when applied to the Tyrolean data.

Fanselow and Mahajan (2000), basing their analysis on data from Höhle (1990), observe for certain varieties of German a doubling construction arising under long extraction of wh-pronouns:

(29) Wen$_i$ denkst du, wen$_i$ sie meint wen$_i$ Harald t_i liebt.
who think you who she believes who Harald loves
Who do you think that she believes that Harald loves.

They propose that doubling of the wh-pronoun takes place as a strategy to fill an intermediate CP position in case C is not occupied by a complementizer. This predicts a complementary distribution of the doubling structure and the structure one obtains when the wh-pronoun is extracted across a *dass*-clause. The prediction seems to be borne out for the varieties described by Fanselow and Mahajan, but the authors themselves observe that there are Southern dialects of German where both the wh-pronoun and a complementizer are present. For these varieties they propose that the doubled wh-pronoun and the complementizer are located in two distinct CPs, the higher one containing the doubled element, the lower one the overt complementizer.

[11]That is a complementizer that 'agrees' with the element in its specifier position in the sense of Rizzi (1990, p. 51).

There are two problems with this analysis in light of the Tyrolean data discussed earlier. First, if we assume that Tyrolean has two CP layers, one to host the extracted interrogative pronoun and one to host the complementizer *dass* and if we further assume that a doubled wh-pronoun is inserted just in case a CP risks to remain empty, then it is not clear why in Tyrolean interrogatives doubling of the wh-pronoun is optional. If *dass* occupies a lower CP, doubling should be obligatory, since, otherwise, the higher CP would remain empty. Worse, as mentioned in Section 2.2, the doubled element is optionally absent only if the complementizer *dass* is present. This means that there is a connection between the two elements which is not expected if they were located in different CPs. Finally, if the explanation given in Fanselow and Mahajan for doubling in Southern German varieties was on the right track, we would expect it to hold also for doubling structures in relatives. But there we see that the complementizer *wos* is in an 'agreement' relation (in the sense of Rizzi 1990, p. 51) with the extracted element, again something not expected if we assume that the relative pronoun and the relative complementizer *wos* are in different CPs.

Fanselow and Mahajan (2000), observing that in the varieties they describe doubling is possible only if the extracted element is not larger than a morpho-phonological word, propose an analysis in terms of head-movement and cliticization to C of the doubled element which is taken up by Nunes (2004).

Nunes discusses the problem, arising under the copy-theory of movement, of how to explain the fact that intermediate traces of a chain are not phonetically overt in most languages. He proposes that deletion of intermediate traces is necessary to guarantee a successful linearization operation under Kayne's (1994) Linear Correspondence Axiom (LCA). If traces were not deleted, the asymmetric c-command relation between two phonetically realized copies of an extracted element ($copy_1$ c-commanding $copy_2$) would imply that $copy_1$ precedes $copy_2$, i.e., the copied element would precede itself. Thus, non-deletion would lead to conflicting linearization requirements, which would lead to a crash. Deletion of copies is a way to ensure the derivation converges at PF. As a result, all copies of extraction but one must be deleted. However, this means that it has to be explained how doubling structures are possible at all in some languages. Nunes claims that in languages where doubling structures do occur, doubling of intermediate positions is not possible when a full XP is extracted. He proposes that a doubling structure always involves movement of a head. In particular, the proposal is that successive cyclic movement of a wh-item, for example, may involve an intermediate movement step whereby the wh-pronoun moves as head and adjoins to C. There, the wh-copy and C undergo morphological fusion and become a single head. Since heads are atomic, their internal structure not being syntactically visible, the resulting chain does not create a problem for the LCA.

This explanation of the doubling phenomenon is not without problems. First, it is not clear whether the empirical facts are as clearcut as Nunes' analysis predicts them to be. As noted above, in Tyrolean the doubling of full XPs

is not completely excluded, but stylistically highly marked. Also in Afrikaans, doubling of an extracted PP seems to be possible (Nunes 2004, p. 38). Second, it might be that the crucial factor here is phonetic heaviness rather than XP vs. X^0 status, as discussed in Section 2.3. Third, differently from the doubling languages discussed in Nunes, in Tyrolean both a doubled pronoun and the agreeing complementizer *wos* can be present in an intermediate CP. No phonological cliticization, though, is visible between the two, to suggest a process of morphological fusion. As a matter of fact, cliticization of pronouns to the complementizer takes place in Southern German varieties when the pronoun *follows* the complementizer, not when it precedes it and cliticization only involves personal pronouns, never wh-pronouns or relative pronouns. One final piece of data that speaks against cliticization of heads in this context is that interrogative pronouns can be emphatically stressed in doubling structures such as (14).

4. ANALYSIS

Wh-movement has usually been modeled in optimality theory as a constraint requiring wh-fronting (OP-SPEC, see Grimshaw 1997) dominating a constraint against movement (STAY in Grimshaw 1997; see also Legendre et al. 1995 and Legendre et al. 1998).[12] I will follow Grimshaw in assuming that there is indeed a constraint requiring the extracted pronoun to occupy [Spec, CP]:

(30) OP-SPEC: syntactic operators must be in specifier position (Grimshaw 1997)

Regarding the dominated constraint disfavoring movement, however, I will follow a new proposal put forward in Grimshaw (2006): the constraints disfavoring movement are considered not to be movement-specific constraints like STAY but constraints belonging to the universal set of faithfulness constraints, whose influence can be observed in many linguistic processes different from movement. Thus, for example the UNIQUE constraint proposed by Grimshaw (2006) militates against movement chains, but is also active in phonology, where it works against the process of diphtongization. The basic idea is very simple: in movement chains, there are several output elements (traces or copies) corresponding to the same input element and this multiple correspondence violates a faithfulness constraint requiring every input element to be realized by a single output element:

(31) UNIQUE: no element of the input has multiple correspondents in the output

(Grimshaw 2006, cf. INTEGRITY in McCarthy and Prince 1995)

[12]But see Vogel (to appear) for a different proposal with respect to the constraints determining the typology of wh-dependencies in OT.

Elaborating on Grimshaw's proposal, I will suggest that besides the general constraint UNIQUE there is a more specific constraint of the same type that disfavors multiple *phonetically realized* (i.e., 'visible') correspondents in the output:[13]

(32) $\text{UNIQUE}_{\text{VIS.}}$: no element of the input has multiple phonetically realized correspondents in the output.

There is one more faithfulness constraint which will play a role in the following analysis, the constraint IDENT, which requires every element of the output to be identical in its features to its correspondent in the input (Grimshaw 2006):

(33) IDENT: every element in the output is identical in feature F to its input correspondent

(where F = phi-features, ±wh).

The following table shows how these faithfulness constraints evaluate the different types of conceivable movement chains and the resumptive pronoun structures:

(34) Evaluation of movement chains and resumptive pronoun structures by faithfulness constraints (*wh* is short here for wh-pronouns as well as relative pronouns):

Input: [wh-pronoun]	Strategies	UNIQUE	$\text{UNIQUE}_{\text{VIS}}$	IDENT
(a) $wh_i \ldots t_i \ldots t_i$	extraction with traces	**	✓	✓
(b) $wh_i \ldots wh_i \ldots t_i$	doubling	**	*	✓
(c) $wh_i \ldots wh_i \ldots wh_i$	doubling all the way down	**	**	✓
(d) $wh_i \ldots t_i \ldots RSP_i$	res. pronoun structure	**	*	*
(e) $wh_i \ldots wh_i \ldots RSP_i$	doubling and res. pronoun	**	**	*
(f) $wh_i \ldots t_i \ldots wh_i$	res. pronoun structure, pronoun = wh	**	*	✓

The structure in a. exemplifies the typical movement chain created by long extraction. This chain violates UNIQUE twice because an input wh-element has three output elements: the moved wh-pronoun and its two traces.[14] The doubling structure in b. violates UNIQUE as well, but differently from a. it also violates $\text{UNIQUE}_{\text{VIS}}$, since it has two phonetically realized correspondents of the

[13] $\text{UNIQUE}_{\text{VIS}}$ and UNIQUE stand in a special–general relationship (see Prince 1997–2001 for implications of such a relationship) and their interaction for the typology of A-bar movement has yet to be fully explored. Note that phonetic realization might play a role also for the constraint OP-SPEC, when structures with movement of an empty operator are considered. Note furthermore, that it is not completely clear how scope-marking constructions have to be analyzed, since the scope-marker in some sense is a visible instantiation of the wh-input, but at the same time is not a perfect copy of it.

[14] I am assuming that each extra correspondent of the input element triggers one UNIQUE violation.

input element. In c. we have a structure which I have called 'doubling all the way down' since not only intermediate traces, but also the extraction site of the pronoun are doubled. None of the doubling languages described in the literature exhibit a pattern of this type and it is doubtful whether it exists at all in natural language. We will see that the analysis proposed here correctly predicts such pervasive doubling not to exist. None of the structures in a.–c. violate the constraint IDENT since both wh-elements and their traces share the same features. Structure d. exemplifies the resumptive pronoun structure. UNIQUE, as before, is violated twice, once for the intermediate trace, once for the resumptive pronoun; $\text{UNIQUE}_{\text{VIS}}$ is violated once by the second visible copy of the input pronoun, the resumptive pronoun. This structure incurs in an additional violation of the constraint IDENT, since the resumptive pronoun lacks the wh-feature of the input element. The pattern in e. is a hybrid of the doubling structure and the resumptive pronoun structure and thus incurs in two violations of $\text{UNIQUE}_{\text{VIS}}$ and one violation of IDENT. For this structure as well it will be shown that the analysis predicts it to be universally banned and, indeed, it was not encountered in the data. In structure f., the resumptive pronoun is a wh-element. In the literature I have consulted resumptive pronouns seem always to be represented by personal pronouns, not by a copy of an extracted wh-element. The reasons for this restriction are not clear to me, but it is not possible that they have to do with faithfulness, since the structure in f., if anything, rates better with respect to the faithfulness constraints than structure d. I must leave discussion of this property of resumptive structures to further research and omit the structure in f. from the following analysis, assuming that it is banned on independent grounds.

Now that the stage for the analysis of A-bar movement is set, I will start with the analysis of the Tyrolean cases. I will assume that the default strategy for the formation of relatives and interrogatives in Tyrolean is extraction. Extraction of wh-elements is generated by the following constraint hierarchy involving the constraints discussed above:

(35) OP-SPEC >> UNIQUE, $\text{UNIQUE}_{\text{VIS}}$, IDENT

The dominant position of OP-SPEC guarantees that the wh-pronoun occupies the highest [Spec, CP]. Since this constraint is not violated in any of the cases to be discussed I will ignore it at a certain point, assuming that it is sufficiently highly ranked never to be violated. The interaction of the constraints is illustrated in Table 1, exemplifying the pattern of short extraction as in the example:

(36) Wen$_i$ hot er t_i gsechn?
who has he seen
Who did he see?

(37)

Table 1: Short extraction: The default pattern is movement.

	Strategies	OP-SPEC	UNIQUE	$\text{UNIQUE}_{\text{VIS}}$	IDENT
☞ (a) $\text{wh}_i \ldots t_i$	extraction		*		
(b) $\text{wh}_i \ldots \text{wh}_i$	doubl. all the way down		*	*!	
(c) $\text{wh}_i \ldots \text{RSP}_i$	resumptive structure		*	*!	*!
(d) .....wh	no movement	*!			

Candidate d., which does not exhibit movement, is excluded by OP-SPEC requiring the wh-element to occupy [Spec, CP]. All other candidates obey this top-ranked constraint and all of them violate UNIQUE because of their chain. However, they rate differently with respect to $\text{UNIQUE}_{\text{VIS}}$; only candidate a. does not violate this constraint. Candidate c. in addition violates IDENT. Note that from Table 1 it becomes clear that a constraint like $\text{UNIQUE}_{\text{VIS}}$ is crucial also for the analysis of regular short A-bar movement, since it distinguishes between candidate a. and b. Since 'doubling all the way down' is not the common structure for wh-extraction and, actually, might be universally excluded, it is important that we assume a constraint that militates against structure b. in favor of extraction structures with a trace, as in candidate a.

So far, doubling structures have played no role, but they become interesting when long distance movement is considered. I will assume that the constraint triggering doubling is functionally motivated. Structures created by long A′-bar movement are arguably structures which are difficult to process for the hearer, because of the long distance between the extracted element and its base position. Resumptive pronoun structures have often been claimed to facilitate processing, as their occurrence in islands and other types of complex structures indicates (cf. among others Kroch 1981; Prince 1990; Dickey 1996). I want to propose that, besides resumptive structures, doubling is one more possibility to facilitate the processing of complex structures created by long movement. What do resumptive pronoun structures and doubling structures have in common? Let us compare them schematically among themselves and with a 'regular' extraction chain with traces:

(38) a. Resumptive pronoun structure: $\text{wh}_i \ldots t_i \quad \ldots t_i \quad \ldots t_i \quad \ldots \text{RSP}_i$

b. Doubling structure: $\text{wh}_i \ldots \text{wh}_i \quad \ldots \text{wh}_i \quad \ldots \text{wh}_i \quad \ldots t_i$

c. 'Regular' extraction: $\text{wh}_i \ldots t_i \quad \ldots t_i \quad \ldots t_i \quad \ldots t_i$

In a. as well as in b., and contrary to c., parsing of the structure is favored because the chain is, in some sense, identified: in structure a. we see where it begins and, crucially, where it ends (the edges are identified), in b. we see its 'body', because of the phonetic realizations of the intermediate links. It could be that structures a. and b. do not favor processing in exactly the same

way, but for the purpose of this chapter I will consider them alike in that both are structures where parsing of long movement chains is facilitated, contrary to c. I will then define the constraint requiring optimization of processability as:

(39) IDENTIFY CHAIN (IC): a movement chain must be identified:
- either by making visible intermediate links of the extraction path
- or by making visible the edges of the chain (head and foot).

With respect to doubling structures, the IC can thus be fulfilled by making visible each intermediate step of the extraction chain. In this sense this approach is reminiscent of McCloskey's (1990) treatment of wh-movement in Irish, which he analyzes as structures making cyclic movement visible by intermediate agreeing complementizers.

If, as assumed here, doubling structures, are triggered by a hearer-oriented principle, it is not surprising that doubling structures should more often be found in dialects, rather than standard languages, considering that dialects are typically languages making use only of the oral register and may thus be more sensitive to hearer-oriented processing principles such as IC. In Standard languages, on the other hand, we can assume that the influence of the written system tends to filter out 'semantically redundant' structures of this type (see Weiß 2002 for a similar reasoning with respect to negative concord).

The hierarchy which permits doubling in a system where movement is the default strategy will thus be as follows.

(40) OP-SPEC >> IC >> UNIQUE, $\text{UNIQUE}_{\text{VIS}}$, IDENT

Assuming that doubling structures emerge under the pressure of a principle such as IC makes several predictions. First, it is predicted that the extraction site is never doubled, i.e., that intermediate doubling of pronouns and resumptive pronouns do not co-occur. There is no need to make the extraction site visible, since it is 'close enough' to the first occurrence of the doubled pronoun in the CP of the clause from which it was extracted. As far as I know, in all languages that exhibit doubling in intermediate CP positions this is indeed the case. Second, if all that matters is that the extraction chain is visible it is not important whether in the intermediate CP the relative pronoun, the movement-sensitive relative complementizer *wos* or both are visible. Indeed, as we have seen in the examples in (4), in relatives either the extracted pronoun or the relative complementizer *wos*, but not necessarily both, have to be present in intermediate CP positions. The two cases are not exactly the same (as pointed out by a reviewer) in terms of information which is made visible in intermediate chain positions. A doubled pronoun doubles the case features of the extracted pronoun and thus gives us some information about the theta-role

assigned to the extraction site. A movement-sensitive complementizer, on the other hand, conveys no information about the theta-role of the extracted element but, arguably, is still able to tell the hearer what type of extraction (e.g., relative pronoun extraction) is 'going on' in intermediate positions. Third, we predict that doubling will typically occur under A-bar-movement, since only A-bar-movement creates long distance chains which must resort to strategies facilitating processing.

Let us then consider the analysis of a doubling structure as the one arising under long extraction of a relative pronoun across a bridge verb:

(41) a. I kenn es Haus, $\underline{\text{des}}_i$ *wos* du glapsch, $\underline{\text{des}}_i$ *wos*
I know the house RP C-rel you think RP C-rel
die M. t_i gekaaft hot.
the M. bought has
I know the house, which you think Maria bought.

(42)

Table 2: Long extraction from relatives – bridge Verbs – no C selected.

	Strategies	IC	UNIQUE	$\text{UNIQUE}_{\text{VIS}}$	IDENT
☞ (a) RP_i ... RP_i ... t_i	doubling		**	*	
(b) RP_i ... t_i ... $RSP._i$	res. pronoun		**	*	*!
(c) RP_i ... RP_i ... $RSP._i$	res. pr. and doubling		**	**!	*
(d) RP_i ... t_i ... t_i	extraction, no doubling	*!	**		
(e) RP_i ... RP_i ... RP_i	doubling all the way down		**	**!	

The top-ranked constraint IC guarantees that candidate d. cannot win, since in this structure neither the body nor the edges of the chain are identified. All other candidates obey IC: candidate a., because it identifies the chain through phonetic realization of the intermediate links, candidate b., since the head and the foot of the chain are both visible (the latter through the realization of a resumptive pronoun) and candidates c. and e. by making visible both the body and the edges of the chain. Candidates c. and e., however, fail on $\text{UNIQUE}_{\text{VIS}}$; they have more visible chain links than would be necessary. Competition on the last constraint is won by candidate a., since, contrary to b., it does not have an IDENT violation.

From the above Table 2 it would seem that the candidate exhibiting the resumptive pronoun structure should never win, since it is inferior, in its violation profile, to candidate a. In fact, the present approach predicts that as long as only processing optimization is taken into account, a doubling structure will always win over a resumptive pronoun structure, since the latter collects an additional IDENT violation.

In the data discussed in the previous sections we saw that resumptive pronoun structures, on the other hand, do occur in certain contexts. They occur

in relatives, under long movement, when the extracted relative pronoun crosses an intermediate clause containing the complementizer *dass*. Let us recall the observed patterns, repeated here for convenience:

(43) a. Relatives:
Doubling: $\underline{RP_i}$ *wos* ... bridge verb, $\underline{RP_i}$ *wos* ... t_i
RSP structure: $\underline{RP_i}$ *wos* ... (non) bridge verb, t_i *dass* ... $\underline{RSP_i}$

b. Interrogatives:
Doubling: $\underline{wh_i}$ ... (non) bridge verb, $\underline{wh_i}$ *dass* ... t_i

Let us first discuss the structures of relatives, as in (43a.). The interpretation given in Section 2.1 to the apparent optionality of doubling structures and resumptive pronoun structures in long movement concerning relatives had to do with the two selection options of bridge verbs (cf. (5)). A bridge verb has the possibility to select a complement clause without selecting a particular C introducing it. In this case, I assume, the realization of C is conditioned by the element that transits through it; either the verb can move to C (as in declarative subordinate clauses), or, under long movement, C can be occupied by the relative complementizer *wos*, allowing a doubled relative pronoun in its specifier position. As a second option, the intermediate bridge verb can select a subordinate clause introduced by *dass*, a complementizer which appears in subordinate declaratives as well as interrogatives (cf. (16)). It is thus compatible with an extracted wh-pronoun, but not with an extracted relative pronoun. Doubling of the relative pronoun in an intermediate specifier whose head is occupied by *dass* is excluded. Non-bridge verbs always select for a *dass*-clause, hence never allow the doubling structure (compare examples (8a) and (b)). I thus propose that doubling of a relative pronoun is possible in Tyrolean only when the intermediate C is underspecified for particular complementizer features, as is the case with one of the selection options of bridge verbs.

Interrogatives, on the other hand, do not seem to have problems of this type. Doubling occurs with intermediate bridge verbs and non-bridge verbs alike and the intermediate complementizer is always *dass*. The compatibility of the doubled pronoun with *dass*, as noted earlier, might be due to the simple fact that *dass* is the complementizer introducing declarative as well as interrogative subordinates (cf. (16)).[15]

But if doubling in relatives is excluded when movement crosses an intermediate *dass*, then why do we resort to a resumptive pronoun structure in this case? There are many languages where resumptive structures can occur in relatives

[15]We could try to interpret *dass* as some sort of default complementizer (as suggested by a reviewer), hence compatible also with interrogative pronouns. However, it does not seem to be enough of a default complementizer to allow the relative pronoun in its specifier.

but not in interrogatives (Salzmann 2006, p. 282), but this cannot be the explanation for the restriction of resumptives to relatives when extraction across *dass* is at stake, since we do have another context where resumptive pronouns can occur in interrogatives in Tyrolean. This is when extraction takes place out of an island. As examples (23), (24), (26) and (27) show, in this context we do find resumptive pronouns both with relatives and interrogatives. We have to conclude that since resumptive pronouns can rescue islands, it is plausible that extraction of a relative pronoun across *dass* must be considered comparable to an island context, i.e. that the chain created by a relative pronoun crossing *dass* is in some sense not well-formed because of the incompatibility of the complementizer *dass* with the presence of a relative pronoun (or its trace) in its specifier position.

I assume, then, that the presence of *dass* (i.e., of a selected complementizer) creates a barrier to the extraction of a relative pronoun and that the only way to rescue the structure is to transform it into a resumptive pronoun structure.

To integrate the rescuing effect of resumptive pronouns into our OT-analysis we have to define a constraint that captures it. It is well known that resumptive pronoun structures can void islands, although the reason for this rescuing potential of resumptives is less clear (see Salzmann 2006 for a critical discussion of various approaches) and it is beyond the scope of this chapter to offer an analysis of it. The following constraint therefore has to be considered just as a shorthand for whatever might be the reason that chains with a resumptive pronoun in base position can be constructed across an island.

(44) *ISLAND-EXTRACTION: no extraction out of islands, unless a resumptive pronoun structure is involved

where the following hierarchy has to be assumed:

(45) *ISLAND-EXTRACTION >> IC >> UNIQUE, $\text{UNIQUE}_{\text{VIS}}$, IDENT

The interaction of the proposed constraints in the generation of resumptive pronoun structures with relatives is illustrated in Table 3:

(46)

Table 3: Long extraction of relative pronouns - *dass* selected by intermediate verb.

	Strategies	*I-E	IC	UNIQUE	UNQ_{VIS}	IDENT
(a) RP_i ... RP_i dass... t_i	doubling	*!		**	*	
☞ (b) RP_i ... t_i ... dass ... RSP_i	res. pr.			**	*	*
(c) RP_i ... RP_i dass... RSP_i	res. pr. and doubl.			**	**!	*
(d) RP_i ... t_i dass... t_i	extraction, no doubl.	*!	*	**		
(e) RP_i ... RP_i dass... RP_i	doubl. all the way down	*!		**	**	

Since the intermediate complementizer *dass* creates a barrier for extraction of the relative pronoun, candidate a., d. and e., fail on this constraint. The only structures that satisfy *ISLAND-EXTRACTION, i.e., that allow for extraction across an island, are those containing a resumptive pronoun (b. and c.). Candidate b. wins over candidate c. because it has one less violation of $\text{UNIQUE}_{\text{vis}}$.

In interrogatives we do not find the resumptive pronoun structure (see examples (11) and (12)) because it is not necessary. In fact, as discussed above, an extracted interrogative pronoun is compatible with the complementizer *dass* and no barrier to extraction is created. The analysis of interrogatives therefore is identical to that illustrated in Table 2 for relatives containing a bridge verb not selecting any particular complementizer. Since no barrier to extraction is created, *ISLAND-EXTRACTION plays no role and the decision is passed to the lower constraints, which select the doubling candidate.

The tables illustrate clearly the distribution of doubled elements in intermediate CP positions and resumptive pronouns. Both doubling structures and resumptive pronoun structures can appear only when the constraint $\text{UNIQUE}_{\text{vis}}$ (and, for resumptives, IDENT) disfavoring them are dominated by some more highly ranked constraint. Thus doubling structures appear only under the pressure of IDENTIFY CHAIN over $\text{UNIQUE}_{\text{vis}}$ and resumptive pronouns under the (additional) pressure of *ISLAND-EXTRACTION.

It is worthwhile to step back a moment and consider the violation patterns of the different candidates from some distance. Take Table 3, for instance. When we observe the violation profile of the single candidates in Table 3, we see that some of them are harmonically bounded. A candidate is harmonically bounded if there is another candidate that is (i) at least as good on all constraints, and (ii) better on at least one constraint (cf. Samek-Lodovici and Prince 1999). In Table 3 this is true for candidate c., which is bounded by candidate b. and for candidate e., which is bounded by candidate a. This means that these candidates should be excluded from the set of possible structures since there is always a better structure that can be chosen instead. Candidate c. is a structure which has both a doubled element in intermediate position and a resumptive pronoun at the foot of the chain. Candidate e. doubles pronouns 'all the way down'. There is no empirical evidence for either pattern in the literature on doubling so far, so the predictions made by the present account are borne out.[16]

5. CONCLUSIONS

In long A-bar movement in Tyrolean relatives and interrogatives two main strategies can be observed, according to the type of intermediate complementizer crossed by the extracted pronoun. We have to distinguish between structures in

[16]The exclusion of candidate c. becomes more complex when longer chains are considered (see e.g. (23a)). It might be possible to interpret structures of this type as involving two chains, where the higher one exhibits a doubling structure while the lower one realizes a resumptive pronoun structure.

which the intermediate verb selects a *dass*-clause and cases in which the intermediate verb does not select any particular complementizer (which corresponds to one selection option of bridge verbs). In the former case, doubling of intermediate extracted pronouns is possible for interrogatives, but not for relatives, which, in this case, resort to a resumptive pronoun structure. In the latter case both relative pronouns and interrogative pronouns can be doubled in intermediate chain positions. In the doubling structure of relatives, in addition, the movement-sensitive relative complementizer *wos* can appear. Both doubling structures and resumptive pronoun structures are sensitive to the heaviness of the extracted element: the heavier the extracted constituent, the more marked doubling becomes. Resumption of heavy XPs seems also to be restricted. Doubling structures and resumptive pronoun structures have both been shown to exhibit movement properties: doubling structures are sensitive to islands and show reconstruction effects, resumptive pronoun structures are not sensitive to islands, but still show reconstruction effects. I have proposed an analysis in the framework of Optimality Theory, where doubling is triggered by a functionally motivated constraint requiring chains to be identified, i.e., to have either overt realization of their chain links or an overt realization of head and foot of the chain. Such a principle can explain why doubling seems to be limited to long A-bar movement and why, in relatives, either the doubled pronoun or the movement-sensitive complementizer *wos*, but not necessarily both have to be present. Resumptive pronoun structures are analyzed as arising when an intermediate *dass*-clause creates an island for the extraction of relative pronouns. The proposed constraints predict two structures to be universally banned: a structure where extracted pronouns are doubled not only in intermediate positions but also in the base position and a structure where doubling co-occurs with a resumptive pronoun. This prediction is welcome since structures of this type do not seem to exist.

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5

TENSE/MOOD/ASPECT-DOUBLING[☆]

Anna-Lena Wiklund

ABSTRACT

The chapter investigates similarities and differences between Tense/Mood/Aspect-doubling constructions (*John tried and wrote*) and the corresponding standard infinitivals (*John tried to write*) in Swedish and factors restricting variation in doubling. It is shown that the inflectional morphology on the embedded verb in the doubling construction is merely agreeing with that of the matrix verb, yielding an 'infinitival in disguise'. Nevertheless, the doubling infinitival involves dependencies between the matrix and embedded clause that are not present in the corresponding standard infinitival. Variation is shown to be limited by factors such as locality, presence of non-overlapping tense, and amount of functional structure. Arguments in favor of taking TMA-doubling to be a surface reflex of restructuring are presented.

[☆]A substantial part of the present chapter has appeared elsewhere (Wiklund 2007). I am indebted to Mouton de Gruyter for granting permission to reuse the relevant material.

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1. INTRODUCTION

Variants of spoken Swedish, Norwegian, Danish, and Faroese allow doubling of verbal morphology under a restricted class of matrix verbs; the inflection of the embedded verb seems to be copied from the matrix verb and is semantically vacuous, see e.g., Ljunggren (1934), Lockwood (1964), Anward (1988), Josefsson (1991), Teleman et al. (1999), Lødrup (2002), Julien (2003), and Wiklund (2001, 2007). For the purpose of the present chapter, the phenomenon will be referred to as TMA-DOUBLING (Tense/Mood/Aspect-doubling). The Swedish sentences in (1a–d) exemplify tense-doubling (present/past), mood-doubling (imperative), and aspect-doubling (past participial), respectively.[1]

(1) a. Lars försöker [o skriver ett brev]. (Swedish)
Lars try.PRES[2] & write.PRES a letter
Lars tries to write a letter.

b. Lars försökte [o skrev ett brev].
Lars try.PAST & write.PAST a letter
Lars tried to write a letter.

c. Försök [o skriv ett brev]!
try.IMP & write.IMP a letter
Try to write a letter!

d. Lars hade försökt [o skrivit ett brev].
Lars had try.PPC & write.PPC a letter
Lars had tried to write a letter.

The phenomenon belongs to non-standard language and therefore is not found in printed text other than sparsely in texts of less formal style. Standard Swedish uses infinitival forms instead of agreeing forms[3]:

(2) a. Lars försöker [att skriva ett brev]. (Swedish)
Lars try.PRES to write.INF a letter
Lars tries to write a letter.

---

[1] I disregard (vacuous) doubling of the infinitival form here.

[2] Abbreviations: PRES, present; IMP, imperative; PPC, past participial; INF, infinitival.

[3] For arguments that also pseudocoordinations of the kind exemplified in (ia) below involve TMA-doubling, see Wiklund (2007). These involve light verb uses of otherwise lexical (motion and posture) verbs and differ from the doublings exemplified in (1) in that infinitival counterparts do not exist in Swedish, cf. (ib).

(i) a. Tycho sitter [o äter]. (Swedish)
Tycho sit.PRES & eat.PRES
Tycho is eating (in a sitting position).

b. *Tycho sitter [att äta].
Tycho sit.PRES to eat.INF

b. Lars försökte [att skriva ett brev].
Lars try.PAST to write.INF a letter
Lars tried to write a letter.

c. Försök [att skriva ett brev]!
try.IMP to write.INF a letter
Try to write a letter!

d. Lars hade försökt [att skriva ett brev].
Lars had try.PCC to write.INF a letter
Lars had tried to write a letter.

TMA-doubling is syntactic and not phonological in nature (see also Section 4.1). An embedded verb with irregular or strong inflection takes on the expected form from its paradigm, and not a form that is phonologically similar to the matrix verb (PHON-AFFIX stands for phonological affix):

(3) a. Tycho prövade [o sprang].
Tycho try.PAST & run.PAST

b. *Tycho prövade [o springde].
Tycho try.PHON-AFFIX & run.PHON-AFFIX

Doubling of all forms (including tensed forms) is widespread in northern as well as in southern variants of Swedish, in particular with aspectual verbs such as *börja* 'start', *sluta* 'stop', *fortsätta* 'continue', and the verbs *försöka* and *pröva*, both meaning 'try'. The other Scandinavian languages, in contrast, appear more selective with regard to forms that may double. Present-day Danish restricts doubling to imperative form (4), Faroese limits doubling to imperative and participial form (5), and the same holds for most doubling variants of Norwegian (6). Icelandic does not allow doubling (7).[4] In what follows, discussion is limited to Swedish. Judgements are my own (Jämtland Swedish) and conform to those of speakers of Västerbotten dialects.

(4) Begynd [og læs]! (Danish var.)
begin.IMP & read.IMP
Start reading!

(5) a. Byrja [og les]! (Faroese var.)
begin.IMP & read.IMP
Start reading!

b. Hann hevði viljað [lisið bókina].
He had want.PPC read.PPC book.DEF
He had/would have wanted to read the book.

[4]I am grateful to Line Hove Mikkelsen (Da.), Hjalmar Páll Petersen and Jógvan í Lon Jacobsen (Fa.), Marit Julien (No.), and Gunnar Hrafn Hrafnbjargarson (Ic.) for data. (6b) is from (Lockwood 1964, p. 141). The doubling sentences all have infinitival counterparts.

(6) a. Prøv [å sei frå i tie]! (Solør Norwegian)
try.IMP & say.IMP from in time
Try to object in time!

b. Han hadde prøvd [å sagt frå i tie].
he had try.PPC & say.PPC from in time
He had tried to object in time.

(7) *Ég hef byrjað [og lesið]. (Icelandic)
I have start.PPC & write.PPC

This chapter reviews similarities and differences between the TMA-doubling construction and the corresponding standard infinitival construction and lists factors that restrict variation. In Section 2, I discuss the linking element *och* 'and' that may appear in between the verbs in the doubling construction. In Section 3, I show that the morphology on the embedded verb is semantically vacuous, thus instantiating a kind of agreement. I present evidence that the doubling construction involves dependencies between the matrix and embedded clause that are not present in the corresponding standard infinitival. In Section 4, I demonstrate that variation in the set of matrix verbs that allow doubling and in the set of forms that may duplicate is limited by locality, presence of non-overlapping tense, and amount of functional structure. In Section 5, I present arguments in favor of taking TMA-doubling to be a surface reflex of restructuring. Section 6 offers a conclusion.

2. THE LINKING ELEMENT

The linking element *o(ch)* that may appear between the two verbs in the doubling construction is pronounced the same as the conjunction element *o(ch)* 'and'; the short form is pronounced /ɔ/. Therefore, TMA-doubling has been analyzed as a special type of coordination (pseudocoordination), see e.g., Josefsson (1991) and Teleman et al. (1999, III, pp. 902–909). Note, however, that the conjunction-like element also can appear instead of the infinitival marker *att* (pronounced /ɑt/) in the standard infinitival construction. Thus, the infinitivals in (2) — involving *att* (careful register) — alternate with (8) — involving *o(ch)* (casual register).[5]

(8) a. Lars försöker [o skriva ett brev].
Lars try.PRES & write.INF a letter
Lars tries to write a letter.

b. Lars försökte [o skriva ett brev].
Lars try.PAST & write.INF a letter
Lars tried to write a letter.

[5]I accept the full form *och* wherever the short form *o* is possible. I use the short form in the examples of this chapter because I believe that this form is more common in spoken language.

c. Försök [o skriva ett brev]!
try.IMP & write.INF a letter
Try to write a letter!

d. Lars hade försökt [o skriva ett brev].
Lars had try.PPC & write.INF a letter
Lars had tried to write a letter.

The traditional view in Scandinavian grammar is that the /ɔ/ that we hear in (8a–d) is a less careful pronunciation of the infinitival marker *att* (see e.g., Teleman et al. 1999, II, p. 745). On this view, the fact that this infinitival marker is otherwise the pronunciation of the coordinating *o(ch)* reduces to a coincidence; the two are homophones. This purported homophony seems to date back to at least the 14th century, on the evidence of scribal insecurity (writing *ok*/*oc* for *at*, and sometimes vice versa) documented by Jespersen (1895) for Danish/Norwegian and Östergren (1901) for Swedish. However, as argued convincingly by Endresen (1995), the series of phonological change which it is necessary to postulate in order to derive /ɔ/ from /ɑt/ is implausible. He argues that the /ɔ/ (*å* in Norwegian orthography) we hear before the infinitive in spoken Norwegian (and by extension, in Mainland Scandinavian in general) is in fact the same (polysemous) lexical item as the coordinating conjunction *o(ch)*, and not (derived from) an alternative pronunciation of *at*/*att*. This is also the view taken here. For additional arguments, see Wiklund (2007, p. 71).

I follow Holmberg (1986), Platzack (1986), and Holmberg (1990) in taking the infinitival marker *att* to be a complementizer, just like the element *att* introducing finite clauses in Swedish. Indications that this analysis is correct include the fact that finite *att* and infinitival *att* behave in a similar way with regard to deletion (Holmberg 1990) and the fact that material (sentential adverbs and floating quantifiers) can be inserted between *att* and the infinitive. These facts also carry over to the element *o(ch)* in (8) and I therefore take *o(ch)* to be capable of functioning as a complementizer.

Turning to *o(ch)* in (1) (doubling context), there is ample evidence that this is the same element. *O(ch)* may appear in a doubling context only under verbs that select an infinitival marker (*och* or *att*) in the corresponding infinitival construction. Illustrative examples can be constructed with the aspectual verb *fortsätta* 'continue' and the modal verb *kunna* 'can'/'be-able'. *Fortsätta* selects an infinitival marker (*och* or *att*), which can be dropped in contexts like (9a) in my variant. In the corresponding doubling construction, *o(ch)* has the same property. It may but need not be overt, cf. (9b).[6]

[6] *Att* can not replace *o(ch)* in a doubling context:
(i) Hans fortsatte (*att) skrev
Hans continue.PAST to write.PAST
Hans continued writing.

(9) a. Hans fortsatte (o/ att) skriva.
Hans continue.PAST &/ to write.INF

b. Hans fortsatte (o) skrev.
Hans continue.PAST & write.PAST
Hans continued writing.

Kunna, in contrast, selects a bare infinitival where no infinitival marker is possible, see (10a). Likewise, no linking element is possible in the corresponding doubling construction, cf. (10b).

(10) a. Han hade kunnat (*o/ *att) skriva.
he had can.PPC & to write.INF

b. Han hade kunnat (*o) skrivit.
he had can.PPC & write.PPC
He had been able to write.

Conforming to our expectations, wherever *att* (or *o*) is required in the infinitival construction, *o* is also required in the corresponding doubling construction, such as e.g., under the verb *undvika* 'avoid':

(11) a. Han hade undvikit *(o/ att) skriva.
he had avoid.PPC & to write.INF

b. Han hade undvikit *(o) skrivit.
he had avoid.PPC & write.PPC
He had avoided to write.

The linking element in the doubling construction is thus a subordinating rather than a coordinating conjunction. I propose that it is a complementizer, cf. Aboh (2004) and Faraci (1970) for the same proposal concerning English *and* in similar construction types.

A more well-known argument in favor of a complementation analysis is the fact that the construction is not subject to the Coordinate Structure Constraint (Ross 1967). Argument and adjunct extraction is possible from the doubling clause, (12a), just as these extractions are possibe from the corresponding standard infinitival, (12b). As shown in (13), a similar extraction from one of the conjuncts in a coordination is not possible.

(12) a. Vad/ hur prövade han [o sjöng __]?
what/ how try.PAST he & sing.PAST

b. Vad/ hur prövade han [att sjunga __]?
what/ how try.PAST he to sing.INF
What/how did he try to sing __?

(13) *Vad/ hur sov han och sjöng __?
what/ how sleep.PAST he and sing.PAST

Likewise, fronting of the doubling clause is possible, (14a), to the extent that the corresponding infinitival clause can be fronted, (14b). As shown in (15), the corresponding fronting from a coordination structure is not possible.

(14) a. [Skrev brev] började han o gjorde i lördags.
write.PAST letter start.PAST he o did last Saturday

b. [Skriva brev] började han att göra i lördags.
write.INF letter start.PAST he to do last Saturday

(15) *Sjöng nationalsången sov han och gjorde
sing.PAST national-anthem.DEF sleep.PAST he and did
i lördags.
last Saturday

From these facts, we may conclude that TMA-doubling does not involve a special type of coordination with a permission to violate the Coordinate Structure Constraint. Rather it involves a special type of complementation where the inflectional form of the matrix verb is replicated in the embedded clause. The semantic vacuity of this doubling is discussed next.

3. INFINITIVAL IN DISGUISE

A literal translation of (16a) below — involving tense doubling — may lead one to suppose that there was a 'writing' event in the past. However, the tense inflection on the embedded verb does not affect the interpretation of the complement. (16a) and its non-doubling (infinitival) counterpart in (16b) have identical truth conditions. Both sentences imply that that the subject referent did not write the letter, because he forgot to do so.

(16) a. Han glömde [o skrev brevet].
he forget.PAST & write.PAST letter.DEF
He forgot to write the letter.

b. Han glömde [att skriva brevet].
he forget.PAST to write.INF letter.DEF
He forgot to write the letter.

One way of showing this is to add the tag *Det skickades omedelbart* 'It (the letter) was mailed immediately' to the sentences. Whenever the tense inflection of *skrev brevet* 'wrote the letter' is interpreted, the tag yields a good result, as in (17).

(17) Han skrev brevet. Det skickades omedelbart.
he write.PAST letter.DEF it mail.PAST.PASS immediately
He wrote the letter. It was mailed immediately.

When added to the sentences in (16), however, the tag yields a pragmatically odd result in both cases:

(18) a. Han glömde [o skrev brevet].
he forget.PAST & write.PAST letter.DEF
#Det skickades omedelbart.
it mail.PAST.PASS immediately
He forgot to write the letter. #It was mailed immediately.

b. Han glömde [att skriva brevet].
he forget.PAST to write.INF letter.DEF
#Det skickades omedelbart.
it mail.PAST.PASS immediately
He forgot to write the letter. #It was mailed immediately.

From examples of this kind, we may conclude that the inflectional morphology on the embedded verb in the doubling construction does not make a semantic contribution. It is merely a phonological reflex of an agreement relation between the matrix clause — where tense is interpreted — and the embedded clause (cf. Anward 1988). In this respect, tense doubling is reminiscent of the phenomenon of *Sequence Of Tense* (SOT). On the latter, see e.g., Ogihara (1995) and Kratzer (1998). The past tense morphology on the embedded verb in (19a) (involving sequence of tense) does not make a semantic contribution in the same way that the embedded tense morphology in (19b) (involving tense doubling) does not make a semantic contribution. Camilla was sad at the time of Tycho's reporting on that state.

(19) a. Tycho sa att Camilla var ledsen. (SOT)
Tycho say.PAST that Camilla be.PAST sad
Tycho said that Camilla was sad.

b. Tycho hjälpte henne och skrev ett brev. (tense doubling)
Tycho help.PAST her and write.PAST a letter
Tycho helped her write a letter.

As we will see shortly, however, doubling is restricted to tenseless environments and therefore seems to affect the complement environments of SOT phenomena. The latter affect clauses that can in principle come with independent tense and do not alternate with infinitival constructions. Secondly, doubling is not restricted to tense, as we have seen, but may also affect mood (the imperative form may be vacuous) and aspect (the participial form may be vacuous). Sequences of mood or sequences of aspect, in contrast, do not seem to exist. Thirdly, SOT has been argued to be restricted to embedded states (Ejerhed Braroe 1974; Sandström 1993). Doubling, however, does not discriminate between eventive and stative embedded clauses.[7]

[7]Adding *på två minuter* (in two minutes) to (19b) is unproblematic.

So far, the difference between the standard infinitival construction, (20a), and the TMA-doubling construction, (20b), seems rather superficial. The embedded verb in (20b) is *an infinitive in disguise* (en forklædt infinitiv), to use the words of Jespersen (1895, p. 170).

(20) a. De försökte [o skriva ett brev].
they try.PAST & write.INF a letter
They tried to write a letter.

b. De <u>försökte</u> [o <u>skrev</u> ett brev].
they try.PAST & write.PAST a letter
They tried to write a letter.

A closer look at the possibility of splitting the infinitival marker/complementizer and the verb, however, reveals that the two sentences are associated with subtly different structures and therefore differ also underlyingly. Whereas floating quantifiers and sentential adverbs may be inserted between *o* and the verb in the standard infinitival, see (21a), such a splitting is not possible in the corresponding TMA-doubling infinitival, cf. (21b).

(21) a. De försökte [o alla alltid skriva ett brev].
they try.PAST & all always write.INF a letter

b. De <u>försökte</u> [o (*alla) (*alltid) <u>skrev</u> ett brev].
they try.PAST & all always write.PAST a letter

Anticipating a proposal to be made below, TMA-doubling infinitivals involve dependencies between the matrix and embedded clause, disabling insertion of the relevant elements in the embedded clause. These dependencies are absent in the standard infinitival construction. In the next section, factors that restrict variation are listed.

4. LIMITS OF VARIATION

Whereas many speakers allow doubling under aspectual verbs such as *fortsätta* 'continue', see (9b), not all of these speakers allow doubling under implicatives such as *glömma* 'forget', exemplified in (16a). Similarly, whereas many speakers allow doubling of the participial form with *försöka* 'try', as in (1d), not all of these speakers allow doubling of the past tense with the same verb, as in (1b). Thus, there is variation with regard to the set of matrix verbs that may select a TMA-doubling infinitival, as well as with regard to the set of verb forms that may duplictate under the relevant verbs. In this section, the limits of this micro-variation is discussed. As we will see, TMA-doubling is:

- Locality sensitive;
- Tense sensitive;
- Proportional to structure.

4.1. Locality

Speakers agree that TMA-doubling is dispreferred or impossible into islands. Thus, doubling into the complement position of a noun, as in (22a), yields an unacceptable result, even though doubling with *glömma* 'forget' is otherwise possible, cf. (16a).[8]

(22) a. *Han hade glömt rådet [o åkt hem].
he had forget.PPC advice & go.PPC home

b. Han hade glömt rådet [att/ o åka hem].
he had forget.PPC advice to & go.INF home
He had forgotten the advice to go home.

The phenomenon is also subject to relativized minimality (Rizzi 1990). In multiple embeddings, either all verbs agree, (23a), or all but the most embedded verb agree, (23b). Long-distance doubling across a verb that does not itself participate in the doubling leads to ungrammaticality, cf. (23c).

(23) a. Han prövade o fortsatte o gick längs stigen.
he try.PAST & continue.PAST & go.PAST along path.DEF

b. Han prövade o fortsatte o gå längs stigen.
he try.PAST & continue.PAST & go.INF along path.DEF

c. *Han prövade o fortsätta o gick längs stigen.
he try.PAST & contine.INF & go.PAST along path.DEF

d. Han prövade o fortsätta o gå längs stigen.
he try.PAST & continue.INF & go.INF along path.DEF
He tried to continue walking along the path.

These data constitute additional evidence that TMA-doubling is syntactic and not phonological. The phenomenon obeys syntactic locality constraints. Note that a post-syntactic account of TMA-doubling would have to involve the existence of a morphological component — as in the framework of Distributed Morphology (Halle and Marantz 1993) — that is distinct from syntax, yet imposing identical locality constraints, see Wiklund (2001) for such an analysis. On that analysis, the dependencies responsible for doubling are established after syntax and before Vocabulary Insertion. Given an operation like Agree, however, relating two syntactic objects with the same feature type, where one has a value and the other does not (Chomsky 2000, 2001), it is not clear that any property of doubling warrants an analysis that makes use of a post-syntactic component of the kind. I therefore hold that doubling

[8](22a) is fine on the irrelevant coordination reading *He had forgotten the advice and gone home*. Counterfactual environments are exceptional in that doubling of the participial form is possible into islands in such contexts for some speakers.

is best viewed as a phonological reflection of dependencies established in (narrow) syntax.[9]

4.2. Tenselessness

Not only is TMA-doubling restricted to infinitivals that are *selected* by the verb from which the inflection is duplicated. These infinitivals have to be tenseless. Consider (24) below.

(24) a. *Han började [att läsa boken imorgon].
he start.PAST to read.INF book.DEF tomorrow

b. *Han börjar [att ha läst boken igår].
he start.PRES to have.INF read.PPC book.DEF yesterday

The event referred to by an infinitival embedded under *börja* 'start' cannot be located in the future with respect to the time of the event referred to by the matrix predicate, (24a), nor in the past, (24b). In this sense, *börja* differs from *besluta* 'decide', which selects a future-oriented infinitival, cf. (25), and *tro* 'think'/'believe', which may select a past-oriented infinitival, see (26).

(25) Han beslutade [att resa hem imorgon].
he decide.PAST to travel.INF home tomorrow
He decided to go home tomorrow.

(26) Han trodde sig [ha läst dokumentet ifjol].
he think.PAST REFL have.INF read.PPC document.DEF last-year
He thought that he read the document last year.

In the above sense *börja* selects a tenseless infinitival, whereas *besluta* and *tro* select tensed infinitivals. Only the former is compatible with TMA-doubling:[10]

(27) Han <u>började</u> [o <u>läste</u> boken].
he start.PAST & read.PAST book.DEF
He started reading the book.

(28) *Han <u>beslutade</u> [o <u>reste</u> hem].
he decide.PAST & travel.PAST home
Intended meaning: He decided to go home.

(29) *Han <u>trodde</u> sig [läste dokumentet].
he think.PAST REFL read.PAST document.DEF
Intended meaning: He thought that he was reading the document.

[9]Such an analysis is still compatible with Late Insertion.

[10]Doubling is exemplified with past tense. All forms may double with *börja* in my variant. No form may double with *besluta*, nor with *tro*.

An overlapping tense orientation between the matrix and embedded clause is thus a prerequisite for (full) TMA-doubling. Variation in the set of verbs that allow selection of TMA-doubling infinitivals is therefore limited to verbs selecting tenseless infinitivals.

4.3. The More Structure — The More Doubling

Whereas doubling of the participial form is fine in the complement of a modal verb like *kunna* 'can', see (30a), tense doubling under the same verb is impossible, cf. (31a).

(30) a. Han hade kunnat skrivit.
he had can.PPC write.PPC

b. Han hade kunnat skriva.
he had can.PPC write.INF
He had been able to write.

(31) a. *Han kunde skrev.
he can.PAST write.PAST

b. Han kunde skriva.
he can.PAST write.INF
He was able to write.

The relevant generalization is that verbs that select bare infinitivals (infinitivals that cannot be introduced by an infinitival marker/complementizer), see (32), restrict doubling to participial form, whereas verbs that select non-bare infinitivals (infinitivals that can be introduced by an infinitival marker/complementizer) allow doubling of all forms in the relevant variants, provided the infinitival is tenseless in the above sense, cf. (1) above.

(32) Hans kunde (*att) skriva.
Hans can.PAST to write.INF
Hans was able to write.

I propose that the relevant non-bare infinitivals are full CPs, whereas the relevant bare infinitivals are AspectPs, therefore lacking the C- and T-domains of the clause. The former may (sometimes must) involve a complementizer (+CP), may contain adverbs quantifying over times and sentential negation (+TP), and may contain the perfect (+AspP). The latter may not contain a complementizer (−CP), nor adverbs quantifying over times or sentential negation (−TP), but may contain the perfect (+AspP).

(33) a. Non-bare infinitivals: [CP [TP [AspP [*v*P]]]]

b. Bare infinitivals: [AspP [*v*P]].

Given that a TMA-doubling infinitival retains the non-bare/bare status of the corresponding standard infinitival, we may formulate the intuitive hypothesis that the category selected by the matrix verb remains constant between non-doubling and doubling constructions. An infinitival selected by *försöka* is a CP (non-bare), regardless of presence/absence of doubling, and an infinitival selected by *kunna* is an AspP (bare), regardless of presence/absence of doubling. On the proposal that doubling of a given form is contingent on the presence of the corresponding functional projection in the embedded clause, the difference between *börja* and *kunna* with regard to number of forms that may double is captured, (1) vs. (30)–(31).

(34) a. The category selected by the matrix verb remains constant between non-doubling and doubling constructions.

b. Doubling of a given form is contingent on the presence of the corresponding functional projection in the embedded clause.

More specifically, doubling of the imperative form requires an embedded C-domain, see Rizzi (1997) on the imperative and C_{Force}. In turn, doubling of tensed verb forms (present and past) requires an embedded T-domain. Finally, doubling of the participial form is contingent on an embedded Asp-domain. It follows that all forms may double under verbs that select non-bare infinitivals (CPs), whereas doubling is restricted to participial form under verbs that select bare infinitivals (AspPs). Variation in the set of forms that may double is in this sense structurally restricted. The more structure there is in a doubing infinitival, the larger the set of forms that may duplicate.[11]

5. A SURFACE REFLEX OF RESTRUCTURING

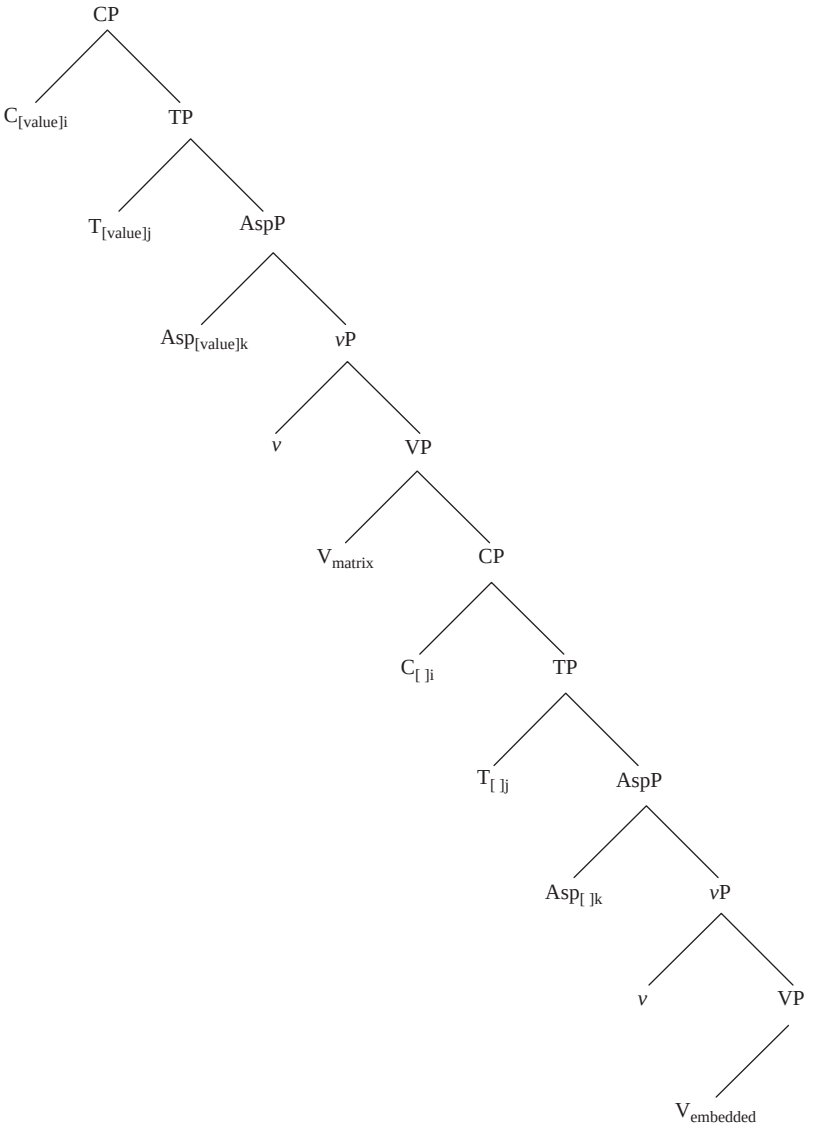
Since the structure involved is constituted by functional projections, doubling of a given forms is possible when the corresponding functional projection is present. This is captured on the hypothesis that:

(35) Doubling is a reflex of dependencies between functional heads of the same label.

Since the form of the embedded verb is determined by the form of the matrix, the downstairs head must be underdetermined, doubling the value of the head upstairs.

[11]Variation within this limit can be captured on the assumption that languages differ with regard to what domain of the clause may double (CP, TP, AspP), perhaps due to language specific morphological factors.

(36)



I propose that the relevant dependency is Agree (Chomsky 2000, 2001) and refer the reader to Wiklund (2007) for a discussion of the theoretical implications of this proposal. An unvalued functional head in the embedded clause triggers Agree with a higher head of the same label, yielding top-down valuation. TMA-doubling is the phonological reflection of such dependencies.[12] On the

[12]Languages may differ regarding whether or not the relevant dependencies are phonologically reflected.

intuitive assumption that an unvalued functional head does not license modifiers, the contrast between (21a) and (21b), repeated below, is captured.[13]

(37) a. De försökte [o alla alltid skriva ett brev].
they try.PAST & all always write.INF a letter

b. De försökte [o (*alla) (*alltid) skrev ett brev].
they try.PAST & all always write.PAST a letter

The present analysis bears similarities to tense(/Infl) raising approaches to restructuring infinitivals, see e.g., Kayne (1989), Terzi (1996), Roberts (1997), and references cited in Wurmbrand (2001). There are two principal arguments that TMA-doubling is indeed a surface reflex of restructuring. The first argument concerns the distribution. Based on five languages (German, Dutch, Italian, Spanish, and Japanese), Wurmbrand (2001) proposes that the core restructuring predicates are modal verbs (*must*, *may*, *can*, *want*), aspectual verbs (*begin*, *continue*, *finish*), causatives (*let*, *make*), and motion verbs (*come*, *go*). These are also core doubling predicates. Factive and propositional predicates, on the other hand, are incompatible with restructuring infinitivals in the languages investigated by Wurmbrand. The same predicates have been shown to be incompatible with doubling (Wiklund 2007). Likewise, restructuring phenomena are restricted to tenseless infinitivals (Wurmbrand 2001) in the same way that doubling is restricted to tenseless infinitivals, as shown. The second argument concerns evidence of deficiency in the relevant infinitivals. Restructuring configurations display restrictions on adverbs and other modifiers (Cinque 2004; Wurmbrand 2001). The same is true for doubling configurations, cf. Section 3.

(38) a. TMA-doubling and restructuring phenomena involve identical sets of matrix verbs and are both restricted to tenseless infinitivals.

b. TMA-doubling and restructuring configurations both display restrictions on adverbs and other modifiers.

If restructuring effects derive from the same basic underlying structural configurations cross-linguistically, the present study of TMA-doubling should provide new insight into the phenomenon of restructuring in natural language. In particular, we have seen that the category selected by the matrix verb may remain constant between doubling (restructuring) and non-doubling (non-restructuring) infinitival constructions.

[13]Another way to put this is to say that Merge of a specifier results in valuation. Suppose that there is an unvalued temporal head T_{past}[…] in the structure and that an adverbial *once* is merged in the form of a specifier. The addition of *once* will force a positive specification of the feature *past* (or add a feature [past]). In this sense, it is intuitive to assume that unvalued heads do not license modifiers. The addition of a modifier will force valuation.

6. CONCLUSION

I have presented evidence in favor of taking TMA-doubling constructions to be infinitivals in disguise. I have argued that TMA-doubling infinitivals differ from the corresponding non-doubling (standard) infinitivals in involving dependencies between the matrix and embedded clause, more specifically between heads of the same label. The analysis captures the fact that doubling appears proportional to the number of functional projections in the embedded clause. I have shown that variation is limited by locality, presence of non-overlapping tense, and number of functional projections in the embedded clause. On the basis of the distribution of the phenomenon and the indications of deficiency in the doubling infinitivals, I have argued that TMA-doubling is a surface reflex of restructuring.

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6

"DOUBLE" FLOATING QUANTIFIERS IN MODERN GREEK AND PONTIC

Vina Tsakali

ABSTRACT

In the literature there are several cases of obligatory clitic doubling; in this study I discuss instantiations of clitic doubling with floating quantifiers (FQ), which appear at a first sight to be obligatory, as shown in the following example:

(I)	*(tus)	idha	olus.	(Modern Greek)
	CL.3PL.M.ACC	see-PST.1SG	all-ACC	
	I saw them all.			

Despite its appearance, I will argue that the example above should not be analysed as genuine clitic doubling (see also Sportiche 1996 and Kayne 2000); instead, it is best analysed as an instance of a single clitic construction, on the basis of two arguments: (a) the observation that the

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quantifier *olus* needs to be accompanied by a clitic not only in clitic doubling languages like Greek but also in Pontic dialect that lacks clitic doubling (like French and Italian) and (b) that the quantifier *olus* can carry informational focus, a property that is systematically incompatible with doubled objects.

I therefore propose that the obligatoriness of the clitic is linked to the object-drop properties of the language: *olus* needs to be obligatorily accompanied by a clitic when the language does not permit definite object drop, while it will be optionally present in languages that have definite object drop. This prediction is borne out by the data; in Modern Greek and in Pontic, where definite object drop is not allowed (Dimitriadis 1994), the presence of the clitic is obligatory, while in languages that can omit definite objects (Brazilian Portuguese, European Poruguese and Quiteño Spanish), (Raposo 1986; Suñer and Yepez 1988), the presence of the clitic is no longer compulsory.

The second part of the study touches upon the issue of the nature of FQ. It is argued that the facts discussed in this chapter seem to support the adverbial analyses of FQ (Bobaljik 1988/2003; Doetjes 1997, among others). Moreover, the moving properties of FQ in Greek seem to further support the view that FQ in Greek are best analysed as adverbial elements.

In summary, I argue against an analysis that groups the clitic-DP dependency together with the clitic-FQ dependency and I propose that the presence of the clitic in constructions with FQ is directly linked to the properties of object drop in the language. The prediction is that *the apparent "clitic doubling" of quantifiers will happen only with FQ*.

1. INTRODUCTION

The purpose of this chapter is to examine the nature of the dependency between object clitics and FQ, and compare these constructions to those typically referred to as clitic doubling (ClD) constructions, offering an account for the attested cross-linguistic variation related to the obligatoriness of a clitic in structures with FQ. In addition, this study attempts to shed light on the theoretical debate concerning the nature of FQ.

The general proposal is that the underlying relationship between the clitic and the floating quantifier is not identical to that between a clitic and its coreferent DP. The cross-linguistic variation stems from differences in the object-drop properties of a language. Regarding the nature of FQ, I argue that FQ in Greek do not form a constituent with the NP they appear to modify. Thus their distribution lends support to the adverbial analysis of FQ.

The chapter is organised as follows: in Section 1, I briefly discuss the properties of the constructions that are characterised as ClD and differ from what is referred in the literature as clitic right dislocation (CLRD) and then I present

some instance of obligatory ClD. In Section 2, I compare these constructions to those with clitics and FQ, showing that the two do not behave on a par. The discussion in Section 3 provides the empirical arguments for the proposal that FQ will obligatorily appear in languages that cannot omit definite objects. In Section 4, the discussion revolves around the relationship between FQ and the DP they modify, which sheds light on the nature of the FQ in Greek, discussed in Section 5. Finally, in Section 6 I conclude.

2. DP-ASSOCIATES OF CLITICS

2.1. Clitic Doubling Versus Clitic Right Dislocation

The term ClD has been confusingly used to refer to distinct clitic constructions such as clitic left dislocation (CLLD), CLRD and proper ClD.[1] Thus the definition of ClD I adopt describes constructions where *a clitic and a full NP/DP refer to the same entity, belong to the same syntactic domain*[2] and hence "compete" for the same Case and Theta-role as shown in the examples (1)–(2) from Greek and Rioplatense Spanish respectively.

(1) Tin efage ti supa o Jiannis.
CL-ACC.3SG.F eat-PST.3SG the soup-ACC.SG.F the John-NOM
John ate the soup.

(2) Lo vimos a Juan.
CL-ACC.3SG.M see-PST.3PL a-PREP John-ACC
We saw John.

The phenomenon of ClD as defined earlier is distinct from the phenomenon of CLRD, where the clitic and the DP do not belong to the same syntactic domain as in (3a), (3b) and (4) from Catalan, French and Pontic respectively.[3] (Example (3a) is from Valduví (1990) while (3b) is from Jaeggli (1986)).

(3) a. El fiquem al calaix, el ganivet.
CL-ACC.1SG put-PRS.1PL in the drawer the knife-ACC
We put the knife in the drawer.

[1]For consistency, I follow Anagnostopoulou (1994 and thereafter) regarding the terminology/abbreviations and the definitions relating to clitic constructions.

[2]The term *syntactic domain* is defined in terms of c-command properties (see Tsakali 2006).

[3]Anagnostopoulou (2005) provides extensive arguments as to how these two constructions are different and why Greek is a ClD language. In sum, the main argument comes from word order: [cl V DP-object DP-subject] grammatical in ClD languages but ungrammatical in CLLD languages like Catalan (see Valduví 1990, for discussion).

b. Je l' ai vu, l'assassin.
NOM CL-ACC.3SG.M have-1SG seen the murderer-ACC
I have seen the murderer.

(4) efae 'ten (o Jiorjikas), ti supa.
ate-PST.3SG CL-ACC George-NOM the soup-ACC
George ate the soup.

Given the similarity between right dislocation of objects and ClD, there was a long debate in the literature of clitics as to whether the two constructions have the same or a different structural analysis. Following Strozer (1976), Rivas (1977), Jaeggli (1982, 1986), Borer (1984) and much later literature, I assume that the DP-object is generated as a complement of the verb in ClD constructions, while it is an adjunct (to VP or IP) in right dislocations.[4]

It is important to note for the purposes of this study that right dislocation is found in all clitic languages and although it can be easily mistaken for doubling, there are no instances of obligatory right dislocation constructions. Thus, while ClD of full DPs is in certain cases obligatory (see discussion in the following section), right dislocation takes place with DP objects of any kind.[5]

Table 1 presents the typology of clitic languages with respect to their ClD properties. The main interest in our discussion is in Modern Standard Greek and Pontic as they differ in that only the former has ClD.

(5)

Table 1: Typology of clitic languages with respect to ClD.

	ClD
Modern Greek	Yes
Romanian	Yes
Bulgarian	Yes
Albanian	Yes
Argentinean Spanish	Yes
Pontic	No
Italian	No
French	No
Catalan	No
Serbo-Croatian	No

[4]According to a different view (Aoun 1981, 1999; Hurtado 1984; Philippaki-Warburton 1987, and much later literature), there is no formal difference between clitic doubling and right dislocation. In both constructions, the phrase associated with the clitic is an adjunct.

[5]In short, doubled objects have the intonation and distribution of arguments, while right dislocated objects have the intonation and distribution of peripheral elements. These differences can be accounted for by an analysis according to which the former occupy argument position and the latter are right-adjoined elements.

2.2. Cases of Obligatory Clitic Doubling

In the literature on ClD there are several cases of obligatory ClD discussed.[6] For example, in Argentinean Spanish an indirect pronominal object (6) has to be doubled by a clitic (e.g., Suñer 1988) and in Romanian proper names (7) must be doubled by a clitic (e.g., Dobrovie-Sorin 1990). Moreover in Standard Modern Greek obligatory ClD occurs with epithets (8), psych verbs (9), *seem*-constructions (10) and passive constructions (11) (examples from Anagnostopoulou 1994, 1999, 2003), as well as, with indirect objects of first and second person pronouns in dative/genitive (12) (Tsakali 2006).

(6) *(lo) vimos a el.
CL-ACC.3SG.M see-PST.3PL a-PREP 3SG.ACC
We saw him.

(7) *(l)-am vazut pe Popescu.
CL-ACC.3SG have –1SG seen pe- PREP Popescu
I have seen Popescu.

(8) *(ton) katedosa ton vlaka stin astinomia.
CL-ACC.1SG squeal-PST.1SG the stupid-ACC to the police
I squealed him on the police.

(9) *(tis) aresi tis Marias to fagito.
CL-DAT.3SG like-PRS.3SG the maria- DAT the food-NOM
Maria likes the food.

(10) *(tu) fenete tu Petru hazo to ergo.
CL-DAT.3SG.M seem- PRS.3SG the Peter- DAT stupid the movie-NOM
The movie seems stupid to Peter.

(11) *(tu) tahidromithike tu Petru to grama htes.
CL-DAT.3SG.M post-PST.3SG the Peter- DAT the letter-NOM yesterday
The letter was posted to Peter yesterday.

(12) *(mu) tilefonise emena htes.
CL-DAT.1SG call- PST.3SG me-DAT yesterday
He/She called me yesterday.

[6]Obligatory clitic doubling can be understood in two ways: (a) an NP that needs to be doubled by a clitic in order to be licit, and (b) a clitic that needs an overt associate NP in order to be felicitous. However, for present purposes, whenever I use the term *obligatory clitic doubling* I refer to constructions where a DP is doubled by a clitic.

In all the above examples, the presence of the clitic is compulsory. In addition to constructions (6)–(12) let us consider example (13) which seems, at a first sight, to be somehow similar to (6)–(12).

(13) a. *(tus) idha olus. (Standard Modern Greek)
b. *(los) vi todos. (Argentinean Spanish)
CL-ACC.PL see-PST.1SG all-ACC
I saw them all.

At first sight (13) appears to be one more instance of obligatory ClD, as the quantifier *all* (todos/olus) needs to be doubled by a clitic in languages like Greek and Argentinean Spanish.

3. OBLIGATORY CLITIC DOUBLING WITH FLOATING QUANTIFIERS?

The question which arises is whether example (13) has the properties of a ClD construction. I argue that construction (13) is not a typical instance of ClD and despite appearances, it should not be analysed as a genuine instance of ClD (see also Sportiche 1996 and Kayne 2000, for French for a different reasoning).[7] In what follows I will show that (13) is an instance of a single clitic construction, which has the underlying structure of (14) and not (15). In other words, example (13) is syntactically akin to (16) and not to (17), which is representative of structure (15).

(14) [cl[$_{VP}$V [all] [pro]]

(15) [cl [V [all]]]

(16) tus_i idha [*pro*]$_i$.
CL-ACC.3PL.M see-PST.1SG
I saw them.

(17) ta_i idha [ta pedhia]$_i$.
CL-ACC.3PL.N see-PST.1SG the kids-ACC
I saw them.

Two are the main arguments that structure (13) does not behave alike with ClD: The first is a language internal argument, namely that quantifier *olus* in Greek can carry informational focus as in (18), a property that is systematically incompatible with doubled objects as shown in (19) (Agouraki 1993; Tsimpli 1995).

[7]Both Sportiche (1988, 1996) and Kayne (2000) analyse the same structure in French as a non-doubling construction.

(18) tus idha OLUS.
CL-ACC.PL SEE-PST.1SG all-ACC
I saw them ALL.

(19) *to dhiavasa TO VIVLIO.
CL-ACC.3SG.N read-PST.1SG the book-ACC
I read it, THE BOOK.

The second argument against an analysis along the lines of structure (15) comes from cross-linguistic comparison, namely the observation that the quantifier *todos*/*olus* needs to be accompanied by a clitic in many clitic languages which lack ClD, such as French, Italian and Pontic.

(20) a. Jean *(les) a invite tous. (French)
Jean-NOM CL-ACC.3PL.M have-3G invited all-ACC
Jean has invited them all.

b. *(li) ho visti tutti. (Italian)
CL-ACC.3PL.M have-1SG seen all-ACC
I've seen them all.

(21) idha-ts oluts. (Pontic)
see.PST.1SG-CL-ACC all-ACC
I saw them all.

Thus examples (20a) and (20b) from French and Italian and example (21) from Pontic indicate that the necessity for the clitic in *todos*/*olus* constructions does not depend on the ClD properties of the language.

Table 2 presents the obligatoriness of the clitic in *todos*-constuctions. All the aforementioned clitic languages seem to have the same syntactic behaviour with clitics and FQs.

(22)

Table 2: Typology of languages with object clitics doubling floating quantifiers.

Standard Greek	yes
Romanian	yes
Bulgarian	yes
Albanian	yes
Spanish	yes
Argentinean Spanish	yes
Pontic	yes
Italian	yes
French	yes
Catalan	yes
Serbo-Croatian	yes

However the discussion so far leads us to the question whether the clitic is obligatory in all clitic languages. This is the issue under discussion in the following section.

4. DO FLOATING QUANTIFIERS NEED TO BE ACCOMPANIED BY A CLITIC IN ALL CLITIC LANGUAGES?

From the development of the discussion so far one might be led to think that FQ need to be accompanied by a clitic in all clitic languages. However, there seem to be clitic languages that do not follow the discussed pattern, that is, they do not need to clitic-double a floating quantifier. These are the cases of Brazilian Portuguese, European Portuguese (BP/EP) and Quiteño Spanish, which do not pattern along with Greek, Argentinean Spanish, Italian, French and Catalan, as the optionality of the clitic in (23) shows.

(23) a. (les) vi a todos. (Quiteño Spanish)
b. (os) vi todos. (BP/EP)
CL-ACC.PL see-PST.1SG all-ACC
I saw them ALL.

Naturally the next question that begs an answer is why is the clitic necessary in (13) but not in (23). In other words, how do Quiteño Spanish, European and Brazilian Portuguese differ from other clitic languages?

The essential idea of my proposal is that the obligatoriness of the clitic relates to the object-drop properties of the language. More precisely, *todos*/*olus* needs to be obligatorily accompanied by a clitic when the language does not permit definite object drop.

Greek as well as Argentinean Spanish can drop the object only when it is indefinite (25), while dropping the definite object results in ungrammaticality (24) (see Dimitriadis 1994; Giannakidou and Merchant 1997 for properties of object drop in Greek and Raposo 1986 for Argentinean Spanish).

(24) a. A: Agorases [ta vivlia]$_i$? -- B: *(ta) agorasa [*pro*]$_i$. (Standard Greek)
Did you buy the books? I bought them.
b. A: Viste la pelicula? -- B: *(La) vi. (Argentinean Spanish)
Did you see the movie? I saw it.

(25) a. A: Agorases vivlia? -- B: agorasa [*pro*]. (Standard Greek)
Did you buy books? I bought.
b. A: Viste gente? -- B: Vi (Argentinean Spanish)
Did you see (any) people? I saw.

Given that neither Greek and Argentinean Spanish are definite object drop languages and given that the floating quantifier in (20) and (21) is not licit without

the presence of the clitic, we draw the conclusion that the floating quantifier cannot serve as the object of the verb in these constructions. Thus the obligatoriness of the clitic depends on the availability of dropping the definite object drop. The prediction then is that in clitic languages that allow definite object drop, the presence of the clitic with FQ will be optional.

This prediction is tested in Brazilian and European Portuguese (EP/BP) and Quiteño Spanish (QS) (see Raposo 1986; Suñer and Yepez 1988 and Campos 1986), which are languages that can omit definite objects (26).

(26) a. Quem e que viu a filme?
who was-3SG that saw-3SG the film
O Manel viu. (EP/BP)
the Manel saw-3SG
Who saw the film? Manel saw it. (Raposo 1986)

b. Cuando quieres que te mande las tarjetas?
when want-2SG that you send-1SG the cards
Puedes mandarme manana? (QS)
can-2SG send me tomorrow
When do you want me to send you the cards? Can you send them to me tomorrow? (Suñer and Yepez 1988)

(27) a. (les) vi a todos. (Quiteño Spanish)

b. (os) vi todos. (EP/BP)
CL-ACC see-PST.1SG all-ACC
I saw them all.

Example (26) show that both Brazilian/European Portuguese and Quiteño Spanish can drop a definite object, while (27) shows that the prediction is borne out as neither Brazilian/European Portuguese nor Quiteño Spanish require the compulsory presence of the clitic in *todos*/*olus* constructions.

5. ON THE NATURE OF THE RELATIONSHIP BETWEEN THE FLOATING QUANTIFIER AND THE DP

Under the current proposal, if indeed the obligatory presence of the clitic with FQ in some clitic-languages results from the impossibility to drop the definite object, the question which arises is why *all*/*todos* cannot replace the DP-object. That is, why cannot *todos*/*olus* be a DP by itself, the way that nominalised adjectives can in languages like Greek and French as in (28)?

(28) a. theli ta kokina pro. (Standard Greek)
want-PRS.3SG the red-ACC
He wants the red ones.

b. Il veut les rouges pro. (French)
he-NOM want-PRS.3SG the red-ACC
He wants the red ones.

One possible answer is that the floating quantifier in Greek and in Pontic (and possibly in all languages) adjoins to DPs and not to NPs, as shown in (29a–30a) versus (29b–30b).

(29) a. ola ta vivlia (Standard Greek)
all the books

b. *ola vivlia
all books

(30) a. olts ti fotitas (Pontic)
all the students

b. *olts fotitas
all students

However such an analysis would lead us to the undesirable account of treating *all*/*todos* in a different fashion from other FQ like *each* in English and *chacun* in French, which cannot be adjoined to DPs, as shown in (31).[8]

(31) *each the children

Given that we have no reason to believe that *all* and *each* behave differently syntactically and to make any further distinction for the natural class that is characterised as FQ, an analysis that distinguishes between the two can no longer be maintained. On the contrary, the data discussed in this chapter support analyses that treat FQ as elements adjoined to the VP/IP (more in the spirit of Doetjes 1997 and Fitzpatrick 2006).

In the next section, I will discuss some properties of the FQ in Standard Modern Greek which suggest that despite the observed agreement between the FQ and the DP it modifies, the relationship between the FQ and the DP does not entail that the two form one unit. If this is correct, my analysis poses an extra puzzle for stranding theories of FQ, that is, for theories which suggest that FQ are parts of the DP they modify.

6. IMPLICATIONS FOR THEORIES OF FLOATING QUANTIFIERS

The central issue in the study of FQ is how we can account for the fact that the syntactic position of FQ does not always corresponds to the one that matches with interpretation of the quantified element. The studies of FQ

[8]I wish to thank one of the anonymous reviewers for pointing this out to me.

during the last decades can be divided into two groups: on the one hand the stranding/adnominal analyses (Sportiche 1988; Miyagawa 1989; Shlonsky 1991; Merchant 1996; Bošković 2004 among many others), and on the other hand the adverbial/adjoined analyses of FQ (Dowty and Brodie 1984; Bobaljik 1988/2003; Doetjes 1997; Brisson 2000; Fitzpatrick 2006 among others).

According to proponents of the first group, there is a transformational movement-based analysis of floating quantification and the floating quantifier itself is part of the argument of the verb. Thus in a structure like (32) (which is the representative structure of example (27)), *all* is part of the surface object.

(32) (Subject) (CL) Verb ALL

Therefore under the stranding analyses we have no proper explanation as to why there seems to be a cross-linguistic difference among clitic languages with respect to the requirement of the obligatory presence of the clitic in *all*/*todos* constructions.

According to the second group, i.e., the adverbial/adjoined analyses, there is no transformation relation between the floating quantifier and the modified DP. Proponents of these analyses treat FQ as adverbial elements. Under this view, there is no surface direct object in (30).

The facts concerning the obligatoriness of the clitic in (13) seem to support the adverbial approach. Without further assumptions, if *all*/*todos* was part of the object, it would be expected that *all*/*todos* could replace the object; the data however show that this is not an option.

Moreover, assuming that Greek FQ support adverbial analyses, as it seems to be the case, we can account for the fact that *all* can appear in a focus position.

In what follows I will briefly discuss data in support of the claim that FQ in Standard Modern Greek are best analysed as adverbial in nature, as they exhibit properties that adnominal analyses of FQ cannot predict (i.e., focused when doubled with clitic and licensed by A-movement only).

6.1. Returning to Focused *All*

Returning to (18)–(19), we saw that focused FQ shows that *olus* cannot be the object of the structure in (19). Only if *all* does not form a constituent with the null object, will it not be subject to any special constraints that hold for doubled objects in Greek, i.e., the impossibility of focusing a doubled object.

(18) tus idha OLUS.
CL-ACC.PL see-PST.1SG all-ACC
I saw them ALL.

(19) *to dhiavasa TO VIVLIO.
CL-ACC.3SG.N read-PST.1SG the book-ACC
I read it, THE BOOK.

However it is possible to focus part of a double object as in (33):[9]

(33) to dhiavasa TO KOKINO to vivlio.
CL-ACC.3SG.N read-PST.1SG the red-ACC the book-ACC
I read THE RED book.

Prima facie, (33) seems equivalent to (34):

(34) tus idha OLUS tus fitites.
CL-ACC.PL see-PST.1SG all-ACC the students-ACC
I saw ALL the students.

However, the contrast between (18) and (35), show that the adnominal approach of FQ that (33) suggests cannot be maintained.

(35) *to dhiavasa TO KOKINO.
CL-ACC.3SG.N read- PST.1SG the red-ACC
I read it, THE RED book.

In (35) the adjectival phrase *to kokino* (the red) when acting as the object of the verb cannot itself be focused, exactly in the same fashion and for the same reasons that (19) is ungrammatical.[10]

6.2. FQs and A/A'-Movement

One of the major arguments for adverbial analyses of floating quantifier is the restriction that they impose on their DP-associate, namely the fact that movement across *all* causes crossover effects (Bobaljik 1988/2003; Doetjes 1997; Brisson 2000; Fitzpatrick 2006 among others).

Deprez (1989) first pointed out that floated *all* in English cannot appear related to an A'-moved element. Thus, even when it occurs in preverbal position, *all* cannot appear related to an A'-moved element in wh-questions (36a), in relative clauses (36b) or related to a topicalised element (36c).

(36) a. *What did John all buy?
b. *The students that John has all met are quite smart
c. *These students, John has all met.

[9]This judgment is not shared by all speakers. However the argument holds for those who can accept examples like (33).

[10]As to why a focused object cannot be clitic doubled in Modern Greek, see Agouraki (1993).

Under the view that FQ in Greek have adverbial distribution, we expect them to display an A/A'-movement asymmetry.

Accordingly, although A-movement in a raising construction as in (37) is grammatical, the equivalent wh-movement in (36) results in ungrammaticality.[11]

(37) a. Ola ta mora arhizun na perpatane
all-NOM the babies-NOM start-PRS.3PL SBJV walk-PRS.3PL
ston endekato mina.
on the eleventh month
All the babies start walking on the eleventh month.

b. Ta mora arhizun ola na perpatane ston endekato mina.

c. Ta mora arhizun na perpatane ola ston endekato mina.

(38) a. *pja ola arhisan na perpatane
who/which all-NOM start- PRS.3PL SBJV walk- PRS.3PL
ston endekato mina?
on the eleventh month
Who/which all started walking on the eleventh month?

b. *pjia arhisan na perpatane ola ston endekato mina?

c. *?pjia arhisan ola na perpatane ston endekato mina?

Impossibility of movement to an A'-position can also be shown in simple wh-questions (39), non-restrictive relative clauses (40) and topicalisation structures (41).[12]

(39) a. *Pja ola ta agorase o Jianis?
which-ACC all-ACC CL-ACC buy- PST.3SG the John-NOM
Which all did John buy?

b. *Pjia ta agorase ola o Jianis?

c. *Pjia ta agorase o Jianis ola?

(40) *I fitites pu/tus opius o Jianis gnorise olus
the students-NOM that/whom the John meet- PST.3SG all-ACC
ine eksipni.
be-PRS.3PL intelligent-NOM
The students that John has all met are smart.

[11]Example (37b–39b) and (37c–39c) are presented in order to show that *all* can occur in different position in the sentence without any further changes. This is the reason why I haven't glossed them.

[12]Note however that the judgments concerning relative clauses are quite subtle and speakers observe a difference between restrictive and non-restrictive relative clauses. Moreover with respect to example (41), it becomes significantly better if the phrase *aftus tus fitites* (these students) is focused.

(41) *Aftus tus fitites, o Jianis ehi
these-ACC the students-ACC the John-NOM have-PRS.3SG
olus gnorisi.
all-ACC met-PTCP
These students, John has all met.

Finally impossibility of moving across the board strongly suggests the view that FQ in Greek behave more like adverbs.[13]

(42) a. tus idha olus ala dhen
CL-ACC.3PL.M see-PST.1SG all-ACC but NEG
tus filisa.
CL-ACC.3PL.M kiss-PST.1SG
I saw them all but I didn't kiss them.

b. tus idha olus ala dhen
CL-ACC.3PL.M see- PST.1SG all-ACC but NEG
tus filisa olus.
CL-ACC.3PL.M kiss- PST.1SG all-ACC
I saw them all but I didn't kiss them all.

(43) Olus tus idha ala dhen
all-ACC CL-ACC.3PL.M see- PST.1SG but NEG
tus filisa.
CL-ACC.3PL.M kiss- PST.1SG
I saw them all but I didn't kiss them.

(42a) has the reading that from the group of the people I saw I didn't kiss anyone, while (42b) has the reading that from the group of the people I saw I kissed some of them but not everyone. In (43) *olus* (all) has moved ascross the board and one would expect to be ambiguous; however (43) can only have the interpretation of (42a) but not (42b). Again this suggests that *all* does not act as (part of) the object of the verb.

7. CONCLUSIONS

In summary I have argued against an analysis that groups the clitic-DP dependency together with the clitic-FQ dependency. I have shown that the presence of the clitic in constructions with FQ is directly linked to the properties of object drop in the language. This is supported by both language internal evidence (i.e., possibility to focus "doubled" FQs) and cross-linguistic evidence at a macro and micro level (i.e., "doubled" FQs appear in languages which do not have clitic

[13]I thank Winnie Lechner for pointing out these data to me.

doubling such as French, Italian and Pontic). The cross-linguistic generalisation seems to be that a clitic will obligatorily appear in relation to a floating quantifier as long as the language is not a definite object drop language. The above facts follow with no further assumptions on theories that treat FQ as adverbial elements (adjoined to VP/IP). The moving properties of FQ in Greek seem to further support the view that FQ in Greek are best analysed as adverbial elements.

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7

PRONOMINAL DOUBLING IN DUTCH DIALECTS: BIG DPs AND COORDINATIONS

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ABSTRACT

This chapter focuses on instances of pronominal doubling in Dutch dialects whereby the subject is a coordination. In such cases, the doubling clitic can double either the entire coordination or just the first conjunct. We show that these data are problematic for all existing accounts of pronominal doubling in dialectal Dutch, and propose a new one. Our analysis starts out from the three-way classification of the pronominal system by Déchaine and Wiltschko (2002) into DPs, φPs and NPs. We argue that the doubling clitic is a spell-out of a subpart of the doubled subject and that the two form a syntactic chain. This analysis not only provides new insights into well-known cases of 'regular' clitic doubling, it also extends straightforwardly to the coordination data discussed at the beginning of the chapter.

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1. INTRODUCTION

As is well known, several Dutch dialects spoken in Belgium display clitic doubling of subject pronouns (cf. De Geest 1990, 1995; Haegeman 1992, 2004; van Craenenbroeck and van Koppen 2002a, b, 2006, 2008).[1] An illustration of this phenomenon is provided in (1).

(1) Ik paus da se zaailn kommen. (Wambeek Dutch)
I think that $they_{CLITIC}$ $they_{STRONG}$ come
I think they are coming.

There are two subject pronouns in the embedded clause of this example: the clitic pronoun *se* 'they' and the strong pronoun *zaailn* 'they', which together form the clitic doubled subject of the embedded clause. Traditional accounts of this phenomenon (cf. the references mentioned earlier) assume that either the clitic or the strong pronoun is the 'real', thematic subject, while the other is a secondary spell-out phenomenon.

In this chapter, however, we introduce two new sets of data into the discussion that show that neither of these accounts is able to capture all the relevant facts. They concern instances of clitic doubling with coordinated subjects. A first example is given in (2).

(2) Ik paus da me [gou en ik] dui suimen
I think that we_{CLITIC} you_{STRONG} and I_{STRONG} there together
wel kunn oitgeruiken.
PRT can out.come
I think that you and I can solve that together.

In this example, the first person plural clitic *me* 'we' does not double a strong pronoun as such, but rather a coordination of two strong pronouns *gou en ik* 'you and I'. We dub this phenomenon full coordination clitic doubling or FuCCD for short. The second configuration we will focus on is illustrated in (3).

(3) Ik paus da se [zaailn en waailn] dui
I think that $they_{CLITIC}$ $they_{STRONG}$ and we_{STRONG} there
suimen wel oitgeruiken.
together PRT out.come
I think that they and we will solve that together.

[1] As pointed out by van Craenenbroeck and van Koppen (2002a, b, 2006, 2008), Dutch dialects display a second type of subject doubling as well, which does not involve a clitic pronoun as one of its components and which they call topic doubling. In this chapter we abstract away from that phenomenon.

Here, the clitic *se* 'they' does not double the entire coordination (note that the coordination as a whole is first person plural), but rather only the first conjunct of the coordinated subject. We will henceforth refer to such data as first conjunct clitic doubling or FCCD.

This chapter is organized as follows. In the next section we explain why FuCCD- and FCCD-data present a problem for previous accounts of clitic doubling in non-standard Dutch. The analysis we want to propose instead makes use of the so-called big DP-hypothesis (cf. Uriagereka 1995; Laenzlinger 1998; Grohmann 2000; van Craenenbroeck and van Koppen 2002a; Belletti 2005; Poletto 2006; Taraldsen 2006; cf. also Kayne 2002), i.e., the idea that the doubler and the doublee are initially merged together as one constituent. To make our account as precise as possible, though, we first provide an in-depth analysis and classification of the pronominal system of one Dutch dialect in terms of the typology proposed by Déchaine and Wiltschko (2002) (Section 3). This will allow us to make very detailed claims about the internal structure of the big DP in clitic doubling in non-standard Dutch (Section 4). In Section 5 we examine the external syntax of such big DPs, i.e., we provide an analysis of 'regular' clitic doubling in Dutch dialects. Sections 6 and 7 then extend this analysis to FCCD and FuCCD, respectively, showing that the problematic nature of these data disappears under the present approach. Section 8 sums up and concludes.

2. PREVIOUS ACCOUNTS OF CLITIC DOUBLING

Consider again a basic clitic doubling example in (4).

(4) Ik paus da se zaailn kommen. (Wambeek Dutch)
I think that $\text{they}_{\text{CLITIC}}$ $\text{they}_{\text{STRONG}}$ come
I think they are coming.

As already pointed out earlier, traditional accounts of clitic doubling in Dutch can be divided into roughly two camps, depending on which of the two subject pronouns they consider to be the 'real', thematic subject.[2,3] The first line of approach (represented most notably by De Geest 1995 and Haegeman 1992, 2004) assumes that the clitic pronoun is the real subject which is base

[2]An exception is van Craenenbroeck and van Koppen (2002a), who present a precursor to the present analysis. As will become clear in Section 4, though, our present account differs considerably from the 2002 analysis.

[3]It should be clear that we are abstracting away here from details and individual differences and similarities between the accounts discussed. We are mainly interested in the general principle and in the problems caused by FuCCD- and FCCD-data for that general principle.

generated in the VP-internal subject position. This clitic moves via Spec,AgrSP to the CP-domain. The strong pronoun is a secondary spell-out phenomenon, e.g., a spell-out of φ- and focus-features in specAgrSP (Haegeman 2004, p. 128). The second type of analysis, on the other hand, assumes — in the spirit of Sportiche (1995) — that the strong pronoun is the real subject, while the clitic spells out an inflectional head in the high middle field or the low left periphery. This approach is put forward by van Craenenbroeck and van Koppen (2002b, 2006, 2008).

Neither of these two lines of analysis, however, takes into account examples of clitic doubling with coordinated subjects. As we will presently show, this is unfortunate, as such data can provide a new perspective on the analysis of clitic doubling. Consider again some basic FuCCD- and FCCD-examples in (5) and (6).

(5) Ik paus da me [gou en ik] dui suimen
I think that we_{CLITIC} you_{STRONG} and I_{STRONG} there together
wel kunn oitgeruiken. (Wambeek Dutch)
PRT can out.come
I think that you and I can solve that together.

(6) Ik paus da se [zaailn en waailn] dui
I think that $they_{CLITIC}$ $they_{STRONG}$ and we_{STRONG} there
suimen wel oitgeruiken. (Wambeek Dutch)
together PRT out.come
I think that they and we will solve that together.

The data in (5) are problematic for the first type of analysis of clitic doubling. In particular, while it seems plausible that in some cases strong pronouns can surface as the mere spell-out of underlying φ-features (a comparison with resumptive pronouns comes to mind), it is highly implausible that something as complex as a coordination could serve the same purpose. What this example suggests is that it is the second element that is the thematic subject. Does this mean these data support the second traditional account of clitic doubling in Dutch? No, as the data in (6) are problematic for both approaches to clitic doubling. This FCCD-example shows that the clitic cannot be the thematic subject, as it constitutes only part of the subject, while on the other hand it cannot be the spell-out of an agreement head either, as it does not have the same φ-features as the inflected verb, which agrees with the φ-features of the entire coordinated subject. It is clear, then, that FuCCD- and FCCD-data constitute a serious problem for traditional accounts of clitic doubling.

The problem is more fundamental than this, however. In particular, the traditional accounts of clitic doubling are unable to provide a principled answer to a number of more basic questions concerning clitic doubling (cf. in this

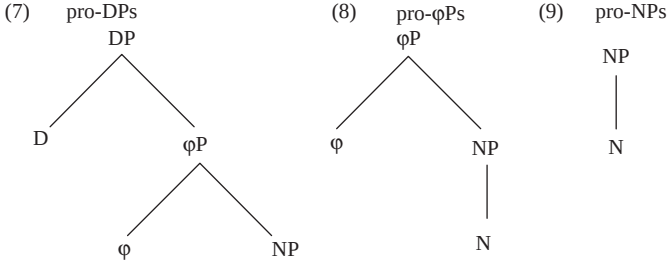
respect the debate between Haegeman 2004 and van Craenenbroeck and van Koppen 2008). First of all, one wonders why object clitic doubling is not possible. Secondly, the absence of clitic doubling of lexical DPs remains mysterious. The task we set ourselves in the remainder of this chapter, then, is to provide an analysis of clitic doubling that is not only able to incorporate FuCCD and FCCD, but that also provides more insight into these two long-standing issues.

3. A CLASSIFICATION OF THE PRONOMINAL SYSTEM IN WAMBEEK DUTCH

In this section we lay the foundation for our analysis of clitic doubling through an in-depth study of the pronominal system of Wambeek Dutch. In particular, we apply the classification of pronouns proposed by Déchaine and Wiltschko (2002) to the Wambeek Dutch pronominal system. The classification of pronouns in Wambeek Dutch will lead to an analysis of clitic doubling in which both the clitic and the strong pronoun are base generated as one DP.

3.1. Déchaine and Wiltschko (2002)

Déchaine and Wiltschko (2002) (henceforth D&W) argue that there are three types of pronouns: pro-DPs, pro-φPs and pro-NPs. These three types of pronouns are related to another, in the sense that pro-DPs have a pro-φP layer and a pro-NP layer, while pro-φPs in turn embed a pro-NP layer. Pro-NPs do not consist of any further layers. The structures in (7)–(9) represent the core idea of D&W's proposal.



These pronominal types can be distinguished from one another on the basis of several syntactic and semantic characteristics. First of all, if a pronoun has DP-status it is expected to act as a DP with respect to the Binding Theory, and hence to obey condition C. Pro-φPs on the other hand acts as pronouns with

respect to the Binding Theory and are only sensitive to condition B. This also means that pro-DPs cannot function as bound variables, whereas pro-φPs can. D&W illustrate these characteristics on the basis of Halkomelem independent pronouns. Two representative examples are given in (10)a–b (from Déchaine and Wiltschko 2002, p. 414).

(10) a. Súq'-t-es [te swíyeqe]$_i$ te kopú-s [tú-tl'ó]$_i$.
search-TRANS-3.SUBJ DET man DET coat-3.POSS DET -3SG
≠ The man$_i$ was looking for his$_i$ coat.

b. [Mékw'ye swíyeqe]$_i$ kw'ákw'ets-et-es te
every DET.PL man looking-TRANS-3.SUBJ DET
stóles-s [tú-tl'ólem]$_i$.
wife3.POSS DET-3PL
≠ All men$_i$ are looking for their$_i$ wives.

These data show that *tú-tl'ó* and *tú-tl'ólem* cannot function as bound variables, and hence, that they are pro-DPs (cf. the original paper for other tests pointing in the same direction). As pointed out by Rullmann (2004), however, the bound variable test should be handled with care, and various contexts should be considered before we can draw conclusions. As a result, we use four different tests in this chapter to determine whether Wambeek Dutch pronouns can be used as bound variables. First of all, we look at simple bound variable contexts as in (11a), in which a QP c-commands and binds the pronoun. Secondly, we discuss sentences in which a pronoun is bound by two antecedents. There are two subcases of this test. In the first one, illustrated in example (11b) (cf. Rullmann 2004, p. 163, ex. 10a), one of the two antecedents is a quantifier. The pronoun *us* gets bound by the pair {*Every woman*, *I*}. In the second subcase, illustrated in (11)c (cf. Rullmann 2004, p. 163, ex. 10c), one of the antecedents is an indefinite DP: the pronoun *we* is bound by the pair {*I*, *a woman*}. Such examples are a subtype of the famous donkey-sentences.

(11) a. Every woman$_i$ thinks she$_i$ is beautiful.

b. Every woman$_3$ I$_S$ date wants us$_{\{S,3\}}$ to get married.

c. Whenever I$_S$ share an apartment with a woman$_3$, we$_{\{S,3\}}$ end up arguing about housework.

A fourth construction in which the bound variable status of pronouns can be tested is ellipsis. A pronoun that can act as a bound variable can induce a sloppy identity reading under ellipsis. An illustration of this is provided in (12a–b). The pronoun *he* in (12b) is a pro-φP (cf. D&W for argumentation)

and can induce a sloppy reading under ellipsis whereas the proper name *Bill*, a DP, cannot.

(12) a. My father thinks that Bill will come and my brother does too.
= λx [x thinks that Bill will come] & λy [y thinks that Bill will come] [strict]
≠ λx [x thinks that x will come] & λy [y thinks that y will come] [sloppy]

b. My father thinks that he will come and my brother does too.
= λx [x thinks that he will come] & λy [y thinks that he will come] [strict]
= λx [x thinks that x will come] & λy [y thinks that y will come] [sloppy]

Finally, D&W argue that pro-DPs and pro-φPs can be used as arguments, while pro-NPs cannot.[4]

To summarize, in order to make a classification of the pronominal system of Wambeek Dutch, we use several tests based on Déchaine and Wiltschko (2002) and Rullmann (2004). The various tests we use and the conclusions they lead to are schematically represented in Table 1 in (13).

(13)

Table 1: Tests categorial status of pronouns.

Test		Pro-DP	Pro-φP	Pro-NP
1	Condition C	+	–	–
2	Bound variable	–	+	–
a	simple QP	–	+	–
b	split antecedent + QP	–	+	–
c	split antecedent + indefinite	–	+	–
d	sloppy identity under ellipsis	–	+	–
3	Argument	+	+	–

3.2. The Pronominal System of Wambeek Dutch

In van Craenenbroeck and van Koppen (2000), we have applied the tripartition between strong, weak and clitic pronouns as proposed by Cardinaletti and Starke (1999) to the pronominal system of Wambeek Dutch. More specifically,

[4]In Déchaine and Wiltschko (2002) this test is more complex, as it also concerns the possible predicate status of a pronoun (in order to distinguish between pro-DPs and pro-φPs). As this test was not applicable to our data for independent reasons, we abstract away from it here.

we have provided arguments for the following classification:

(14)

Table 2: Strong, weak and clitic pronouns in Wambeek Dutch.

		Subject pronouns	Object pronouns
1s	strong	ik	mou
	weak	'k	ma
	clitic	'k	–
2s	strong	gou	ou
	weak	ge	a
	clitic	ge	–
3sm	strong	aai	hem
	weak	–	em
	clitic	'n	'n
3sf	strong	zaai	ee
	weak	ze	ze
	clitic	ze	ze
3sn	strong	–	–
	weak	et	et
	clitic	t	t
1p	strong	waaile	ons
	weak	we	–
	clitic	me	–
2p	strong	gaaile	aaile
	weak	ge	–
	clitic	ge	–
3p	strong	zaaile	eele
	weak	ze	ze
	clitic	ze	ze

In the remainder of this section, we provide a classification of the Wambeek Dutch pronominal system in (14) into pro-DPs, pro-φPs and pro-NPs.

3.3. The Categorial Status of Subject Pronouns in Wambeek Dutch

3.3.1. Subject Clitics

Subject clitics behave as pro-φPs. Table 3 in (15) summarizes the results of the tests. Subject clitics are not sensitive to condition C, they can act as bound variables and they can appear as arguments.[5]

[5] We did not include the actual examples in the main text. They are all provided in the appendix.

(15)

Table 3: Categorial status of subject clitics in Wambeek Dutch.

		Subject clitics
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

3.3.2. Weak Subject Pronouns

As is clear from Table 2 in (14), weak pronouns and clitic pronouns are often homophonous. Furthermore, if a certain person/number-combination can be expressed both as a clitic and as a weak pronoun, the clitic pronoun is preferred in neutral contexts (cf. in this respect also Cardinaletti and Starke 1999). Hence, it is important to make sure we are dealing with weak pronouns in the tests provided below and not with clitic pronouns. In van Craenenbroeck and van Koppen (2000) we show that weak pronouns can be separated from the complementizer by a parenthetical constituent, while clitic pronouns cannot. This is illustrated in (16) for colloquial standard Dutch, which has a clitic pronoun *ie* 'he' and a weak pronoun *ze* 'she'.

(16) a. *Ik denk dat, naar alle waarschijnlijkheid, ie
I think that to all probability he$_{\text{CLITIC}}$
vandaag niet komt.
today not comes

b. Ik denk dat, naar alle waarschijnlijkheid, ze
I think that to all probability she$_{\text{WEAK}}$
vandaag niet komt. (colloquial standard Dutch)
today not comes
I think that it is unlikely that she will come today.

Therefore, we have included an *if*-clause in between the complementizer *da* 'that' and the subject pronoun in the tests (as can be seen in the appendix) in order to guarantee that we are indeed dealing with weak pronouns, rather than with clitics.

According to the tests of D&W, weak subject pronouns should be classified as pro-φPs, as is shown in Table 4 in (17).

(17)

Table 4: Categorial status of weak subject pronouns in Wambeek Dutch.

		Weak subject pronouns
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

3.3.3. Strong Subject Pronouns

With strong subject pronouns, not all tests lead to the same conclusion. On the one hand, the lack of a condition C effect in (18) seems to suggest that strong subject pronouns are pro-φs. However, when we look at the bound variable behavior of these strong pronouns in (19)–(22), the conclusion seems to be that strong subject pronouns are pro-DPs.[6]

Test 1 *Condition C*

(18) Marie$_i$ paust da <u>zaai$_i$</u> gui winnen.
Marie thinks that she$_{STRONG}$ goes win
Marie thinks that she will win.

Test 2 *Bound variable*

a. *simple QP*

(19) Elke vrou$_i$ paust da <u>zaai$_i$</u> gui winnen.
every woman thinks that she$_{STRONG}$ goes win
Every woman thinks that she will win.

b. *Split antecedent + QP*

(20) *Elk maske$_1$ paust da 'k$_S$ gezeid em da <u>waaile$_{\{S,1\}}$</u>
every girl thinks that I said have that we$_{STRONG}$
gonj winnen.
go win
Every girl thinks that I have said that we will win.

[6]For reasons unclear to us, simple QPs do not pattern like the other tests. We hope to return to the contrast between (19) on the other and (20)–(22) on the other.

c. *Split antecedent + indefinite*

(21) *Elke kieje da 'k$_S$ me een vrou$_1$ suimewoeën,
every time that I with a woman live.together
muike waaile$_{\{S,1\}}$ rieze.
make we$_{STRONG}$ argument
Every time I live together with a woman, we quarrel.

d. *sloppy identity under ellipsis*

(22) Marie paust da zaai gui winnen, en Julia oek.
Marie thinks that she$_{STRONG}$ goes win, and Julia also
= λx [x thinks that she will win] & λy [y thinks that she will win] [strict]
≠ λx [x thinks that x will win] & λy [y thinks that y will win] [sloppy]

Déchaine and Wiltschko (2002, p. 424) show that certain pronouns they classify as pro-DPs also fail to trigger condition C violations. They argue that this is expected under Demirdache's (1997) analysis of condition C effects. According to Demirdache, condition C effects can be reduced to strong cross-over violations. In her analysis, the example in (23)a is ungrammatical because in English all DPs are quantificational and undergo Quantifier Raising. The fact that QR takes place leads to a strong cross-over violation, as illustrated in (23)b.

(23) a. *I know he$_i$ loves Oscar$_i$.
b. [Oscar$_i$] [I know he$_i$ loves t$_i$]

Demirdache shows that in languages in which DPs are not quantificational and hence do not undergo QR, there are no Condition C effects. D&W argue that on the basis of this analysis it is expected that pro-DPs that are not quantificational and hence do not undergo QR are also not sensitive to condition C. This, they claim, is why focused pronouns and deictic pronouns are not subject to condition C. Strong pronouns in the dialect of Wambeek necessarily carry a focused interpretation, and hence are not expected to be subject to condition C. This means that the lack of condition C effects in this case does not say anything about the categorial status of strong subject pronouns. However, the fact that they cannot act as bound variables in three out of four contexts seems to lead to the conclusion that these pronouns are in fact pro-DPs. The summary of the results of these tests is provided in Table 5 in (24).

(24)

Table 5: Categorial status of strong subject pronouns in Wambeek Dutch.

	Strong subject pronouns	
1	Condition C	inconclusive
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

3.3.4. Clitic Doubled Subject Pronouns

The test results for clitic-doubled subject pronouns are in all relevant respects identical to those of non-doubled strong subject pronouns (cf. the previous subsection). In particular, while the majority of the tests points towards an analysis of clitic-doubled pronouns in terms of pro-DPs, one test is inconclusive (Condition C) and one points towards a pro-φP-account (simple QPs). Not surprisingly then, we reach the same conclusion as in the previous section, i.e., clitic-doubled pronouns are pro-DPs.

(25)

Table 6: Categorial status of clitic-doubled subject pronouns in Wambeek Dutch.

	Clitic-doubled subject pronouns	
1	Condition C	inconclusive
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

3.3.5 Coordinated Subject Pronouns

Coordinated subject pronouns behave in all respects as pro-DPs. They are sensitive to condition C and cannot appear as bound variables.

(26)

Table 7: Categorial status of coordinated subject pronouns in Wambeek Dutch.

		Coordinated subject pronouns
1	Condition C	+
2	Bound variable	
a	Simple QP	–
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

3.4. The Categorial Status of Object Pronouns in Wambeek Dutch

3.4.1. Object Clitics

Just like subject clitics and weak subject pronouns, object clitics and weak object pronouns are also often homophonous (cf. *supra*, Table 2 in (14)). To make sure that we are dealing with object clitics in this section, we use examples in which the object pronoun appears in between the two parts of a clitic doubled subject. As van Craenenbroeck and van Koppen (2000, 2002a, b, 2006, 2008) have shown, this position is strictly reserved for object clitics.

Surprisingly, the tests based on Déchaine and Wiltschko (2002) and Rullmann (2004) lead to the conclusion that object clitics are not pro-φPs like their subject counterparts, but rather pro-DPs. In particular, they are sensitive to condition C of the binding theory and they cannot be used as bound variables.

(27)

Table 8: Categorial status of object clitics in Wambeek Dutch.

		Object clitics
1	Condition C	+
2	Bound variable	
a	Simple QP	–
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

3.4.2. Weak Object Pronouns

Weak object pronouns can be unambiguously classified as pro-φPs. They are not sensitive to condition C and they can be used as bound variables.

(28)

Table 9: Categorial status of weak object pronouns in Wambeek Dutch.

		Weak object pronouns
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

3.4.3. Strong Object Pronouns

Strong object pronouns behave exactly the same as weak object pronouns with respect to condition C of the binding theory and the ability to act as bound variables. Hence, strong object pronouns can also be classified as pro-φPs.

(29)

Table 10: Categorial status of strong object pronouns in Wambeek Dutch.

		Strong object pronouns
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

3.5. SUMMARY

Following Déchaine and Wiltschko's (2002) classification of pronouns into pro-DPs, pro-φPs and pro-NPs, we have made a detailed inventory of the pronominal system of Wambeek Dutch. On the basis of several tests we have reached the conclusion that the pronominal system of this dialect is made up exclusively out of pro-φPs and pro-DPs. A detailed summary of the classification is provided in (30). In the remainder of this chapter we provide an analysis of subject clitic doubling in Wambeek Dutch that makes crucial use of the categorial status of these various subject and object pronouns.

(30)

Table 11: Categorial status of object and subject pronouns in Wambeek Dutch.

Subject	clitic	φP
	weak	φP
	strong	DP
	clitic-doubled	DP
	coordination of pronouns	DP
Object	clitic	DP
	weak	φP
	strong	φP

4. PUTTING TWO AND TWO TOGETHER: THE BIG DP

4.1. Introduction

In the previous section we have given a detailed classification of the pronominal system of Wambeek Dutch in terms of the three-way split proposed by Dechaîne and Wiltschko (2002). In particular, while object clitics and strong subject pronouns behave as pro-DPs, weak and clitic subject pronouns have the defining characteristics of pro-φPs. In this section we show that this classification leads to a very specific proposal for the analysis of clitic doubling in Wambeek Dutch, one that straightforwardly accounts for a number of salient characteristics of this phenomenon.

4.2. The Basic Structure

An analysis of pronominal doubling that has been around for at least ten years, but that has become increasingly popular recently, is the so-called big DP-account (cf. Uriagereka 1995; Laenzlinger 1998; Grohmann 2000; van Craenenbroeck and van Koppen 2002a; Belletti 2005; Poletto 2006; Taraldsen 2006; cf. also Kayne 2002). It starts out from the assumption that the doubled and the doubling element are initially merged together in one complex 'big DP', which is then split up — usually by movement — in the rest of the derivation. The main problem with such accounts, though, is that they are either not explicit about the internal structure of the big DP or that they assume an internal structure that seems compatible with only part of the data. In particular, it is well known that in many Romance languages the morphology of (object) clitic pronouns is identical to that of determiners. Accordingly, several researchers have proposed that clitic-doubled objects in Romance start out as a DP the head of which is the clitic pronoun, while the rest of the DP is spelled out as the doubled element (cf. Uriagereka 1995; Laenzlinger 1998; Grohmann 2000). While this looks like a promising tack to take for Romance, however, it breaks down in Germanic, as Germanic determiners

are *not* homophonous to clitic pronouns. Consider in this respect the contrast between the French examples in (31) and the Wambeek Dutch ones in (32).

(31) a. Jean voit la femme.
John sees the woman
John sees the woman.

b. Jean la voit. (French)
John her sees
John sees her.

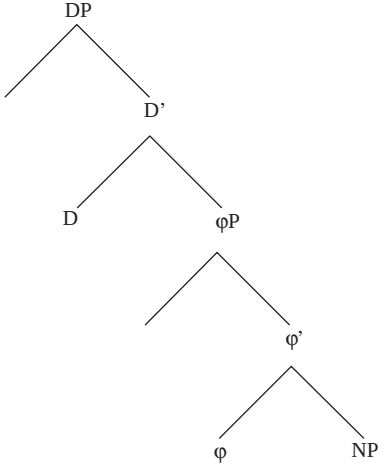
(32) a. Jef ziet de vrou.
Jef sees the woman
Jef sees the woman.

b. Jef ei-se gezien. (Wambeek Dutch)
Jef has-her seen
Jef saw her.

While in French the form of the object clitics is systematically identical to that of the corresponding determiners, in Wambeek Dutch the two paradigms are substantially different. This does not necessarily rule out the clitics-as-D°-analysis for Germanic (cf. van Craenenbroeck and van Koppen 2002a), but it does take away the key piece of evidence supporting such an account in Romance.

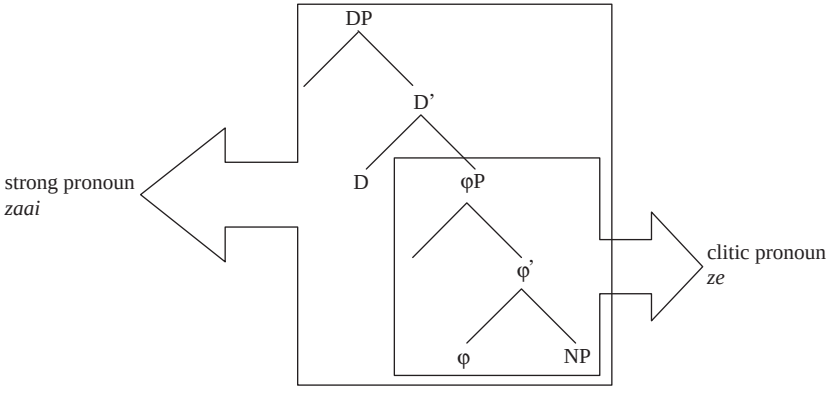
In this chapter, we want to take a different approach, one which is based on the classification argued for in the previous section. Recall that in Wambeek Dutch — as in all varieties of Dutch — it is only strong subject pronouns that can be doubled by a clitic. In Section 3.3.3 we have argued that strong subject pronouns should be analyzed as pro-DPs. This implies that they have the abstract structure outlined in (33) (cf. D&W 2002, p. 410).

(33) schematic structure of strong subject pronouns



Recall that according to D&W, a pro-DP contains a pro-φP and a pro-NP as its subparts. This, we want to argue, provides the key to understanding the mechanism behind clitic doubling in Wambeek Dutch. In particular, in Section 3.3.1 we have shown that subject clitics are themselves pro-φPs. Given that the structure of strong subject pronouns contains such a φP, it seems tempting to try and relate the presence of the clitic in a doubling configuration to this particular subpart of the internal structure of strong subject pronouns. In particular, as will become clear and technically precise in the following sections, we will assume that a clitic-doubled form like *ze-zaai* ('she', lit. she_{CLITIC}-she_{STRONG}) can arise as a result of double spell-out: the DP-part of the structure in (33) is spelled out as a strong pronoun, and the φP-part as a clitic (cf. Barbiers et al. 2007 for a comparable — though not identical — approach to clitic doubling). This is schematically represented in (34).

(34) schematic structure of a clitic-doubled strong subject pronoun



This is the analysis we will develop more fully in the rest of the chapter. A clitic-doubled DP starts out as one constituent, and in the course of the derivation, various parts are spelled out as different pronominal elements. Note that this is not only a very explicit proposal about the internal structure of big DPs, it also accords very well with our findings from the previous section, i.e., strong subject pronouns are pro-DPs and subject clitics are pro-φPs. Before we focus on the external syntax of clitic doubling — thereby making explicit how the structure in (33) can be subject to double spell-out — we first want to look at a number of predictions raised by this basic proposal.

4.3. Predictions Made by the Proposal

The big DP-approach we have sketched in the previous section allows for a fairly straightforward analysis of two long-standing questions surrounding clitic doubling in Dutch dialects. First of all, it can explain why these dialects lack clitic doubling of fully lexical DPs. Consider in this respect the example in (35).

(35) *… da-se-t dei doktores gezien eit.
that-se$_{\text{CLITIC}}$-it$_{\text{CLITIC}}$ that female.doctor seen has
intended: … that that female doctor has seen it.

The constituent *dei doktores* 'that female doctor' is a DP. Given that a DP contains a φP and an NP as its subparts, this seems to suggest that the doubling mechanism proposed in the previous section should be applicable here as well. Note, however, that there is a crucial difference between (33)/(34) on the one hand and (35) on the other. While in the structure in (33)/(34) φP contains only functional material (say, φ-features), in a DP such as *dei doktores* the NP-part contains lexical material (the noun *doktores*). Given that NP is dominated by φP, this material is also present in φP. It is clear that such a constituent cannot be spelled out as a clitic — one could even wonder if it can be spelled out separately at all. In other words, the lack of clitic doubling with lexical DPs follows straightforwardly from the present account.

The second and arguably more puzzling question concerning pronominal doubling in Dutch concerns the absence of object clitic doubling. Consider a relevant example in (36).

(36) *… da-ge-ze ee gezien etj.
that-you$_{\text{CLITIC}}$-her$_{\text{CLITIC}}$ her$_{\text{STRONG}}$ seen have
… that you have seen her.

The sentence in (36) is grammatical with either the object clitic on its own or the strong object pronoun on its own, but not when the two are combined. This fact is particularly mysterious from the point of view of big DP analyses. Given that there is no intrinsic difference between object and subject DPs, a mechanism that is available to one should be available to the other as well. In the present proposal, however, the absence of object clitic doubling follows from the two basic ingredients: on the one hand the idea that the clitic is a spell-out of a subpart of the strong subject pronoun and on the other the classification of the pronominal system in terms of the distinction between DPs, φPs and NPs. Recall that we have shown in the previous section that object clitics, unlike their subject counterparts, are DPs rather than φPs. Strong object pronouns on the other hand were shown to be φPs. This means that object clitics can never be the spell-out of a subpart of strong object pronouns, and as a result, that object clitic doubling is not an option in the dialects under consideration here.[7]

Summing up, the theory we have outlined so far not only makes very specific (and hence falsifiable) claims about the internal structure of big DPs in Wambeek Dutch, it also offers a straightforward account for two long-standing

[7]One object doubling configuration that remains theoretically possible is the one whereby a strong object pronoun (a φP) spells out part of an object clitic (a DP). We return to this option in the next section.

questions concerning pronominal doubling in non-standard Dutch. In the next section we examine the clausal syntax of these big DPs.

5. THE SYNTAX OF CLITIC DOUBLING

Determining the internal structure of a clitic-doubled DP is only the first half of the analysis. We also have to examine its external syntax, in order to determine which syntactic processes act upon it in the course of the derivation, thus making technically precise the mechanism of double spell-out alluded to several times earlier.

We will argue that the big DP is subject to two separate Probe/Goal-relations with concomitant Internal Merge operations. The first one is the well-known mechanism responsible for subject agreement on the verb. Specifically, T° probes the subject in spec*v*P, after which the subject is internally merged in specTP. The second, higher Probe specifically targets the clitic part of the big DP (i.e., the φP). To make this probing operation technically precise, we first focus on the feature specification of subject clitics. As is shown in Table 12 in (37), Wambeek Dutch has a full paradigm of subject clitics. We take this to indicate that they have a full set of (valued) φ-features.

(37)

Table 12: Subject clitic paradigm in Wambeek Dutch.

	Singular	Plural
1	*'k*	*me*
2	*ge*	*ge*
3m	*n*	*ze*
f	*ze*	
n	*t*	

This does not exhaust their feature specification, however. In particular, there is a featural difference between subject clitics and strong subject pronouns. Consider in this respect the examples in (38) and (39).

(38) (*Ge) *(gou) em gezien emmen is ni genoeg.
you$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ him seen have-$_{\text{INF}}$ is not enough
Having seen him is not enough.

(39) En (*ge) *(gou) em helpen zeker?
and you$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ him help-$_{\text{INF}}$ surely
And you're gonna help him, I suppose?

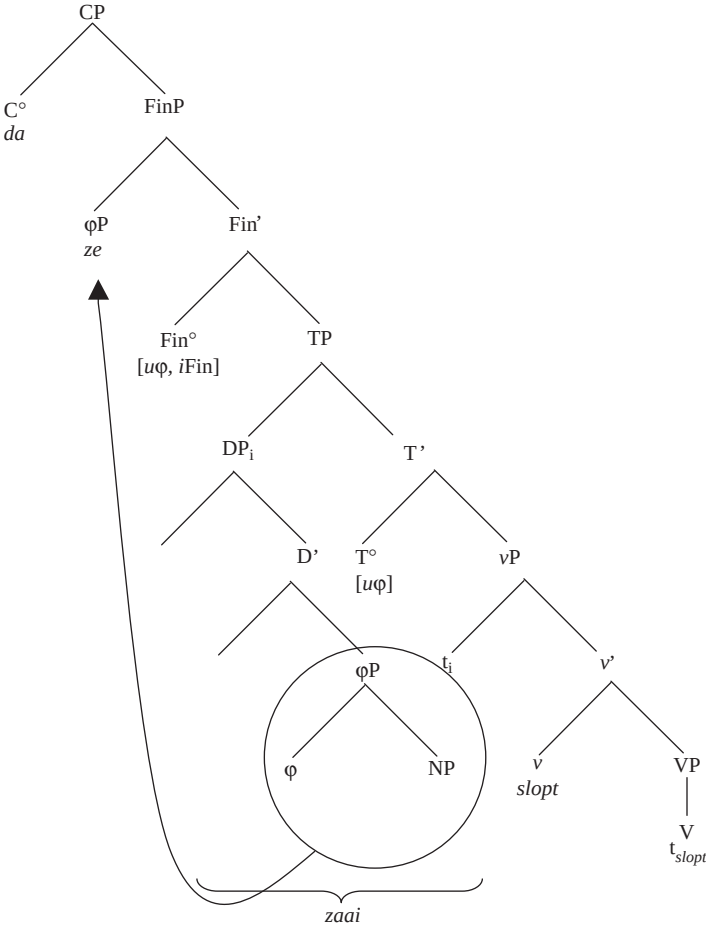
These data show that while strong pronouns are allowed as infinitival subjects, clitic-doubled pronouns and bare clitics are not. More generally, subject clitics are restricted to finite contexts.[8] We encode this observation by adding an

[8]Cf. van Craenenbroeck and van Koppen (2002b) for a similar observation about object clitics.

uninterpretable/unvalued Fin(iteness)-feature to the feature matrix of subject clitics. This, we assume, is what formally distinguishes a non-doubled strong subject pronoun from a clitic-doubled one: the latter carries an unvalued [Fin]-feature, but the former does not. This feature has to be checked against an appropriate C-head, thus ensuring that clitics only show up in finite contexts. Following current cartographic theorizing on the CP-domain (cf. Rizzi 1997 *et seq.*), we will assume that it is Fin° that targets subject clitics in Wambeek Dutch, i.e., Fin° is the second Probe alluded to at the beginning of this section. With all of this in mind, the analysis of a basic clitic doubling example such as the one in (40) can now be represented as in (41).

(40) … da ze zaai slopt.
that she_{CLITIC} she_{STRONG} sleeps
… that she's sleeping.

(41)



In this structure, the strong subject pronoun is merged as a (big) DP in spec*v*P. When T° is merged, the unvalued φ-features of this head cause the subject to raise to its specifier. In the next step of the derivation, Fin° is merged. Due to its combination of φ- and Fin-features, it specifically probes for the clitic portion of the subject and attracts it to specFinP. Finally, the finite complementizer is merged (arguably in Force°, but the head is neutrally labeled C° here), which concludes the narrow syntactic derivation of this subclause. At PF, two links in the subject chain are spelled out: the φP in specFinP is spelled out as a clitic, and the DP in specTP as a strong subject pronoun. This completes our derivation of subject clitic doubling in Wambeek Dutch.

Before moving on to our analysis of first conjunct clitic doubling, there is one technical aspect of our analysis we want to focus on further. It concerns the notion of subject chain we are adopting. As pointed out in the previous paragraph, we assume the clitic and the strong pronoun to represent two links in a single (extended) movement chain. That is, the subject undergoes φ-driven movement from spec*v*P to specFinP via specTP, but given its specific feature specification, the final step of the movement operation involves only a smaller portion of the subject-DP. This type of approach has a number of distinct advantages. First of all, the double spell-out mechanism we propose is perfectly in line with the more well-known cases of multiple spell-out discussed in Nunes (2004). Like in those other phenomena, the double spell-out mechanism involved in clitic doubling is optional. This is illustrated in (42).

(42) … da ze (zaai) slopt.
that she_{CLITIC} she_{STRONG} sleeps
… that she's sleeping.

Moreover, this double spell-out — which under normal circumstances would cause the linearization algorithm to crash — is only allowed because one of the spelled out copies undergoes morphological merger with a nearby host. In particular, it is well known that clitics in Dutch dialects form one morpho-phonological unit with the complementizer to their left (cf. van Craenenbroeck and van Koppen 2002b, p. 285n3 for some of the evidence in favor of this claim). As such, our analysis explains why clitic doubling always involves a clitic, and not, say, two strong pronouns.

A second advantage of taking the clitic and the strong subject pronoun to constitute two links in the same movement chain, is that it straightforwardly accounts for the ungrammaticality of examples such as the one in (43).

(43) Zaai pauz-ek da (*se) da guit duun.
she_{STRONG} think-I that she_{CLITIC} that goes do
SHE I think will do that.

This example shows that while a strong subject pronoun can undergo long focalization, it cannot do so when it is clitic doubled. In other words, a

clitic-doubled strong subject pronoun cannot move across its doubling clitic. If the two were completely independent syntactic objects, this restriction would be unexpected, especially since no relativized minimality seems to be at stake (the clitic not being a suitable target for focalization). Under the approach adopted here, though, the facts follow straightforwardly. Given that it is not allowed to move any link but the highest in an existing movement chain, the strong pronoun in a clitic doubling configuration is frozen in place.

Thirdly and finally, the claim that clitic and strong pronoun form a single chain also provides a handle on a problem facing nearly all big DP-analyses of subject doubling, i.e., the fact that the derivation in (41) at first sight violates the Subject Condition. It particular, it looks like the clitic is subextracted from a subject in its derived position. Under the assumption adopted here, however, there is no such subextraction. Instead, there is one single movement chain of which two chain links happen to be spelled out.

Summing up, in this section we have outlined our analysis of clitic doubling in Wambeek Dutch (and in non-standard Dutch more generally). The clitic and the strong pronoun start out as one single DP (cf. *supra*, Section 4.2). This DP moves to specFinP via specTP, but due to its having an uninterpretable/unvalued [Fin]-feature, the final step of this movement operation only affects the φP-part of the DP. At PF, the two highest chain links in the movement chain of the subject are spelled out, thus creating a typical clitic doubling configuration. This analysis turned out to be perfectly in line with other well-known instances of multiple spell-out, it provided an account for the fact that doubled strong pronouns are frozen in place, and it opened up a way of circumventing the apparent Subject Island violation inherent in big DP-analyses of subject doubling.[9] In the next section we apply this analysis to first conjunct clitic doubling.

6. FIRST CONJUNCT CLITIC DOUBLING

Recall that at the outset of this chapter, we presented a new set of doubling data to show that none of the traditional accounts of clitic doubling in non-standard Dutch is able to handle all the relevant facts. In particular, the fact that clitics can be used to double the first conjunct of a coordinated subject seems incompatible both with accounts that assume the clitic is the spell-out of an agreement head (van Craenenbroeck and van Koppen 2002b) and with analyses that assume the

[9]Note also that the hypothetical account left open in Note 7, i.e., an object clitic DP being doubled by a strong object pronoun φP, is ruled out by the analysis we have presented. In particular, given that the movement that leads to the 'separation' of the clitic and the strong pronoun is due to the [Fin]-feature of the clitic, it would always induce movement of the entire DP in this hypothetical case, and the strong pronoun φP would never surface as a separate syntactic object (and hence, would not be spelled out separately).

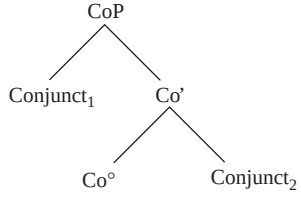
doubled element is a mere spell-out of φ-features (cf. Haegeman 2004). In this section we show that FCCD can be straightforwardly handled in the proposal put forward in this chapter. The analysis we will propose is virtually identical to the account presented above for 'regular' clitic doubling. The only complication will be the fact that the doubled element is now part of a coordination.

In an FCCD-sentence, the clitic that is attached to the complementizer (or the fronted verb) agrees with the first conjunct of a coordinated subject. An example is given in (44).

(44) … omda-ge gou en ik makannern gezien emmen.
because-you$_{CLITIC}$ you$_{STRONG}$ and I each.other seen have
… because you and I saw each other.

In this example the subject clitic *ge* 'you' agrees only with the first conjunct *gou* 'you' of the coordinated subject *gou en ik* 'you and I'.[10] Given that the finite verb is plural and given that the sentence contains a reciprocal (i.e., *makannern* 'each other'), it is clear that this is not a case of IP-coordination, but that it is only the subject that is coordinated. In other words, what we have here is a case of pronominal subject doubling whereby the doubling element doubles only part of the subject. To be able to analyze these data, we first have to make explicit what our analysis of coordinated structures is. We follow Munn (1993), Kayne (1994), Johannessen (1998), Progovac (1998) and van Koppen (2005) in assuming that coordinations have the schematic structure in (45), whereby the coordinator is the head of the entire coordination, the first conjunct sits in its specifier, and the second conjunct is the complement of the coordinator.

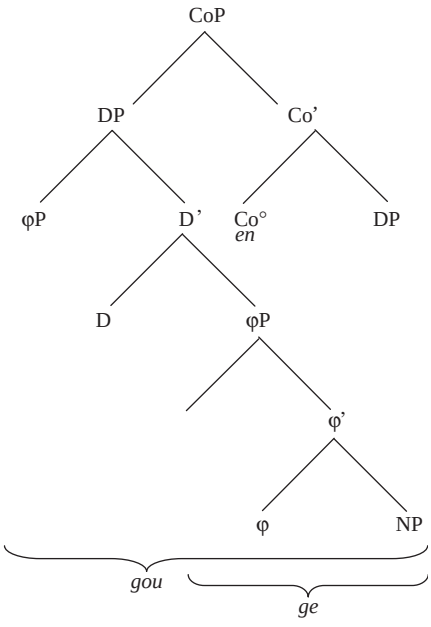
(45)



With this much as background, we can proceed to our analysis of FCCD. The starting point will be the analysis of 'regular' clitic doubling outlined in the previous section. This means the subject clitic and the strong subject pronoun that it doubles start out as one big DP. In particular, the clitic corresponds to the φP-part of the strong subject pronoun that appears as first conjunct. This is schematically represented in (46) for the example in (44).

[10]Note that the coordination as a whole is first person plural, and hence incompatible with the second person clitic.

(46)



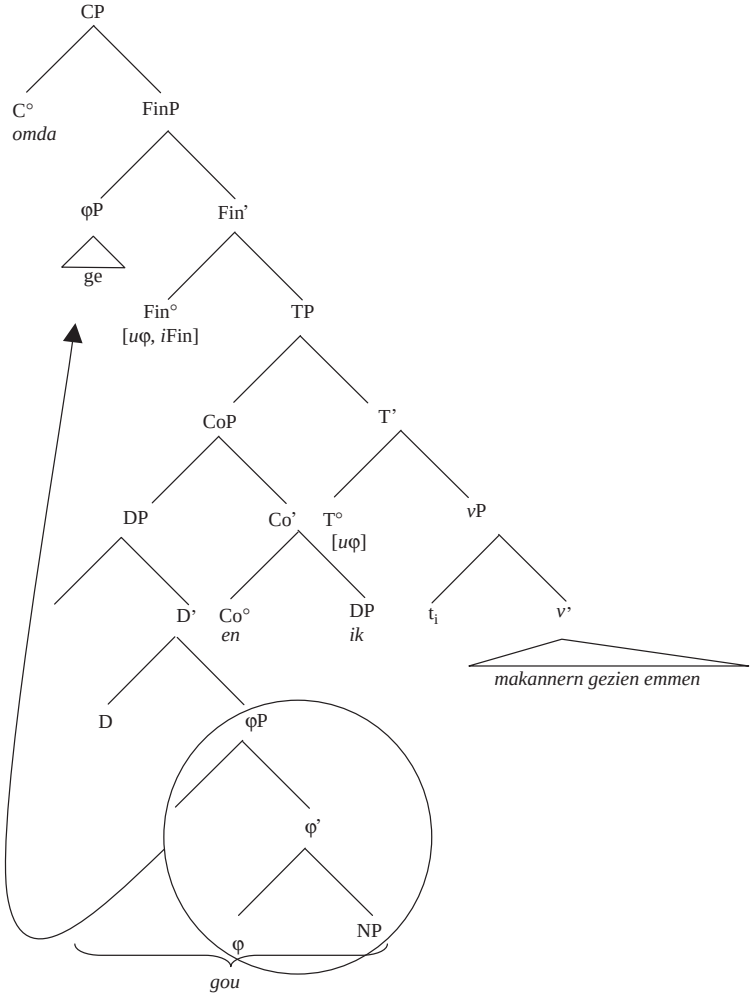
This complex structure is now merged in the subject position (i.e., spec*v*P) of the verb *gezien* 'seen' in (44), after which point the derivation proceeds as in (47) on the next page.

In this structure, the big DP containing both the strong subject pronoun and the subject clitic is merged as the first conjunct of the CoP in spec*v*P. When T° is merged, the unvalued φ-features of this head cause the CoP to raise to its specifier. In the next step of the derivation, Fin° is merged. Due to its combination of φ- and Fin-features, it specifically probes for the clitic portion of the first conjunct of the CoP and attracts it to specFinP. At PF, the φP in specFinP is spelled out as a clitic, and the DP in the first conjunct of the coordination as a strong subject pronoun. This completes our derivation of FCCD in Wambeek Dutch.

It is clear that the derivation sketched in (47) is highly similar to the one presented in the previous section. Both analyses depend on the same two basic ingredients, i.e., big DP and double spell-out. In other words, our approach to clitic doubling extends naturally to FCCD-data. At the same time, however, the structure in (47) raises two new questions. The first concerns the Coordinate Structure Constraint (CSC). In particular, the operation moving the φP from its DP-internal position to specFinP seems to violate this well-known and well-established locality restriction on movement. It is important to note that the solution we presented in the previous section with respect to the Subject Island is only of limited avail here. Specifically, if the clitic and the strong pronoun represent two links in a single movement chain — as we claim they do — the derivation in (47) does not contain an instance of subextraction out of one conjunct of a coordinated structure (just like the derivation in (41) in the

previous section did not contain an instance of subextraction out of a subject in a derived position).

(47)



However, given that the CSC blocks not only subextraction out of a conjunct, but also movement of the entire conjunct, the representation in (47) is still predicted to be illicit. What we want to propose instead is that it is the double spell-out mechanism itself that salvages the CSC-violation in this example. In particular, by being spelled out, the strong pronoun in specCoP starts acting like a resumptive (or more specifically, an intrusive) pronoun that amnesties the CSC-violation (cf. Kroch 1981). This line of approach makes an immediate prediction with respect to the optionality of doubling in FCCD. Recall that in 'regular' clitic doubling, the spelling out of the strong subject pronoun is optional (cf. example (48), repeated from above).

(48) … da ze (zaai) slopt.
that she_{CLITIC} she_{STRONG} sleeps
… that she's sleeping.

In FCCD, however, the strong subject pronoun takes on the role of an intrusive pronoun that is needed to salvage an otherwise unavoidable CSC-violation. This predicts that in such cases, doubling should be obligatory. As shown in (49), this prediction is borne out.[11]

(49) … omda-ge *(gou) en ik makannern gezien emmen.
because-you_{CLITIC} you_{STRONG} and I each.other seen have
… because you and I saw each other.

The second question that arises as a result of the derivation in (47) concerns the absence of second conjunct clitic doubling. In particular, nothing in the analysis seems to rule out merging the big DP as the *second* conjunct of the CoP, thus leading to clitic doubling of this conjunct. This would lead to the derivation of ungrammatical examples such as the one in (50), clearly an undesirable result.

(50) *… omda-k gou en ik makannern gezien emmen.
because-I_{CLITIC} you_{STRONG} and I each.other seen have
intended: … because you and I saw each other.

We propose to ascribe the ill-formedness of examples such as (50) to a locality violation (cf. in this respect van Koppen 2005). In particular, the first conjunct is a more local Goal for the Fin°-Probe than the second one, and as a result, it blocks clitic movement from that second conjunct. Although we will leave the details of such an account as a topic for further investigation, it is important to point out that it is entirely consistent with current theorizing on the locality of (φ-)Agree-relations. Moreover, as we will show in the next section, the locality restriction on the second conjunct can be lifted when Fin°-driven movement proceeds from both conjuncts simultaneously. In such a scenario the locality considerations alluded to here no longer apply, and the φP of the second conjunct can be raised.

To sum up, in this section we have presented our analysis of first conjunct clitic doubling. In so doing, we made use of the two basic ingredients that were introduced in the previous section: big DPs and double spell-out. The fact that the doubled strong pronoun is situated inside a coordination led to a discussion of the CSC. We proposed that spelling out the chain link inside the first

[11]Note that the ungrammaticality of (49) cannot be due to the fact that clitics are not allowed to occur in coordinations (Kayne 1975). This is suggested by the well-known fact that in Celtic languages, the first conjunct of the complement of a preposition can cliticize onto that preposition (McCloskey and Hale 1984).

conjunct as a strong pronoun serves to create an intrusive pronoun that salvages an otherwise unavoidable CSC-violation. This also explained why spelling out the strong pronoun is obligatory in this case (unlike in 'regular' clitic doubling). Finally, we looked at the absence of second conjunct clitic doubling, and argued that such a phenomenon would violate the locality condition on the Agree-relation induced by Fin°.

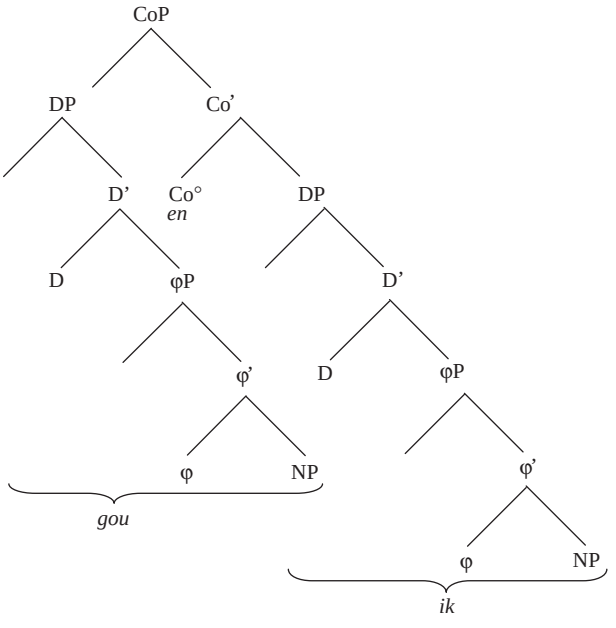
7. FULL COORDINATION CLITIC DOUBLING

Recall that in full coordination clitic doubling (FuCCD), it is not the first conjunct but rather the entire coordination that is doubled by a clitic. Consider again a representative example in (51).

(51) … omda-me gou en ik makannern gezien emmen.
because-we$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ and I each.other seen have
… because you and I saw each other.

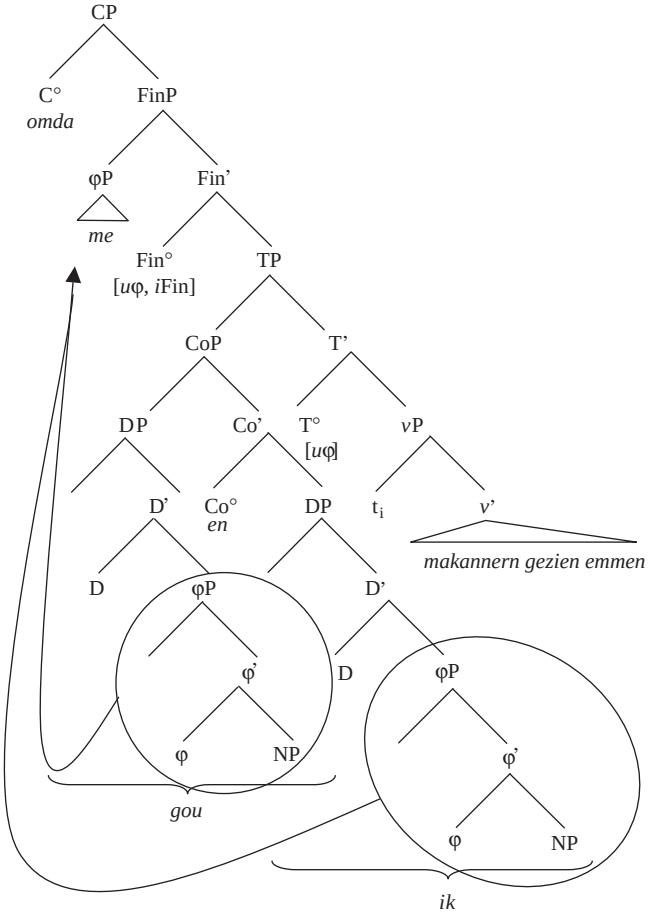
In this sentence the clitic *me* 'we' has the same φ-feature specification as the entire coordination *gou en ik* 'you and I'. As such, it seems to double the entire CoP. At first sight, this poses a considerable problem for the type of big DP-analysis we have been advocating so far. In particular, in our analysis the doubling and the doubled pronoun were simply two sides of the same coin, as they spelled out different portions of the same DP-structure. Consider in this respect the structure of the coordination *gou en ik* 'you and I':

(52)



The problem this structure poses for the big DP-analysis of the previous sections is the fact that there is no φP available that can serve as spell-out of the clitic-double of the entire CoP. One way out of the problem would be to assume that the functional superstructure of CoP contains such a φP, but given what little is known about CoPs, that would amount to a pure stipulation. The approach we want to suggest here is quite different. Note that the structure in (52) does contain a φP in each individual conjunct. Moreover, the combined φ-feature specification of these two φPs is precisely the specification of the doubling clitic in (51). What we propose, then, is that FuCCD arises as the result of ATB-movement of the φPs of both conjuncts to specFinP. More specifically, the derivation of the example in (51) proceeds as in (53).

(53)



This structure contains not one, but two big DPs: one in each conjunct of the CoP. This CoP is probed by the unvalued φ-features of T° and subsequently moves to specTP, after which Fin° is merged. Just like in the previous sections, the combination of φ- and Fin-features acts as a Probe. What is different about this derivation, though, is that this probing operation triggers ATB-movement of *both* φPs to specFinP.[12] The highest copy of this movement chain is then spelled out as a clitic that combines the φ-features of both independent φPs, i.e., as a clitic that doubles the entire coordination. This completes our derivation of FuCCD in Wambeek Dutch.

The analysis outlined earlier is highly similar to the ones discussed in the two previous sections. Once again, we make crucial use of big DPs on the one hand and double spell-out on the other. In other words, the analysis pursued in this chapter straightforwardly — and in a unified manner — accounts not only for 'regular' clitic doubling, but also for FCCD and FuCCD. Moreover, the account predicts that an FCCD-clitic and an FuCCD-clitic should not be able to co-occur. Given that both of them are the spell-out of a copy of φP in specFinP, at most one of them should be able to surface in a single sentence. As the example in (54) illustrates, this prediction is borne out.

(54) … omda<*-ge>-me<*-ge> gou en ik makannern
because-you$_{\text{CLITIC}}$-we$_{\text{CLITIC}}$-you$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ and I each.other
gezien emmen.
seen have
… because you and I saw each other.

In this example, two clitics are attached to the complementizer. One of them doubles the entire coordination (the FuCCD-clitic) and the other one only the first conjunct (the FCCD-clitic). Regardless of the word order, however, this pattern is ruled out. This provides support for the idea that FCCD and FuCCD should be given a unified account, which they receive in this chapter.

Summing up, in this section we have shown that FuCCD can be straightforwardly incorporated into the account of pronominal doubling that we have put forward in this chapter. This means that the second set of data that proved problematic for traditional accounts of clitic doubling also becomes unproblematic from the present perspective.

[12] An at first sight unusual aspect of this analysis concerns the type of ATB-movement it employs. Normally, the two ATB-moving elements have to be identical, while here it looks like the first one is a second person clitic and the second one a first person clitic. However, under a Late Insertion approach to the syntax-morphology interface, this apparent problem vanishes. What is moved in both cases is a φP, i.e., a bundle of ϕ-features, and the way in which these bundles are actually spelled out is determined at a later stage in the derivation.

8. CONCLUSION

In this chapter we have focused on one type of pronominal subject doubling in Dutch dialects, namely the type whereby a clitic acts as the doubling element. First of all, we have shown that the traditional accounts of this phenomenon all run into problems when clitic doubling with coordinated subjects is considered. In such a case, the clitic can agree either with the first conjunct or with the coordination as a whole. Given that these facts are incompatible with a number of assumptions made by previous accounts of clitic doubling, they present a serious challenge for the theory.

We have then proceeded to put forward a unified theory of clitic doubling. Central to that account was the so-called 'big DP', a complex structure in which the doubling and the doubled element are merged together. Moreover, based on a classification of the Wambeek Dutch pronominal system into DP/φP/NP (cf. Déchaîne and Wiltschko 2002), we were able to make the internal structure of these big DPs very precise. The clausal syntax of clitic doubling involved two probing heads, each attracting a different part of the big DP. In the final two sections we have shown that this new account straightforwardly extends to first conjunct and full coordination clitic doubling. As such, these data ceased to be problematic.

One issue we have touched upon only minimally in this chapter is the topic of crosslinguistic variation. In Section 4.2 we pointed out that while in French the morphology of subject clitic pronouns could be seen as strong evidence in favor of a particular incarnation of the big DP-account, such evidence is lacking in Germanic. In the discussion that followed we implicitly assumed that the account we have proposed for dialectal Dutch is not — or at least not straightforwardly — transferable to Romance. This is not altogether surprising given that there are many well-known and quite noticeable differences between pronominal doubling in the two language groups. To name but two of them, clitic doubling in Spanish targets objects, not subjects and unlike the data we have discussed, Spanish can double full DPs:

(55) Lo vi a Luis.
him$_{\text{CLITIC}}$ I.see to Luis
I see Luis.

That said, however, it is clear that a unified analysis for all types of pronominal doubling should remain the ultimate goal of current theorizing. With this chapter, we hope to have come a small step closer towards achieving that goal.

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APPENDIX: THE CATEGORIAL STATUS OF PRONOUNS IN WAMBEEK DUTCH

A.1. Subject Pronouns

A.1.1. Subject Clitics

Test 1 Condition C

(56) Jef$_i$ paust dat $\underline{n}_i$ gui winnen.
Jef thinks that he$_{CLITIC}$ goes win
Jef thinks that he will win.

Test 2 Bound variable

a *Simple QP*

(57) Elke joeng$_i$ paust dat $\underline{n}_i$ gui winnen.
every boy thinks that he$_{CLITIC}$ goes win
Every boy thinks that he will win.

b *Split antecedent + QP*

(58) Elke student$_1$ paust da-k$_S$ gezeid em da $\underline{me}_{\{S,1\}}$
every student thinks that-I$_{clitic}$ said have that we$_{CLITIC}$
gonj winnen.
go win
Every student thinks that I have said that we will win.

c *Split antecedent + indefinite*

(59) Elke kieje da'k$_S$ me een vrou$_1$ suimewoeën, muike
every time that-I with a woman live.together make
$\underline{me}_{\{S,1\}}$ rieze.
we$_{CLITIC}$ argument
Every time I live together with a woman, we quarrel.

d *Sloppy identity under ellipsis*

(60) Jef paust dat $\underline{n}$ gui winnen, en Piet oek.
Jef thinks that he$_{CLITIC}$ goes win and Piet also
= λx [x thinks that he will win] & λy [y thinks that he will win] [strict]
= λx [x thinks that x will win] & λy [y thinks that y will win] [sloppy]

Test 3 Argument status

(61) Jef paust dat $\underline{n}$ gui winnen.
Jef thinks that he$_{CLITIC}$ goes win
Jef thinks that he will win.

(62)

		Subject clitics
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

A.1.2. Weak Subject Pronouns

Test 1 Condition C

(63) Waaile venj da, as men trouven, $\underline{\text{we}}_i$ veel geldj
we find that if we marry we_{WEAK} much money
mute kraaigen.
should get
We think that, if we marry, we should get a lot of money.

Test 2 Bound variable

a *Simple QP*

(64) Elke vrou_i paust da, as ze mo wacht, $\underline{\text{ze}}_i$
every woman thinks that if she PRT wait, she_{WEAK}
gui trouven.
goes marry
Every woman thinks that, if she just waits, she will marry.

b *Split antecedent + QP*

(65) Elke vrou_1 da k_S gezien em zeit da, azzek me ee
every woman who I seen have said that if.I with he
trouf, $\underline{\text{we}}_{\{S,1\}}$ geldj kraaigen.
marry we_{WEAK} money get
Every woman I saw said that, if I marry her, we will get money.

c *Split antecedent + indefinite*

(66) Elke kieje da'k_S me een vrou_1 klap blekt da, azzek
every time that.I with a woman talk appears that if.I
me ee trouf, $\underline{\text{we}}_{\{S,1\}}$ veel geldj kraaigen.
with her marry we_{WEAK} much money get
Every time I talk with a woman, it appears that, if I marry her, we get a lot of money.

d *Sloppy identity under ellipsis*

(67) Waaile pauzen da, ast reigert, we$_{WEAK}$ gonj winnen, mo gaailn oek.
we think that if.it rains we go win but you too
= λx [x thinks that we will win] & λy [y thinks that we will win] [strict]
= λx [x thinks that x will win] & λy [y thinks that y will win] [sloppy]

Test 3 Argument

(68) Waaile venj da, as men trouven, we$_{WEAK}$ veel geldj mute kraaigen.
we find that if we marry we much money should get
We think that, if we marry, we should get a lot of money.

(69)

	Weak subject pronouns	
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

A.1.3. Strong Subject Pronouns

Test 1 Condition C

(70) Marie$_i$ paust da zaai$_i$ gui winnen.
Marie thinks that she$_{STRONG}$ goes win
Marie thinks that she will win.

Test 2 Bound variable

a *Simple QP*

(71) Elke vrou$_i$ paust da zaai$_i$ gui winnen.
every woman thinks that she$_{STRONG}$ goes win
Every woman thinks that she will win.

b *Split antecedent + QP*

(72) *Elk maske$_1$ paust da 'k$_S$ gezeid em da waaile$_{\{S,1\}}$ gonj winnen.
every girl thinks that I said have that we$_{STRONG}$ go win
Every girl thinks that I have said that we will win.

c *Split antecedent + indefinite*

(73) *Elke kieje da ‘k$_S$ me een vrou$_1$ suimewoeën, muike
every time that I with a woman live.together make
waaile$_{\{S,1\}}$ rieze.
we$_{STRONG}$ argument
Every time I live together with a woman, we quarrel.

d *Sloppy identity under ellipsis*

(74) Marie paust da zaai gui winnen, en Julia oek.
Marie thinks that she$_{STRONG}$ goes win, and Julia also
= λx [x thinks that she will win] & λy [y thinks that she will win] [strict]
≠ λx [x thinks that x will win] & λy [y thinks that y will win] [sloppy]

Test 3 Argument status

(75) Marie paust da zaai gui winnen.
Marie thinks that she$_{STRONG}$ goes win
Marie thinks that she will win.

(76)

	Strong subject pronouns	
1	Condition C	inconclusive
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

A.1.4. Clitic-Doubled Subject Pronouns

Test 1 Condition C

(77) Marie$_i$ paust da ze zaai$_i$ gui winnen.
Marie thinks that she$_{CLITIC}$ she$_{STRONG}$ goes win
Marie thinks that she will win.

Test 2 Bound variable

a *Simple QP*

(78) Elke vrou$_i$ paust da ze zaai$_i$ gui winnen.
every woman thinks that she$_{CLITIC}$ she$_{STRONG}$ goes win
Every woman thinks that she will win.

b *Split antecedent + QP*

(79) *Elk maske$_1$ paust da 'k$_S$ gezeid em da me waaile$_{\{S,1\}}$
every girl thinks that I said have that we$_{CLITIC}$ we$_{STRONG}$
gon winnen.
go win
Every girl thinks that I have said that we will win.

c *Split antecedent + indefinite*

(80) *Elke kieje da 'k$_S$ me een vrou$_1$ suimewoeën, muike
every time that I with a woman live.together make
me waaile$_{\{S,1\}}$ rieze.
we$_{CLITIC}$ we$_{STRONG}$ argument
Every time I live together with a woman, we quarrel.

d *Sloppy identity under ellipsis*

(81) Marie paust da ze zaai gui winnen, en Julia oek.
Marie thinks that she$_{CLITIC}$ she$_{STRONG}$ goes win and Julia also
= λx [x thinks that she will win] & λy [y thinks that she will win] [strict]
≠ λx [x thinks that x will win] & λy [y thinks that y will win] [sloppy]

Test 3 Argument status

(82) Marie$_i$ paust da ze zaai$_i$ gui winnen.
Marie thinks that she$_{CLITIC}$ she$_{STRONG}$ goes win
Marie thinks that she will win.

(83)

	Clitic-doubled subject pronouns	
1	Condition C	inconclusive
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	Pro-DP

A.1.5. A Coordination of Subject Pronouns

Test 1 Condition C

(84) *Waaile$_i$ pauzen da gou en **ik**$_i$ gonj winnen.
we think that you$_{STRONG}$ and I$_{STRONG}$ go win

Test 2 *Bound variable*

a *Simple QP*

(85) *Elk koppel$_i$ paust da aai en zaai$_i$ gonj winnen.
every couple thinks that he$_{STRONG}$ and she$_{STRONG}$ go win
Every couple thinks that he and she will win.

b *Split antecedent + QP*

(86) *Elke vrou$_1$ dat n$_S$ zag zou da aai en zaai$_{\{S,1\}}$
every woman who he saw said that he$_{STRONG}$ and she$_{STRONG}$
muten trouven.
should marry
Every woman he saw said that he and she should get married.

c *Split antecedent + indefinite*

(87) *Elke kieje dat n$_S$ een vrou$_1$ kust, muiken aai en
every time that he a woman kisses make he$_{STRONG}$ and
zaai$_{\{S,1\}}$ rieze.
she$_{STRONG}$ argument
Every time he kisses a woman, he and she quarrel.

d *Sloppy identity under ellipsis*

(88) Ons muder paust da gou en ik gonj winnen,
our mother thinks that you$_{STRONG}$ and I$_{STRONG}$ go win
en aaile muder oek.
and your mother also
= λx [x thinks that you & I will win] & λy [y thinks that you & I will win] [strict]
≠ λx [x thinks that x will win] & λy [y thinks that y will win] [sloppy]

Test 3 *Argument status*

(89) Gou en ik gonj winnen.
you$_{STRONG}$ and I$_{STRONG}$ go win
You and I will win.

(90)

	Coordinated subject pronouns	
1	Condition C	+
2	Bound variable	
a	Simple QP	–
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

A.2. OBJECT PRONOUNS

A.2.1. Object Clitic Pronouns

Test 1 *Condition C*

(91) *Jef$_i$ paust da ge n$_i$ gou gotj zien.
Jef thinks that you$_{CLITIC}$ him$_{CLITIC}$ you$_{STRONG}$ go see
Jef thinks that you will see him (not Jef).

Test 2 *Bound variable*

a *Simple QP*

(92) *Elke joeng$_i$ paust da ge n$_i$ gou gotj zien.
every boy thinks that you$_{CLITIC}$ him$_{CLITIC}$ you$_{STRONG}$ go see
Every boy thinks that you will see him.

b *Split antecedent + QP*

(93) *Elke vrou$_1$ wui da Jan mee klaptn paust da
every woman where that Jan with spoke thinks that
ge **ze**$_i$ gou gotj zien.
you$_{CLITIC}$ them$_{CLITIC}$ you$_{STRONG}$ go see
Every woman Jan spoke with thinks that you will see them.

c *Split antecedent + indefinite*

(94) *Elke kieje da Jan$_S$ ba een vrou$_1$ woentj, paust n
every time when Jan with a woman lives thinks he
da ge ze$_{\{S,1\}}$ gou gotj ambeteren.
that you$_{CLITIC}$ them$_{CLITIC}$ you$_{STRONG}$ go bother
Every time Jan lives with a woman, he thinks that you will bother them.

d *Sloppy identity under ellipsis*[13]

(95) Jef ze vouder paust da ge n gou
Jef his father thinks that you$_{CLITIC}$ him$_{CLITIC}$ you$_{STRONG}$
gezien etj, en Pierre oek.
seen have and Pierre also
= λx [x's father thinks that you saw Jef] & λy [y thinks that you saw Jef] [strict]
≠ λx [x's father thinks that you saw x] & λy [y thinks that you saw y] [sloppy]

[13] We set up this example in such a way that the antecedent *Jef* is not c-commanding the clitic pronoun, as that would result in a Condition C violation (cf. supra, example (91)). The question arises if this example is as felicitous a test for detecting sloppy readings as the one we have been using so far. In the worst case scenario, then, the example in (95) is inconclusive.

Test 3 *Argument status*

(96) Jef paust da ge n gou gotj zien.
Jef thinks that you$_{\text{CLITIC}}$ him$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ go see
Jef thinks that you will see him.

(97)

	Object clitics	
1	Condition C	+
2	Bound variable	
a	Simple QP	–
b	Split antecedent + QP	–
c	Split antecedent + indefinite	–
d	Sloppy identity under ellipsis	–
3	Argument	+
	Conclusion	pro-DP

A.2.2. Weak Object Pronouns

Test 1 *Condition C*

(98) Jef$_i$ paust da ge gou em$_i$ gotj zien.
Jef thinks that you$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ him$_{\text{WEAK}}$ go see
Jef thinks that you will see him.

Test 2 *Bound variable*

a *Simple QP*

(99) Elke joeng$_i$ paust da ge gou em$_i$
every boy thinks that you$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ him$_{\text{WEAK}}$
gotj zien.
go see
Every boy thinks that you will see him.

b *Split antecedent + QP*

(100) Elke vrou$_1$ wui da Jan mee klaptn paust
every woman where that Jan with spoke thinks
da ge gou ze$_i$ gotj zien.
that you$_{\text{CLITIC}}$ you$_{\text{STRONG}}$ them$_{\text{WEAK}}$ go see
Every woman Jan spoke with thinks that you will see them.

c *Split antecedent + indefinite*

(101) Elke kieje da Jan$_S$ ba een vrou$_1$ woentj,
every time when Jan with a woman lives
paust n da ge gou ze$_{\{S,1\}}$ gotj ambeteren.
thinks he that you$_{CLITIC}$ you$_{STRONG}$ them$_{WEAK}$ go bother
Every time Jan lives with a woman, he thinks that you will bother them.

d *Sloppy identity under ellipsis*

(102) Marie paust da ge gou ze gezien etj, en
Marie thinks that you$_{CLITIC}$ you$_{STRONG}$ her$_{WEAK}$ seen have and
Julia oek.
Julia also
= λx [x thinks that you have seen Mary] & λy [y thinks that you have seen Mary] [strict]
= λx [x thinks that you have seen x] & λy [y thinks that you have seen y] [sloppy]

Test 3 Argument status

(103) Jef paust da ge gou em gotj zien.
Jef thinks that you$_{CLITIC}$ you$_{STRONG}$ him$_{WEAK}$ go see
Jef thinks that you will see him.

(104)

	Weak object pronous	
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

A.2.3. Strong Object Pronouns

Test 1 Condition C

(105) Marie$_i$ paust da ge gou ee$_i$
Marie thinks that you$_{CLITIC}$ you$_{STRONG}$ her$_{STRONG}$
gotj zien.
go see
Marie thinks that you will see her.

Test 2 *Bound variable*

a *Simple QP*

(106) Elke vrou$_i$ paust da ge gou ee$_i$ gotj zien.
every woman thinks that you$_{CLITIC}$ you$_{STRONG}$ her$_{STRONG}$ go see
Every woman thinks that you will see her.

b *Split antecedent + QP*

(107) *Elke vrou$_1$ wui da Jan mee klaptn paust da ge
every woman where that Jan with spoke thinks that you$_{CLITIC}$
gou eele$_i$ gotj zien.
you$_{STRONG}$ them$_{STRONG}$ go see
Every woman Jan spoke with thinks that you will see them.

c *Split antecedent + indefinite*

(108) *Elke kieje da Jan$_S$ ba een vrou$_1$ woentj, paust
every time when Jan with a woman lives thinks
n da ge gou eele$_{\{S,1\}}$ gotj ambeteren.
he that you$_{CLITIC}$ you$_{STRONG}$ them$_{STRONG}$ go bother
Every time Jan lives with a woman, he thinks that you will bother them.

d *Sloppy identity under ellipsis*

(109) Marie paust da ge gou ee gezien etj,
Marie thinks that you$_{CLITIC}$ you$_{STRONG}$ her$_{STRONG}$ seen have
en Julia oek.
and Julia also
= λx [x thinks that you have seen her] & λy [y thinks that you have seen her] [strict]
= λx [x thinks that you have seen x] & λy [y thinks that you have seen y] [sloppy]

Test 3 *Argument status*

(110) Marie$_i$ paust da ge gou ee$_i$
Marie thinks that you$_{CLITIC}$ you$_{STRONG}$ her$_{STRONG}$
gotj zien.
go see
Marie thinks that you will see her.

(111)

	Strong object pronouns	
1	Condition C	–
2	Bound variable	
a	Simple QP	+
b	Split antecedent + QP	+
c	Split antecedent + indefinite	+
d	Sloppy identity under ellipsis	+
3	Argument	+
	Conclusion	pro-φP

8

ON GEOGRAPHICAL ADEQUACY, OR: HOW MANY TYPES OF SUBJECT DOUBLING IN DUTCH

Gunther De Vogelaer and Magda Devos

ABSTRACT

In many southern Dutch dialects, subject doubling is found, i.e., the phenomenon that one single clause contains several, non-inflectional subject markers (be they clitics, pronouns, or lexical elements). The distribution of the phenomenon is influenced by a significant number of parameters, including clause type (main clause vs. subclause), word order, the type of subject in the clause (pronoun or not), the number of pronouns, etc. Taking these parameters into account, at least eight different syntactic patterns can be distinguished. In the recent literature, there is debate about whether these different syntactic patterns are manifestations of one single type of doubling (e.g., Haegeman 1992, 2004; De Geest 1993) or of two different types (Van Craenenbroeck and Van Koppen 2002). After discussing the attested patterns of subject doubling and their analyses in the literature (Section 1), we provide geographical evidence for distinguishing three different types of subject doubling (Section 1). In Section 3, the diachrony of subject doubling will be addressed.

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1. SUBJECT DOUBLING: DIFFERENT PATTERNS

Many southern Dutch dialects allow clauses to contain multiple subjects. A typical example is found in (1):

(1) Ze werkt (zij) in Brussel.
she$_{\text{CLITIC}}$ work.3SG she$_{\text{STRONG}}$ in Brussels
She is working in Brussels.

The example in (1) is a main clause with so-called 'regular' word order, i.e., with a sentence-initial subject. It contains the feminine 3sg.-clitic *ze*, which is doubled by an optional strong pronoun *zij*. The same combination of the clitic *ze* and the strong pronoun *zij* is found in other clause types as well, such as subclauses and main clauses with 'inverted' word order (i.e., the inflected verb preceding the subject). Apart from combinations of a clitic and a strong pronoun, clauses with regular word order may allow combinations of two strong pronouns, as well as combinations of two clitics and a strong pronoun (tripling). In addition, in some dialects the strong pronoun *zij* also combines with non-pronominal subjects, such as the proper name *Marie*. This yields eight syntactic patterns, which are shown in (2).

(2)

Eight patterns of subject doubling.

Regular word order:		
1. ze werkt zij in Brussel	'she$_{\text{CLITIC}}$ works she$_{\text{STRONG}}$ in Brussels'	
2. ze werkt ze zij ...	'she$_{\text{CLITIC}}$ works she$_{\text{CLITIC}}$ she$_{\text{STRONG}}$ ...'	
3. Marie werkt zij ... (also: hij)	'Mary works she$_{\text{STRONG}}$ ...'	(also: he$_{\text{STRONG}}$)
4. Zij werkt zij ...	'she$_{\text{STRONG}}$ works she$_{\text{STRONG}}$ ...'	
Inverted word order:		
5. werkt ze zij ...	'works she$_{\text{CLITIC}}$ she$_{\text{STRONG}}$ ...'	
6. werkt zij Marie ... (also: hij)	'works she$_{\text{STRONG}}$ Mary ... '	(also: he$_{\text{STRONG}}$)
Subclause:		
7. dat ze zij in Brussel werkt	'that she$_{\text{CLITIC}}$ she$_{\text{STRONG}}$ works in Brussels'	
8. dat zij Marie ... (also: hij)	'that she$_{\text{STRONG}}$ Mary ...'	(also: he$_{\text{STRONG}}$)

Interestingly, recent geographical data gathered for the *Syntactic Atlas of Dutch Dialects* (henceforth: SAND, Barbiers et al. 2005; see Cornips and Jongenburger 2001 for more information) show that the different types have a different geographical distribution; dialects may, for instance, only allow types 1 and 4, but not the other ones, or only types 1, 5, and 7 (cf. De Vogelaer and Neuckermans 2002). The most important parameters for the geographical distribution of subject doubling are the ones that are used to define the different

subject doubling patterns in (2), i.e., clause type and word order (main clause with regular word order vs. inverted word order vs. subclause), the type of subjects in the clause (clitic, strong pronoun, or non-pronominal element), and the number of pronouns (doubling vs. tripling).[1] At present, all accounts of subject doubling have focussed on a specific dialect, and, since some patterns seldom co-occur, only on a limited number of the patterns in (2). Haegeman (1992, 2004) for instance, provides examples of patterns 1, 5, and 7 for the West-Flemish dialect of Lapscheure (i.e., *ze werkt zij*, *werkt ze zij*, and *dat ze zij*). All patterns are considered instances of clitic doubling, in which the clitic is analysed as the argument of the verb, and the optional strong pronoun is taken to be an emphatic element. De Geest (1993) provides a similar analysis for the East-Flemish dialect of Ghent. Van Craenenbroeck and Van Koppen (2002), however, discussing the Brabantic dialect of Wambeek, distinguish two types of doubling, i.e., clitic doubling, comprising patterns 5 and 7 (i.e., *werkt ze zij* and *dat ze zij*), and topic doubling, comprising patterns 1, 3, and 4 (i.e., *ze werkt zij*, *Marie werkt zij*, and *zij werkt zij*). In both types of subject doubling, the postverbal strong pronouns are taken to be the arguments to the verb, but the second element is analysed differently. In clitic doubling, the clitic element is considered an agreement element, while the (preverbal) weak or strong pronoun or the lexical element in topic doubling is considered a topic.

Although the present analyses of subject doubling differ strongly, we shall not try to argue in favour of one particular analysis in this chapter. Rather, we will evaluate the way in which current accounts of subject doubling classify the patterns in (2) as manifestations of different types of subject doubling. And indeed, the present accounts differ with respect to such a classification. Haegeman (1992, 2004), for instance, distinguishes only one type of subject doubling, whereas Van Craenenbroeck and Van Koppen (2002) distinguish two. Van Craenenbroeck and Van Koppen (2002, pp. 300–301) explicitly claim their classification to be valid for all the dialects they investigate, including the dialects of Ghent and Lapscheure (but see Haegeman 2004 for arguments against this). We will test these classifications against data from a large number of subject doubling dialects. In the SAND, data are available for 109 dialects in which at least one type of subject doubling is found. In addition, we will present a new classification which will include less well-studied subject doubling patterns such as 2, 6, and 8 (*ze werkt ze zij*, *werkt zij Marie*, and *dat zij Marie*).

[1]Apart from these, some other parameters are relevant, such as the person, number, and gender of the subject, and the relative order of the subject pronouns and object clitics. The different status of 1SG and 2SG/PL is discussed in Section 2.2.1. 3SG.NEUT and 3SG.MASC show a deviant behaviour too, which relates to a defective pronominal morphology (see De Vogelaer 2005, pp. 201–203 and 207–210 for discussion).

2. DIALECT GEOGRAPHY

2.1. Geographical Adequacy

One way to evaluate the different classifications of the patterns in (2) is to investigate to what extent these patterns co-occur in the subject doubling dialects: patterns that co-occur almost without exception, may safely be assumed manifestations of one single type of subject doubling, whereas patterns that never show up in the same dialect may not. The larger issue at stake is that one should only assume a linguistic correlation between dialect phenomena (or language phenomena in general) when they have a similar or at least a comparable geographical distribution. In other words, a comparable geographical distribution is a necessary condition for a linguistic correlation. It is not a sufficient condition, however, as similar geographical distributions can be coincidental. Therefore, correlations must also be explained on linguistic grounds. But as the absence of empirical evidence for an alleged correlation can suffice to abandon it, one can use the presence or absence of co-occurrences of linguistic phenomena in a geographical area to test the empirical reliability of correlations, which are then found geographically adequate or not.

The general rule of thumb behind a test for geographical adequacy would be that the more comparable the distribution of the phenomena under investigation, the stronger the case for a linguistic correlation. The strongest possible geographical evidence for a correlation is a 1/1-correspondence between the occurrences of linguistic features. In this case, the relevant features will have an identical geographical distribution on dialect maps. Not only 1/1-correspondences are meaningful in establishing correlations however. A somewhat weaker empirical basis is found when a one-to-many-correspondence is observed. One-to-many-correspondences can be recognised on dialect maps when the dialects in which a certain phenomenon (A) occurs, constitute a proper subset of the dialects in which another phenomenon (B) occurs. This pattern may originate in different ways: B may be older than A, and may have been a necessary condition for A to arise. Or A and B may have developed together, with B having spread over a larger area than A.[2] Given the fact that one-to-many-correspondences provide relatively weak evidence for a correlation, more often than not supplementary data and a coherent linguistic explanation will be needed to make a firm case for a correlation. Finally, when a many-to-many-correspondence is observed, the case for a linguistic correlation is weak or even non-existent. One geographical pattern exemplifying a many-to-many-correspondence is that of two rather distinct areas which are

[2]For a more elaborate discussion of the possible diachronic interpretations of one-to-many correspondences, see Weijnen (1977).

partly overlapping. Although the overlap causes the relevant phenomena to co-occur in a number of dialects, the fact that each of the phenomena can be found without the other one, shows that there is probably no correlation between them.

2.2. Main Types of Subject Doubling

2.2.1. Clitic Doubling

Turning to the attested patterns of subject doubling, at least three different types of doubling need to be distinguished. The first type comprises patterns 5 and 7, and can be termed 'clitic doubling', as both patterns combine a clitic and an optional strong pronoun. Both Haegeman (1992, 2004) and Van Craenenbroeck and Van Koppen (2002) also distinguish clitic doubling, and in both analyses patterns 5 and 7 are considered manifestations of the type.[3]

(3) Two types of clitic doubling:

a. following verbs:

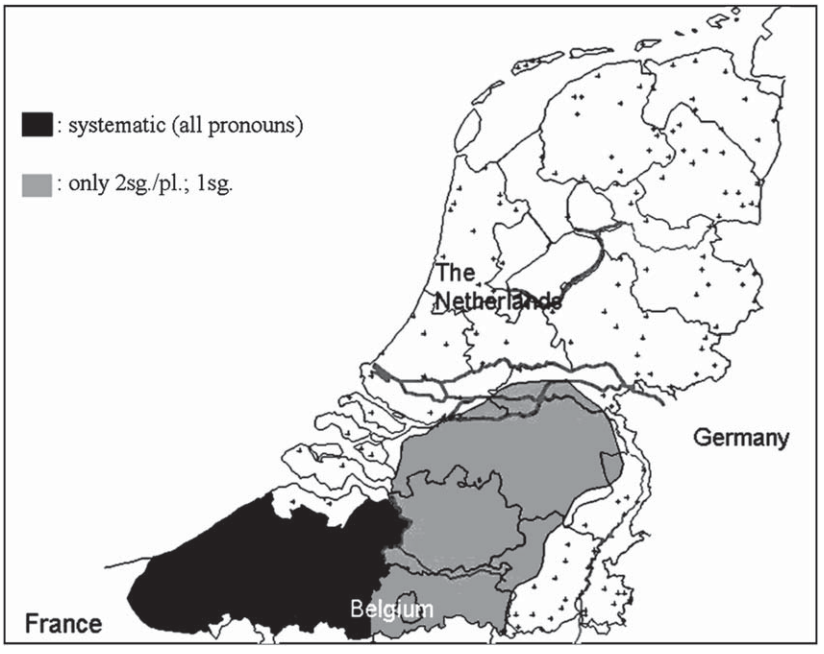
Werkt	ze	(zij)	in Brussel?	(= pattern 5)
work.3SG	she_{CLITIC}	(she_{STRONG})	in Brussels	
Is she working in Brussels?				

b. following complementisers:

... dat	ze	(zij)	in Brussel	werkt.	(= pattern 7)
... that	she_{CLITIC}	(she_{STRONG})	in Brussels	work.3SG	
... that she is working in Brussels.					

Map 1 shows that the distribution of both patterns is (almost) identical; both pattern 5 and pattern 7 are found in a systematic way, i.e., for all grammatical persons except the third person singular neuter, by and large in French Flanders and the Belgian provinces of West and East Flanders (55 SAND-locations). More to the east, i.e., by and large in the Belgian provinces of Flemish-Brabant, Antwerp and the west of Limburg, and in the Dutch province of North Brabant, only instances are found in the first person singular (totalling 88 locations) and/or the second person singular and plural. In this eastern area, there are more dialects allowing doubling of a second person subject pronoun following a verb (pattern 5; 105 locations) than following a complementiser (pattern 7; 67 locations), but the difference does not affect the geographical distribution (see also SAND-maps 54a and 55a).

[3]Both classifications differ with respect to pattern 1 however (e.g., *ze werkt zij*), which Haegeman considers clitic doubling, and Van Craenenbroeck and Van Koppen do not. See Section 2.3.



Map 1: Clitic doubling (pattern 5, 7): Verb/Complementiser + clitic + strong.

The main argument to distinguish a separate type called clitic doubling is a geographical one; there are many dialects in which only this type occurs. In the easternmost and northernmost parts of the subject doubling area, all other types of subject doubling are unattested. Not surprisingly, this type has caught the widest attention in the linguistic literature. But clitic doubling also differs from the other types linguistically; unlike for the other types, most dialects do not allow alternatives to this construction, in that the clitics are obligatory. For instance, in most Flemish dialects (i.e., the dialects with systematic clitic doubling), both verbs and complementisers can never be followed by a strong pronoun without a clitic in between them. Also, clitic doubling is the only type in which the strong element consistently shows up later in the sentence than the weak element (cf. Nuyts 1995).

2.2.2. Topic Doubling

The second type of subject doubling which needs to be distinguished to obtain a geographically adequate classification of the subject doubling patterns in (2), is topic doubling. The clearest examples of topic doubling are the combinations of two strong pronouns in the same clause (pattern 4, attested in 20 locations), illustrated in (4a). Although the precise conditions for the use of this pattern are not yet described in detail (but see Vandekerckhove 1993, pp. 175–179 and Nuyts 1995, pp. 54–57 for some discussion), this pattern seems to occur predominantly in clauses with a highly topical/thematic subject

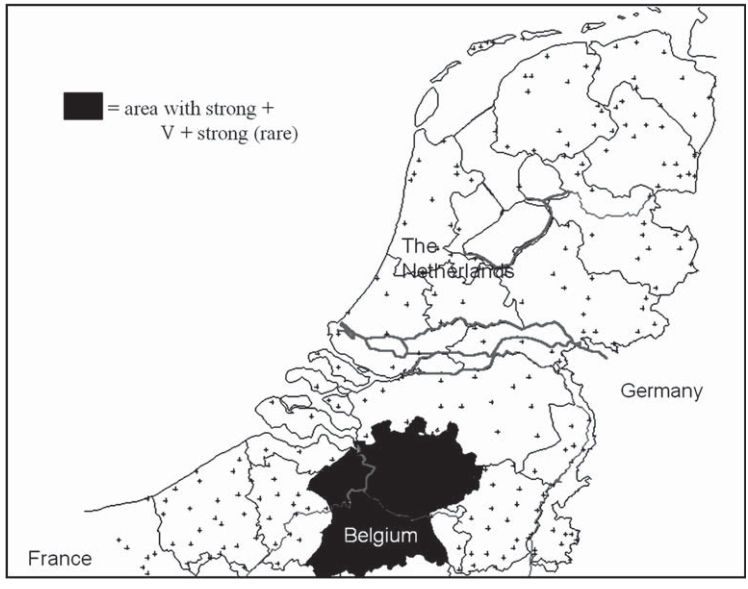
pronoun, as shown in (4b). (4c) shows that the pattern is not available when the pronoun is used to express contrast focus.[4]

(4) One type of topic doubling:

a. Zij werkt zij in Brussel. (= pattern 4)
she$_{STRONG}$ work.3SG she$_{STRONG}$ in Brussels
Is she working in Brussels?

b. Jan zegt dat zij het gedaan heeft, maar zij heeft zij
John says that she it done has but she has she
dat niet gedaan.
that not done
John says that she has done it, but she hasn't.

c. *Jan zegt dat hij het gedaan heeft, maar zij heeft
John says that he it done has but she has
zij dat gedaan.
she that done
John says that he has done it, but she has.



Map 2: Topic doubling (pattern 4): Strong + verb + strong.

Map 2 identifies the region where the pattern is used according to the data in the SAND; it is only found systematically in the Belgian provinces of Antwerp

[4]Van Craenenbroeck and Van Koppen (2002, pp. 294–295) also use the term 'topic doubling' for this pattern, for a different reason: they claim that the sentence-initial pronoun and indeed all sentence-initial subjects should be considered topics in clauses like (4a).

and Flemish-Brabant and in the west of East Flanders, i.e., more or less the area with defective clitic doubling paradigms (cf. Map 1). Some more western, isolated attestations are not shown on the map (but see the SAND; note, however, that the SAND-data do not contain any West-Flemish instances of the pattern). Even in the relevant region the pattern is quite rare; despite the fact that all the SAND-informants were asked explicitly for all grammatical persons whether they could combine two strong pronouns in the same clause, there are no dialects in which the pattern is indeed found for all grammatical persons. Its rarity also distinguishes this pattern from clitic doubling.

2.2.3. Topic Marking

The third type of subject doubling is topic marking. Topic marking involves a combination of a lexical element and a strong pronoun, comprising three patterns from (2), which are shown in (5a–c). Hence, the pattern differs from clitic doubling and topic doubling in that there is no reduplication involved of a pronoun; rather a strong pronoun is used to mark certain pragmatic characteristics of the subject. The term 'topic marking' reflects that, here too, the pattern is found in sentences in which the subject is highly topical or thematic, but not in sentences where contrast focus is implied, as was the case for the use of topic doubling (cf. 5d–e).

(5) Three types of topic marking:

a. main clause, regular word order:
Marie werkt zij in Brussel. (= pattern 3)
Mary work.3SG she$_{STRONG}$ in Brussels
Mary is working in Brussels.

b. main clause, inverted word order:
Werkt zij Marie in Brussel? (= pattern 6)
work.3SG she$_{STRONG}$ Mary in Brussels
Is Mary working in Brussels?

c. subclause (following complementisers):
... dat zij Marie in Brussel werkt. (= pattern 8)
... that she$_{STRONG}$ Mary in Brussels work.3SG
... that Mary is working in Brussels.

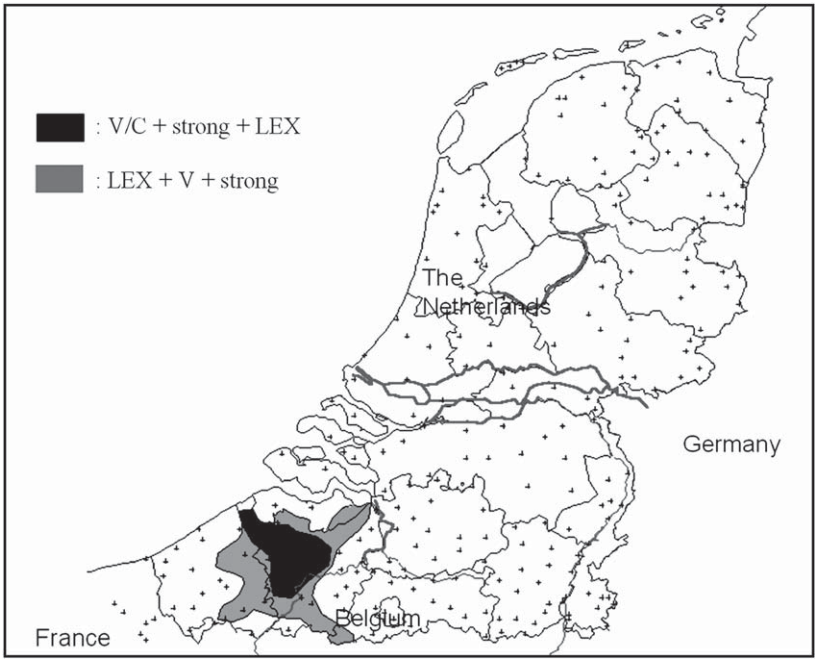
d. Jan zegt dat An het gedaan heeft, maar An heeft
John says that Ann it done has but A. has
zij dat niet gedaan.
she that not done
John says that Ann has done it, but she hasn't.

e. *Jan zegt dat hij het gedaan heeft, maar An heeft
John says that he it done has but An has
zij dat gedaan.
she that done
John says that he has done it, but An has.

Topic marking is also found for the third person singular masculine, and, in some dialects, for the third person singular neuter and the third person plural as well. The phenomenon shows quite some variation with regard to the morphology of the strong pronoun; in the examples in (5), some dialects would use a masculine pronoun *hij* or a specialised pronoun *tet* instead of *zij* to double the feminine non-pronominal subject (see De Vogelaer 2005, pp. 212–217 for an exhaustive overview of these morphological variants). The morphological variation does not correlate with any major differences in the syntax of topic marking, however.[5] For instance, in all topic marking dialects, similar restrictions on the choice of the subject seem to apply (see Section 3.4). Also, there are dialects in which some of the morphological variants show a free distribution. As morphological variation in the choice of the pronoun is absent in all the other types of subject doubling, it provides a further argument to consider the patterns in (5) indeed as a separate type.

Map 3 shows that there is no 1/1-correspondence between the distribution of pattern 3 on the one hand (found in 14 locations), and patterns 6 and 8 on the other (found in 9 locations); rather a one-to-many-correspondence is observed. The distributional differences are, given the obvious similarity between the patterns, insufficient to warrant a separate type of subject doubling. Neither Haegeman (1992, 2004) or De Geest (1993), nor Van Craenenbroeck and Van Koppen (2002) define a separate type of topic marking. De Geest (1993) does not provide any data resembling topic marking, although the variety under discussion, the Ghent dialect, is spoken in the centre of the topic marking area. Haegeman (1992, p. 63) discusses the dialect of Lapscheure, which is situated in the northwest of the topic marking area on Map 3, and mentions the so-called 'focus element' *tet*, which, in our view, exemplifies topic marking (cf. 5d–e). Hence both De Geest (1993) and Haegeman (1992) implicitly distinguish patterns 3, 6, and 8 from clitic doubling. Van Craenenbroeck and Van Koppen (2002) only discuss pattern 3, since it is the only one found in the Wambeek dialect. From an empirical point of view, Map 3 corroborates their data; Wambeek sits near the southeastern border of the grey area on the map, where pattern 3 is found (e.g., *Marie werkt zij*) and patterns 6 and 8 are not. The pattern is not analysed as an instance of topic marking however, but as topic doubling, i.e., the same type of subject doubling as the patterns discussed in Section 2.2.2 (e.g., pattern 4: *zij werkt zij*). Maps 2 and 3 show that this is not a geographically adequate analysis: the geographical distribution of pattern 4 (topic doubling) and pattern 3 (topic marking) exemplify a many-to-many correspondence. To provide some additional data: in the SAND-corpus, there are only four dialects in which pattern 3 (*Marie werkt zij*) combines with

[5]This is not to say that there are no dialectal differences with respect to the productivity of topic marking; the topic marking dialects do indeed show some variation. But this variation does not seem to correlate with the morphology of the pronouns. For instance, similar differences are found in dialects using *zij* as in the ones using *hij* or *tet* (see Section 3.4.2 for more detailed discussion).



Map 3: Topic marking (pattern 3, 6, 8): All types of doubling with a lexical element.

pattern 4 (*zij werkt zij*), whereas there are 28 in which only one of these patterns is found (16 dialects with *zij werkt zij*, and 12 with topic marking patterns such as *Marie werkt zij*).

2.3. Problematic Types

2.3.1. Pattern 1 ('ze werkt zij')

In Section 2.2, three types of subject doubling are distinguished: clitic doubling, topic doubling, and topic marking. Using dialect geographical data, it is possible to classify six of the eight subject doubling patterns that are distinguished in (2) as straightforward instances of one of these types. However, there are two remaining patterns, viz., pattern 1 (*ze werkt zij*) and pattern 2 ('tripling', e.g., *ze werkt ze zij*). Pattern 1 seems to be the most controversial one:

(6) Pattern 1: subject doubling with a sentence-inital weak pronoun/clitic

Ze	werkt	zij	in Brussel.
$she_{CLITIC/WEAK}$	work.3SG	she_{STRONG}	in Brussels

She is working in Brussels.

Haegeman (1992, 2004) considers pattern 1 an instance of clitic doubling, whereas Van Craenenbroeck and Van Koppen (2002) provide two arguments to analyse it as topic doubling rather than as clitic doubling. Firstly, they claim the preverbal element *ze* to be a weak pronoun rather than a clitic. Secondly, there is the observation that, in the Wambeek dialect, this *ze* can be replaced with the strong form *zij* (and non-pronominal elements such as the proper name *Marie* or *die vrouw* 'that woman'). While the argumentation of Van Craenenbroeck and Van Koppen (2002) may be valid for the dialect of Wambeek, both arguments do not carry over automatically to other dialects: the Lapscheure dialect that is described by Haegeman (1992), for instance, does not have morphologically distinct weak pronouns and clitics, so the claim that the sentence-initial *ze* in *ze werkt zij* is a weak pronoun rather than a clitic cannot be tested. Neither can the preverbal *ze* be replaced with strong *zij* (nor with the proper name *Marie* or with *die vrouw* 'that woman'; see Haegeman 2004, pp. 134–144 for further discussion).

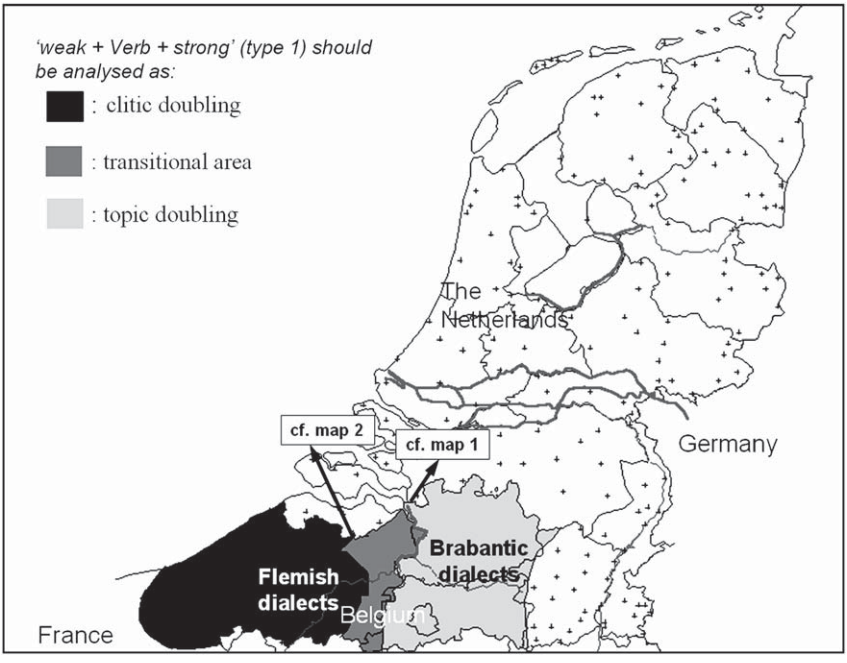
The geographical distribution of pattern 1 does not provide a decisive argument either. The pattern is not found in the Netherlands. The relevant area stretches from French Flanders in the west, to the west of Limburg in the east (totalling 90 locations). In the Flemish dialects on the one hand, pattern 1 co-occurs with the systematic use of clitic doubling (i.e., in French Flanders and West and East Flanders, cf. Map 1). In the Brabantic dialects, on the other hand, the pattern combines with topic doubling, in an area which has, in general, only a defective paradigm for clitic doubling (cf. Maps 1 and 2). Hence, either analysis of pattern 1 raises problems. Assuming that utterances such as *ze werkt zij* are instances of clitic doubling would imply that the Brabantic dialects show systematic clitic doubling, but only in clauses with initial weak pronouns as subjects (initial strong pronouns that are doubled are instances of topic doubling). Assuming that *ze werkt zij* is topic doubling would imply that the Flemish dialects have topic doubling, but only in clauses with an initial weak pronoun or clitic (initial strong pronouns cannot be doubled in the Flemish dialects, and subject doubling clauses with postverbal clitics are analysed as clitic doubling). One solution to these problems would be to analyse the instances of pattern 1 in a non-uniform way, i.e., as clitic doubling in Flemish dialects, and as topic doubling in Brabantic, as shown in (7).

(7)

'Pattern 1' in Flemish and Brabantic dialects

	Flemish Dialects	Brabantic Dialects
clitic doubling	*werkt-ze zij*	*werkt-ze zij
'pattern 1'	*ze werkt zij*	*ze werkt zij*
topic doubling	*zij werkt zij	*zij werkt zij
	'she works'	'she works'

Map 4 shows the distribution of pattern 1, and also the analysis of the pattern for the different parts of the subject doubling area. In the west, a fully productive



Map 4: A geographically specific analysis of pattern 1 ('weak + Verb + strong').

clitic doubling area where topic doubling does not occur, the pattern exemplifies clitic doubling; in the east, a productive topic doubling area with limited possibilities for clitic doubling, the pattern exemplifies topic doubling. There is a small intermediate area where both clitic doubling and topic doubling are found quite frequently (i.e., the area which overlaps when Maps 1 and 2 are combined). For this area, the present data do not allow to decide whether the instances of pattern 1 must be analysed as clitic doubling or as topic doubling. This might differ from dialect to dialect, or even from speaker to speaker.

While a geographically specific analysis of pattern 1 may look unappealing at first sight, it has the advantage that it incorporates some of the syntactic differences that are observed. Clearly, the syntax of pattern 1 in Brabantic dialects, such as the Wambeek dialect discussed by Van Craenenbroeck and Van Koppen (2002), differs from its syntax in Flemish dialects, such as the Lapscheure dialect discussed by Haegeman (1992, 2004). As the syntactic behaviour of the pattern shows dialectal variation, a non-uniform analysis may actually provide a better understanding of the data. In addition, the proposed analysis corresponds to the well-known fact that western dialects, such as the Flemish dialects, show much more cliticisation phenomena than dialects that are spoken in the east of the language area. For instance, western dialects often have morphologically distinct reduced pronouns at their disposal (i.e., 'special clitics' in

Zwicky's 1977 sense), whereas eastern dialects tend to employ 'simple clitics', i.e., weak forms that are merely formal variants of their strong counterparts (see De Schutter 1989; De Vogelaer 2005 for illustrations). Also, the western, Flemish dialects make a consistent use of object clitics, whereas the Brabantic dialects do not (see De Schutter 1994).

2.3.2. Pattern 2: Tripling ('ze werkt ze zij')

The table in (2) contains one pattern that has not been classified yet, i.e., pattern 2:

(8) Pattern 2: subject tripling

Ze	werkt	ze	zij	in Brussel.
$she_{CLITIC/WEAK}$	work.3SG	$she_{CLITIC/WEAK}$	she_{STRONG}	in Brussels

She is working in Brussels.

One striking fact about tripling is that, at least in the SAND-data, large differences are found when it comes to the geographical distribution of tripling for the different grammatical persons; whereas the phenomenon is quite widespread in the first person singular (64 locations) and, to a lesser extent, in the first person plural (21 locations), it is close to unattested in the third person singular (there are 8 locations with tripling for 3sg.masculine, and 5 for 3sg.feminine). There are even some grammatical persons in which tripling is not found at all, such as the second person singular and plural, and the third person plural. Hence, there are no dialects in which subjects can be tripled systematically. It is even doubtful whether there are any legitimate examples of tripling, as many instances obviously need to be explained as apparent cases. Some representative data for the first person singular and plural are shown in (9):

(9) Apparent tripling in the first person singular and plural

a. first person singular

'k	werk	ekik	in Brussel.	--> also found:	Jan en ekik
$I_{CLITIC/WEAK}$	work.1SG	I_{STRONG}	in Brussels		John and I_{STRONG}

I am working in Brussels.

b. first person plural

We	ga-me	wij	naar Brussel.	--> also:	wij ga-me
$we_{CLITIC/WEAK}$	go-INFL	we_{STRONG}	to Brussels		we_{STRONG} go-INFL

We are going to Brussels.

Both alleged triplings in (9) need to be explained as the result of morphological innovations in subject doubling dialects, either in the pronoun system (9a) or in the verbal inflection (9b). In (9a), the combination *ekik* could in principle be analysed as a combination of weak *ek* and strong *ik* (lit. $I_{CLITIC/WEAK}$ + I_{STRONG}). The combination, however, is shown to occur not only in the apparent subject

tripling pattern, but also in a syntactic position where combinations of two pronouns are not found, i.e., in a conjoined NP. Hence the form *ekik* must be analysed as a pronoun in its own right, rather than as a combination of two pronouns, and the alleged instance of subject tripling is turned into an 'ordinary' instance of clitic doubling or topic doubling. In (9b), the element *-me*, although historically a pronoun, not only surfaces in the apparent tripling construction *we ga-me wij* (with *we*, *-me*, and *wij* as 1pl.-pronouns), but also in a position where it is clearly not inserted as a result of subject doubling, i.e., as an inflectional ending to the verb (in *wij ga-me*). Here too, then, the apparent tripling should be explained as an instance of clitic doubling or topic doubling.

Apart from the first person singular and plural, the SAND-corpus provides instances of subject tripling for the third person singular masculine and feminine as well (see SAND-map 56b and 57b). At least for the third person masculine, these instances can be explained in a similar way as the ones in the first person singular, i.e., as mere innovations in pronominal morphology. All in all, subject tripling is not only a phenomenon that does not occur systematically in any of the 109 dialects under investigation, but it is also the case that most sporadic instances, possibly even all of them,[6] must be explained as clitic doubling or topic doubling.

2.4. Implications for Previous Analyses

In contrast to previous attempts, which only take into account data for one or a small number of dialects, we have used data from no less than 109 dialects to obtain a geographically adequate classification of the different subject doubling patterns in (2). The geographical data from the SAND indicate that three types of subject doubling must be distinguished: clitic doubling, topic doubling, and topic marking. Not all types are found in all subject doubling dialects. For instance, most Flemish dialects only allow clitic doubling, although some show topic marking as well. Topic doubling is mainly found in the Brabantic dialects, which, in general, only have a defective clitic doubling paradigm at their disposal, and which show no topic marking.

Our classification can be used to evaluate the proposals by Haegeman (1992, 2004) and Van Craenenbroek and Van Koppen (2002). These proposals differ from ours in that they do not apply a thorough geographical approach: Haegeman (1992) provides an in-depth analysis of one dialect; Van Craenenbroeck and Van Koppen (2002) provide a similar in-depth analysis

[6]There are five possible instances of tripling for 3sg.feminine instances in the SAND-corpus (cf. 8), for which clear arguments in favour of an alternative analysis are lacking. Will (2004, pp. 269–270), however, provides a rather peculiar example of doubling for 3sg.feminine in sentence-initial position (*ze-zie moest…* 'she-she must…'), for which only 1sg. counterparts are found (e.g., *k-ik kon…* 'I-I could…'). This extremely rare pattern lends support to an analysis of the 3sg.feminine instances of tripling in a similar manner as the 1sg. instances, i.e. as the result of the formation of a complex pronoun in a subject doubling dialect (cf. 9a).

for the dialect of Wambeek, but, by comparing data from a small number of dialects, they also adopt a contrastive approach. Some of the claims from the literature seem to hold: for instance, in the Lapscheure dialect discussed by Haegeman (1992, 2004), all subject doubling patterns involving combinations of a clitic and a strong pronoun indeed exemplify clitic doubling. However, a geographical approach casts some light over the use of the element *tet* in the Lapscheure dialect. While Haegeman (1992, p. 63) labels *tet* as a 'focus element', the element must, in our opinion, be seen as an instance of topic marking. Van Craenenbroeck and Van Koppen (2002), focussing on the Brabantic dialect of Wambeek, distinguish two types of subject doubling in the relevant dialect, viz., clitic doubling and topic doubling. Their analysis differs from Haegeman's in that pattern 1 (*ze werkt zij*) is labelled topic doubling instead of clitic doubling. It is argued that, at least for the Wambeek dialect, their argumentation is valid. However, in order to provide a geographically adequate analysis, one must label some of their instances of topic doubling, i.e., the ones exemplifying pattern 3 (*Marie werkt zij*), as topic marking.

3. THE DIACHRONY OF SUBJECT DOUBLING

3.1. Geography and Diachrony

Geographical data may be helpful not only in establishing (synchronic) correlations, but also in explaining them diachronically. Chambers and Trudgill (1998, pp. 167–168) discuss a number of tendencies involving the relationship between the distribution of dialect phenomena and their diachrony, most of which were employed in mid-20th century dialectology (cf., among others, Bonfante 1947; Weijnen 1977). One of the principles is stated as follows: 'If, of two forms, one is used over a larger area than the other, then that is the older'. Of course, comparing the distribution of two forms, or syntactic patterns for that matter, only makes sense when they are somehow linguistically related to each other. In addition, counterexamples to this principle can be found, so, in order to obtain a reliable account, the proposed diachronic relationships need to be tested against additional data, and they need to be explained. This is what we will do in the rest of Section 3.

Provided that a relatively wider distribution indeed reflects an older age, Maps 1–4 yield the claims that are given in (10):

(10) Diachronic implications of Maps 1–4:
   a. Clitic doubling is the oldest type of subject doubling.
   b. Topic doubling has originated out of clitic doubling.
   c. Topic marking has originated out of clitic doubling.
   d. Topic doubling and topic marking have originated independently.

The first claim, that clitic doubling is the oldest type, boils down to the fact that it occurs in a larger area than both topic doubling and topic marking. As for the latter types of doubling, these are expected to be younger than clitic doubling. Since they do not often co-occur in the dialects, it is not clear how they could be related diachronically. Rather, the fact that their geographical distributions show a many-to-many-correspondence indicates that they have originated independently.

3.2. The Rise of Clitic Doubling

One of the logical consequences of considering clitic doubling the oldest type of subject doubling (cf. 10a), is that subject doubling in Dutch must have originated in the form of clitic doubling. Hence, to prove that our maps yield accurate predictions with respect to the diachrony, an account is needed for the rise of clitic doubling in Dutch. An account that has been proposed in the literature for the rise of clitic doubling, and which seems to apply for the Dutch data, is the so-called 'Accessibility'-account (Ariel 2000). The underlying cause for the rise of clitic doubling is, in Ariel's account, the tendency to minimally encode highly 'accessible' elements, i.e., elements that are highly salient or active in discourse. Pronouns, typically encoding given, highly accessible referents, therefore tend to be formally reduced and cliticise to the verb. The possibility to double these formally reduced pronouns starts when they are reanalysed as a part of the morphology to the verb, allowing the insertion of another subject pronoun or a lexical element. The account is summarised in (11):

(11) An 'Accessibility'-account for the rise of clitic doubling (Ariel 2000, p. 207)
   a. Pronoun # Verb
   b. Clitic + Verb
   c. zero + $V_{[+inflection]}$
   d. NP/Pronoun/zero # $V_{[+inflection]}$

Ariel's (2000) schedule describes a language in which the subject(s), both the clitic and the NPs/pronouns, occur to the left of the verb, but there is no reason why the account should not apply to languages in which subjects follow the inflected verb. It does seem to imply, however, that clitic doubling arises in languages in which both the clitics and the strong pronouns appear on the same side of the verb, which is the case in Dutch, at least in the very widespread clitic doubling patterns 5 and 7. An 'Accessibility'-account also provides insight to the fact that clitic doubling, and subject doubling in general, is restricted to pronominal subjects in the vast majority of the Dutch subject doubling dialects, as pronouns are the prime candidates to be formally reduced, and hence to be doubled (cf. stages a–c in the schedule). In addition, the fact that Dutch

is a non-pro-drop language provides even more support; in a non-pro-drop language like Dutch, pronouns are used extensively to refer to highly accessible referents, which are zero-marked in pro-drop languages. This too makes cliticisation very likely (see De Vogelaer 2008, for more argumentation).

Apart from some theoretical support for the claim that clitic doubling is the oldest type of subject doubling, there is empirical support as well. The oldest instances of clitic doubling trace back to the Middle Dutch period (Van Helten 1887, p. 282). Although Van Helten does not mention exact dates for his attestations, it is clear that these instances are much older than any instances of topic doubling and topic marking that are found.

3.3. From Clitic Doubling to Topic Doubling

While clitic doubling is found in the majority of the southern Dutch dialects (excluding the larger part of Limburg), the patterns that have been labelled topic doubling are by and large restricted to the Belgian part of the Brabantic dialect area. The diachronic implication of this geographical distribution would be that topic doubling has originated in these dialects as an extension of clitic doubling (cf. 10b; the relevant development is shown in 12a). The contemporary Brabantic dialects indeed still show some types of clitic doubling. One apparent problem in claiming that topic doubling has originated out of clitic doubling, could be that clitic doubling in present-day Brabantic dialects is less productive than in the Flemish dialects (cf. Map 1), but it is not unreasonable to assume that in the past, more types of clitic doubling were used in Brabantic dialects. For instance, De Vriendt (2003, p. 75) provides instances of clitic doubling in the dialect of Brussels which are not found in the (younger) SAND-corpus. So the introduction of topic doubling seems to be paralleled with the partial loss of clitic doubling (cf. 12b). Hence, the diachronic developments in Brabantic can be summarised as follows:

(12) From clitic doubling to topic doubling in Brabantic

a. pattern 1:

clitic V strong (*clitic doubling*)	>	weak/strong V strong (*topic doubling*)
e.g. ze werkt zij		e.g. ze/zij werkt zij
she$_{CLITIC}$ works she$_{STRONG}$		she$_{weak}$/she$_{STRONG}$ works she$_{STRONG}$

b. pattern 5, 7 (*in 3sg., 1pl., 3pl.; cf. map 1*):

V/C-clitic strong (*clitic doubling*)	>	V/C weak/strong (*no subject doubling*)
e.g. werkt ze zij		e.g. werkt ze/zij
works she$_{clitic}$ she$_{strong}$		works she$_{weak}$/she$_{strong}$

There are two arguments which support the development in (12). First, Brabantic dialects show an observable tendency to ban clitics and replace them with weak pronouns. This is clearly visible in the loss of the so-called special clitics, i.e., clitics which are no formal variants of the strong pronouns.

Instead of these special clitics, weak pronouns are introduced: in some syntactic environments, for instance, the 2sg./pl. clitic *-de* seems to be replaced with the weak pronoun *ge*, which is clearly a formal variant of strong *gij* (cf. Schuurmans 1975, see also SAND, especially Maps 39–40). Likewise, the 1pl. clitic *me* is gradually losing ground in favour of the weak pronoun *we*, a variant of strong *wij* (compare, for instance, the map by De Schutter (1989) with SAND-maps 44–45).[7] Secondly, there is a region in the Dutch language area where an identical shift as in Brabantic is well-documented, indicating that the pathway in (12) is indeed a plausible one. Will (2004, pp. 232–271), describing a number of syntactic developments in the Zeelandic Flemish dialects as spoken in the 20th century, shows that some of these dialects have had similar subject doubling possibilities as the contemporary Flemish dialects, including patterns 1, 5, and 7 (which were found for all grammatical persons). Most of these instances have disappeared, however. But Will's (2004, p. 263) data also show that the patterns which are found in the Brabantic dialects nowadays, are exactly the ones that have resisted loss in the Zeelandic Flemish dialects for a long time, viz., the use of pattern 1 for all grammatical persons, and the use of clitic doubling in the first and second person singular, and the second person plural.

3.4. From Clitic Doubling to Topic Marking

3.4.1. A Diachronic Pathway

The geographical data yield the hypothesis that, diachronically, not only topic doubling derives from clitic doubling, but topic marking as well (cf. 10c). The most widespread pattern of topic marking is pattern 3, i.e., main clauses with regular word order. Hence the most plausible diachronic pathway involves main clauses with regular word order (i.e., 'pattern 1'-clauses like *ze werkt zij* and 'pattern 3'-clauses like *Marie werkt zij*):

(13) From clitic doubling to topic marking (preliminary version)

clitic V strong (*clitic doubling*)	>	lexical element V strong (*topic marking*)
e.g. ze werkt zij		e.g. Marie werkt zij
she$_{clitic}$ works she$_{strong}$		Mary works she$_{strong}$

It is not immediately clear what mechanism could be responsible for the development in (13); in general, clitics cannot simply be replaced with lexical elements. In addition, an account for (13) must also explain why the lexical elements in topic marking are used in a construction in which strong pronouns

[7] There are more instances testifying to the large-scale loss of clitics in Brabantic, including data for 1sg. *'k* and 3sg.masc. *en*, but the loss of these clitics is less well-documented. See De Vogelaer (2008) for discussion.

are not used, as topic marking patterns such as *Marie werkt zij* seldom co-occur with topic doubling patterns such as *zij werkt zij* (cf. 10d).

There are, however, more differences between clitic doubling and topic marking than the nature of the preverbal element. First, topic marking shows morphological variation in the choice of the postverbal strong element. Apart from the feminine pronoun *zij*, other pronouns can be used to double feminine subjects, such as *hij*, *(t)jij*, and *tet*. When masculine and neuter subjects are topic marked, *hij*, *(t)jij*, and *tet* are the only options.

(14) Topic marking: Morphological variation in the strong element
  a. Topic marking with feminine subject:
     Marie werkt zij / hij / (t)jij / tet.
     Mary works (strong element)
     Mary works.
  b. Topic marking with masculine/neuter subject:
     Jan/dat kind werkt hij / (t)jij / tet.
     John/that child works (strong element)
     John/that child works.

All in all then, the most important topic markers are *hij*, *(t)jij*, and *tet*; they combine with masculine and neuter subjects in all dialects, and with feminine subjects in the majority of the topic marking dialects. Among these elements, *hij* and *(t)jij* are strong masculine pronouns; *tet* is more difficult to label. Historically, *tet* may derive from a strong masculine or neuter pronoun (see De Vogelaer 2005, pp. 209–210 for discussion), but in contemporary dialects, it is only used in topic marking constructions, and in clitic doubling, where *tet* doubles the 3SG.NEUT clitic *'t*. (15) shows an example of 3SG.NEUT clitic doubling. In dialects in which *tet* is not available, *hij* and *(t)jij* are used instead.

(15) Clitic doubling in 3SG.NEUT
     Dat feest? 't is hij / (t)jij / tet afgelast.
     that party? it is (strong element) cancelled
     The party? It is cancelled.

Clitic doubling for 3sg. neuter is much less widespread than clitic doubling for all the other grammatical persons. Interestingly, the geographical distribution of clitic doubling for 3SG.NEUT is comparable to the distribution of topic marking (compare map 3 and SAND-map 58b with SAND-map 58a). Although there are a few dialects for which the SAND only attests topic marking, clitic doubling for 3SG.NEUT is the more widespread phenomenon. The fact that the most frequent topic markers, *hij*, *(t)jij*, and *tet*, are used in clitic doubling patterns as well, and that the geographical distribution of topic doubling resembles the distribution of clitic doubling for 3SG.NEUT, suggests that a diachronic account

of topic marking should not focus on *zij*, as was done in (13), but rather on *hij*, *(t)jij*, and *tet* (cf. below).

Apart from the morphological variation in the strong element, there is a second additional difference between clitic doubling and topic marking, viz., that the restrictions on the subject are much stricter for clitic doubling than for topic marking. Clitic doubling, on the one hand, only affects pronouns, and, hence, specific referents. Topic marking, on the other hand, is possible for a much wider range of subjects. Haegeman (1992, pp. 63–64) and Haegeman and Van de Velde (2006) provide some examples for the dialect of Lapscheure (with *tet* as a topic marker), but similar instances are found in other dialects (with *hij* or *(t)jij*). In (16), some relevant examples are given, involving different types of subjects. (16a) and (16b) contain an expletive *'t* 'it'. (16a) formally resembles clitic doubling, in that *tet* clearly doubles the clitic *'t*, which is used as a subject to the weather verb *regenen* 'to rain'. In (16b), it is not clear which element is doubled: the sentence contains the clitic *'t*, but this clitic is used to introduce the non-specific subject *een man* 'a man'. (16c) is a typical instance of topic marking, in which *tet* doubles a third person masculine subject. (16d–f) show that instances can be found of *tet* doubling a non-3sg.masculine subject, i.e., a 3pl. subject in (16d), a 1pl.-pronoun in (16e), and a clitic doubled 3sg.feminine pronoun in (16f).

(16) Variation in the subjects that can be topic marked.

a. 't Is tet nu aan 't regenen.
it$_{\text{CLITIC}}$ is TET now on the raining
It is raining. (Haegeman and Van de Velde 2006)

b. 't Heeft tet hier een man gewoond.
it$_{\text{CLITIC}}$ has TET here a man lived
A man has lived here.

c. Die man heeft tet in Brussel gewoond.
that man has TET in Brussels lived
That man has lived in Brussels.

d. Zijn tet de studenten weg?
are TET the students gone
Are the students gone? (Haegeman 1992, p. 63)

e. Me kennen tet dat.
we$_{\text{CLITIC}}$ know TET that
We know that. (Haegeman and Van de Velde 2006)

f. Ze kent tet zij dat.
she$_{\text{CLITIC}}$ knows TET she$_{\text{STRONG}}$ that
She knows that. (Haegeman and Van de Velde 2006)

(16b) is particularly interesting, as it provides a possible link between clitic doubling and topic marking; in this example, both the clitic *'t* 'it' and the lexical

subject *een man* 'a man' occur. The clitic *'t* is used as an expletive in (16b), and expletives can indeed occur in clitic doubling patterns in some Flemish dialects (cf. 16a). Combinations of expletives and lexical subjects would then be a syntactic environment in which clitic doubling patterns can extend to sentences with lexical subjects, giving rise to topic marking. Hence, expletive doubling is a possible intermediate development between clitic doubling and topic marking. This leads to the hypothesis in (17).

(17) From clitic doubling to topic marking (final version)

3 SG.NEUT clitic doubling	>	expletive doubling	>	topic marking
't Werkt tet (or: hij / (t)jij).		't Werkt tet een man.		Die man werkt tet.
it_{CLITIC} works he_{STRONG}		it_{CLITIC} works he_{STRONG} a man		that man works he_{STRONG}
IT WORKS.		A MAN WORKS.		THAT MAN WORKS.

(17) shows a scenario in which fewer unlikely changes occur than in (13). The basic hypothesis is that the topic markers *hij*, *(t)jij*, and *tet* originally function as strong pronouns that can double 3SG.NEUT clitics. As the 3SG.NEUT clitic *'t* is used as an expletive in the dialects under investigation, *hij*, *(t)jij*, and *tet* can also be used to double expletives, giving rise to clauses with an expletive, a non-pronominal subject and the pronoun *hij*, *(t)jij*, or *tet*. In a further step, the co-occurence of the non-pronominal subject and *hij*, *(t)jij*, or *tet* is extended to clauses without expletives, turning the doubling elements *hij*, *(t)jij*, and *tet* into topic markers.

The scenario in (17) does not deal with topic marking in clauses with non-3sg.masc.-subjects, which are indeed attested (cf. 16d–f), and which provide a challenge to the hypothesis. For the scenario in (17) to hold, it needs to be shown that patterns such as (16d–f) have not played a role in the rise of topic marking, i.e., they are younger extensions of instances like (16c).

3.4.2. Empirical Support

In the previous section, it was stated briefly that 3SG.NEUT clitic doubling and topic marking show a comparable geographical distribution. SAND-map 58a shows that the geographical distribution of expletive doubling is more or less the same as the distribution of 3SG.NEUT clitic doubling. Hence the geographical data corroborate the hypothesis in (17). Further empirical evidence for the hypothesis in (17) is found by taking dialect-internal variation into account. Unlike clitic doubling and topic doubling, the use of topic marking is subject to substantial dialect-internal variation; while informants for a specific dialect are usually consonant in their judgements of the different kinds of clitic doubling and topic doubling, huge disagreements occur when they are asked to judge instances of topic marking. We have conducted a small-scale fieldwork investigation to take stock of this dialect-internal variation. In short interviews,

34 speakers of a topic marking dialect were asked whether a given number of patterns could occur in their dialect. All test sentences had regular word order. (18) provides a summary of the results (a more detailed overview can be found in the appendix).

(18)

Dialect-internal variation in topic marking dialects (n = 34)

DOUBLING OF:	
clitic doubled 't 'it'	29–32 speakers
a.o. referential 't	
subject of a weather verb	
expletive 't	
3sg.masc. nouns	22–25 speakers
a.o. die vent 'that man'	
een boer 'a farmer' (generic use)	
other types	1–16 speakers
frequently found (n > 10): conjoined pronouns (3 + 1; 2 + 1), 1pl. pronoun, 3pl. noun	
less frequently found (10 > n > 5): 3sg.fem. pronoun, 2sg. pronoun	
hardly attested (n < 5): 1sg. pronoun, 3sg.fem. pronoun (clitic doubled)	

(18) ranks a number of different subject doubling patterns according to the frequency with which they are found in all dialects under investigation. The ranking does not depend on the topic marker that is used; if one were to make separate rankings for the dialects in which *tet* is used as a topic marker (n = 17), and for those in which *(t)jij* (n = 10) or *hij* is used (n = 7), the same results would be obtained. In general, the older a particular subject doubling pattern is in our account in (17), the more informants judge it grammatical in (18); almost all informants allow doubling of the neuter pronoun *'t*, be it an instance of referential *'t*, of *'t* as a subject of a weather verb, or as expletive *'t* introducing an indefinite subject ('3SG.NEUT clitic doubling' and 'expletive doubling' in (17)). Doubling of 3sg.masc. nouns with a topic marker is less popular, but still very widespread. All other types are, in our hypothesis, younger extensions of topic marking, and, correspondingly, they are far less frequently found. Hence it looks as if the presence of doubling of *'t* 'it' is a necessary condition for all the other types to arise, and the presence of topic marking for 3sg.masc. nouns is a necessary condition for all topic marking patterns without *'t* 'it' to arise. This corroborates the hypothesis in (17).

Our results confirm the existence of most of the types discussed by Haegeman (1992) and Haegeman and Van de Velde (2006), although some of them are very rare. That they are rare suggests that they must be analysed as relatively young extensions of topic doubling for the third person masculine, and that they have indeed not played a role in the rise of topic marking. We cannot, at this point, provide any hypothesis for the rise of these patterns, but the results in (18) raise many questions. For instance, it is not clear why topic marking in clauses with conjoined pronoun subjects (i.e., *zij en ik* 'she and I' and *gij en ik* 'you and I') ranks relatively high, as does topic marking in clauses with a 1pl. pronoun. It is not even clear why topic marking would even exist in clauses with pronominal subjects, as these subjects can already be doubled with strong pronouns in the relevant dialects, giving rise to clitic doubling. We must, at this point, leave these questions open for further research.

4. CONCLUSIONS

In this chapter, we have discussed the distribution of the most important subject doubling patterns that are found in the Dutch dialects. Using data from the SAND, it is argued that three basic types need to be distinguished: clitic doubling, topic doubling, and topic marking. As for the diachrony of subject doubling, the maps suggest that clitic doubling is the oldest type, and that topic doubling and topic marking have originated more recently. We have provided linguistic arguments and some additional data, which, in both cases, corroborated our diachronic analysis of the geographical distribution of the different types.

Although geographical data alone certainly do not suffice for a complete analysis of all subject doubling patterns (cf. the questions that were raised at the end of Section 3.4.2), some of the advantages of a geographical approach have been illustrated quite clearly; for instance, a thorough geographical approach will yield generalisations that are empirically more adequate than a contrastive one (see Section 2). In addition, dialect geography may provide useful clues as to the diachrony of the phenomena under investigation (see Section 3). We therefore hope that in an era in which dialect syntax is becoming increasingly relevant for theoretical linguistics (cf. Kortmann 2002), some traditional methods of dialect geography will receive the re-appraisal that they deserve.

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APPENDIX: RESULTS OF THE TOPIC MARKING INVESTIGATION

		n = 34
't with weather verbs	't regent tet/(t)jij/hij. it rains TM It is raining	32
expletive 't	't woont tet/(t)jij/hij hier een oud ventje. it lives TM here an old man, Here lives an old man.	32
referential 't	't is tet/(t)jij/hij al lang geleden. it is TM already long ago It is been long ago.	29
3sg.masc. – specific	Die vent is tet/(t)jij/hij op reis geweest. that man is TM on vacation been That man has been on vacation.	25
3sg.masc. – generic	Een boer gaat tet/(t)jij/hij nooit op reis. a farmer goes TM never on vacation A farmer never goes on vacation.	22
conjoined 3 + 1	Zij en (ek)ik zijn tet/(t)jij/hij samen op reis geweest. she and I have TM together on vacation been She and I have been on vacation together.	16
conjoined 2 + 1	Gij en (ek)ik zijn tet/(t)jij/hij samen op reis geweest. you and I have TM together on vacation been You and I have been on vacation together.	13
1pl. pronoun	Wij zijn tet/(t)jij/hij samen op reis geweest. We have TM together on vacation been We have been on vacation together.	13
3pl. – lexical	Die mannen zijn tet/(t)jij/hij samen op reis geweest. these men have TM together on vacation been These men have been on vacation together.	11
3sg.fem. pronoun	Ze is tet/(t)jij/hij op reis geweest. she is TM on vacation been That man has been on vacation.	9
2sg. pronoun	Ge zijt tet/(t)jij/hij op reis geweest. you are TM on vacation been You have been on vacation.	7
1sg. pronoun	Ik ben tet/(t)jij/hij op reis geweest. I am TM on vacation been I have been on vacation.	2
3sg.fem. pronoun (clitic doubled)	Ze is tet/(t)jij/hij zij op reis geweest. she is TM she on vacation been She has been on vacation.	1

9

PLEONASTIC *TET* IN WEST FLEMISH AND THE CARTOGRAPHY OF SUBJECT POSITIONS

Liliane Haegeman

ABSTRACT

The empirical focus of the chapter is pleonastic *tet* in the Lapscheure dialect. At first sight, *tet* looks like a third person neuter pronoun which functions as a pronominal doubling element in the subject doubling pattern. The chapter first recapitulates the arguments against treating *tet* as a subject doubler (Haegeman 1986, 1992, Haegeman and vandeVelde 2006). Distributionally, *tet* is shown to differ from strong/doubling subject pronouns, from weak subject pronouns, from non-subject clitics and from discourse-related adverbs.

Following Grohmann (2000), van Craenenbroeck and Haegeman (2005, 2007) and Haegeman and vandeVelde (2006), it is proposed that *tet* lexicalizes a functional projection ('FP') which demarcates TP and CP. This expressive function of *tet* is similar to that of discourse-related modal particles (Kratzer 1999) and suggests that FP is a modal or discourse-related projection. On the other hand, given its licensing conditions, *tet* also seems to share crucial properties of 'subject' elements and on this basis FP might be identified as 'SubjP' (Rizzi 2006), the highest subject

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projection (see also Cardinaletti and Repetti 2005; Chinellato 2005; Rizzi and Shlonsky 2006).

Two issues are further examined: (i) the fact that the intervention of *tet* between the agreeing complementizer and the subject remains compatible with complementizer agreement. It will be proposed that, thanks to its featural underspecification, *tet* can mediate the agreement relation between C and the subject. (ii) The fact that pleonastic *tet* alternates with the form *hij*, which corresponds to the third person masculine pronoun. Following Rooryck (2001) it is proposed that both *tet* and *hij* are featurally underspecified and thus can take up a pleonastic function.

1. INTRODUCTION: AIM AND SCOPE

1.1. *Tet* as a Doubling Pronoun?

The focus of this chapter is the interpretation and distribution of the element *tet* in the Lapscheure dialect. Based on (1a), *tet* looks like a third person neuter pronoun which functions as a pronominal subject doubler, whose function would be like that of the strong pronoun *zie* ('she') in (1b) (Haegeman 1992, 2005). In (1b) the third person singular feminine subject is instantiated twice: once by *ze*, a weak pronominal form, and once by *zie*, a strong form of the pronoun.

(1) a. T ligt tet doa.
it lies *tet* there
It is lying there.

b. Ze ligt zie doa.
she lies SHE there
She is lying there.

Many Flemish dialects display subject doubling. For a fairly detailed description of the Lapscheure dialect I refer to Haegeman (1990, 1992, 2005).

In the regular pattern illustrated in (1b), doubling is not obligatory: the weak form may survive by itself (2a). In the same way *tet* is not obligatory in (1a), as shown by (2b):

(2) a. Ze ligt doa.
she lies there
She is lying there.

b. T ligt doa.
it lies there
It is lying there.

I will show that the distribution of *tet* in (1a) is unlike that of the doubling pronouns illustrated by *zie* in (1b), and alternative analyses will be explored.

1.2. Organization of the Chapter

The chapter is organized as follows. In the following two sections, I show that the element *tet* differs from the regular subject doubling pronouns. While discussing the empirical evidence against treating *tet* as a doubling pronoun, I will provide information concerning its distribution. After that, I will formulate the hypothesis that *tet* lexicalizes a functional projection ('FP') located either on the lower edge of CP or on the higher edge of TP. I will discuss two proposals with respect to the nature of this projection. I will also examine the question of how the presence of *tet* between the complementizer and the subject can be reconciled with the adjacency condition on complementizer agreement. Finally, I will discuss the observation that for some speakers and/or in some dialects, a masculine singular third person pronoun seems to have the same function as *tet*. The chapter ends with a brief conclusion.

2. SUBJECT DOUBLING AND THE PRO-DROP PHENOMENON

In this and the next section I will show that, though at first sight *tet* is like any other subject doubling pronoun, closer inspection reveals that such an analysis is not tenable. First I show that, while the doubling pronoun in the regular doubling pattern as illustrated in (1b) seems to have roughly the same function as the strong pronoun in the pro-drop languages, *tet* does not share these properties.

2.1. Subject Doubling and Strong Subject Pronouns in the Pro-Drop Languages

Among those who have worked on subject doubling, one fairly widespread assumption is that the role of the doubling pronoun *zie* in (3a) can be compared to that of the overt strong subject pronoun in pro-drop languages. It is assumed that the strong pronoun *zie* in (3a) occupies the canonical subject position. In (3b), the variant without doubling, the strong pronoun is absent and, adhering to the accounts for the pro-drop phenomenon, one might assume that the canonical subject position is occupied by *pro*, a null pronoun identified through agreement with the φ features of the weak form *ze* and of the inflected complementizer *da*.

(3) a. kpeinzen da-ze zie da weet.
I-think that-she SHE that knows
I think that SHE knows that.

b. kpeinzen da-ze [pro] da weet.
I think that she knows that.

Along these lines, the examples in (3a) and (3b) could be compared to Italian (4). Like the strong pronoun *lei* ('she') in (4a), the doubling strong pronoun

zie in (3a) induces some kind of emphatic interpretation: 'she' contrasts with another background entity ('she and not I', for instance). In (3b) and (4b), without the strong pronoun, there is no such contrastive effect.

(4) a. Lei lo sa.
she it know-3SG
SHE knows it.

b. [pro] lo sa.
[pro] it know-3SG
She knows it.

For completeness' sake, I add that in the Lapscheure dialect doubling is restricted to pronouns: DP subjects cannot co-occur with a weak form of the pronoun, whatever sentence type they occur in (5a). DP subjects also cannot be doubled by strong forms of the pronoun (5b,c). The ungrammaticality of (5b,c) follows if we assume that strong pronouns and DP subjects occupy the same position.

(5) a. *kpeinzen da-ze Marie komt.
I think that she Marie comes

b. *kpeinzen da zie Marie komt.
I think that SHE Marie comes

c. *kpeinzen da Marie zie komt.
I think that Marie she comes

The doubling pattern systematically consists of a combination of a strong form of the pronoun and a matching weak form of that pronoun.

A terminological point is in order. In the past, many authors have used the term 'clitic' as a shorthand term to cover either what would technically be a syntactic clitic, i.e., an X° element, or what is syntactically a weak form of the pronoun, i.e., an XP element, which cliticizes at PF. For instance, in Haegeman (1990) the element *ze* in (1b) was referred to as a 'clitic' but it is patently clear from the discussion (1990, p. 352) that the element was analyzed as a syntactic XP (cf. Haegeman 1992, pp. 102–103; Shlonsky 1994, p. 370 for a similar use of the term 'clitic'). In the present chapter I will avoid using the term 'clitic' to designate the weaker component of the subject doubling pattern and I will use the terms 'weak pronoun' or 'weak form (of the pronoun)' instead. These terms are used in a pre-theoretical sense. I do not rule out that in some of its guises, the so-called weak form or weak pronoun is an XP that undergoes PF cliticization, while in others it must be analyzed as a genuine syntactic clitic, i.e., an X°, and in yet other cases it may be the spell-out of agreement features. (See Fuss 2005 for discussion of the status of weak forms in Germanic.)

I will often refer to the Lapscheure dialect by the abbreviation 'WF' for 'West Flemish'. Most of the claims I make in this chapter are based on data from the

Lapscheure dialect and they should not be taken to imply that I assume that the generalizations apply across West Flemish.

2.2. Third Person Neuter and Pronoun Doubling

It might appear as if WF (1a) can be analyzed as an instance of subject doubling in the third person singular neuter: the weak element *t* co-occurs with what looks like a strong pronominal counterpart, *tet*. This doubling is optional (2b). However, the regular doubling case illustrated in (1b), presents a third alternative with only the strong pronoun: (6a) is a marked pattern and requires stress on the subject *zie*. (6a) will be used in a situation in which the referent of *zie* is contrasted with some other discourse entity. This pattern is not available with *tet* (6b).

(6) a. ZIE ligt doa.
SHE lies there
She's lying there.

b. *TET ligt doa.[1]
it lies there

At first sight (7a) and (7b) could also be interpreted as instantiations of (optional) doubling.[2]

(7) a. T'is (tet) nu an 't regenen!
it is (*tet*) now on the rain
It is raining now.

b. T'goan (tet) vee studenten dienen boek kuopen!
it go (*tet*) many students that book buy
Many students will be buying that book.

A doubling analysis for (7) would lead to the conclusion that *tet* doubles a non/pseudo-argumental weak pronoun *t*. In terms of the pro-drop analogy for doubling referred to earlier, this would mean that a non/pseudo-argumental null pronoun in the canonical subject position alternates with an overt pronoun. This is unexpected: in the pro-drop languages overt pronouns are typically arguments. Italian weather verbs, for instance, are incompatible with an overt subject pronoun, whether it be strong or weak (8a). Similarly, in advanced

[1]Initial *tet* is signalled by De Vogelaer (2005, p. 172) for the dialect of Sint Laureins (Sand 1156p), but (i) would not be grammatical in my dialect:

(i) Tet is a lang geleden!
it is already long ago

[2]De Vogelaer (2005, p. 170, note 16) seems to take examples such as (7b) as evidence for expletive doubling.

varieties of French (Zribi-Hertz 1994), for which subject clitics have been argued to have become reanalysed as the spell-out of agreement features licensing a pro subject and giving rise to a doubling pattern (8b), a pseudo-argument subject could never give rise to doubling (8c,d). See Holmberg (2005) on Finnish, though.

(8) a. (*Lui/*Esso) piove.
(*it) rains.

b. (Lui) il ne ferait pas cela.
(he) he would not do that.

c. (*Lui) il pleut.
(*it) it rains.

d. (*Lui) il y a beaucoup de livres sur la table.
(*it) there are many books on the table.

If WF *tet* in (7) is interpreted as a double for a non/pseudo-argumental subject, the basis for postulating a parallelism between the regular doubling pattern and the pro-drop pattern becomes considerably weakened.

Moreover, if (7) is taken as an illustration of doubling, then the contrastive/emphatic effect associated with the doubling pattern in (1b) and (3a) can no longer be generalized. In (7), *tet* cannot be associated with a contrastive/emphatic reading: the very nature of non/pseudo-argumental subjects excludes contrast/emphasis.

3. THE DISTRIBUTION OF *TET* IN THE LAPSCHEURE DIALECT

This section will show that, though formally *tet* resembles a pronoun, its distribution differs both from that of the strong subject pronouns and from that of weak pronouns.

3.1. The Distribution of *Tet* is unlike that of Strong Pronouns

Formally, the element *tet* looks like a strong form of the third person neuter singular pronoun.[3] It is worth pointing out that not all speakers use the same doubler (De Vogelaer, 2005, p. 170). The form *tet* alternates with forms such as *(tj)ie* and *(t)jij*, which are used as the strong forms of the third person masculine. De Vogelaer (2005) shows that for the relevant speakers/dialects, the element which alternates with *tet* systematically corresponds to the pronoun used as the third person masculine nominative pronoun. So, some speakers who

[3](i) in note 1 illustrates *tet* as a third person neuter pronoun.

use *ie* for the third person masculine also use *ie* instead of *tet*; some speakers who use *hij* as the third person masculine pronoun also use *hij* instead of *tet*. (9) is from De Vogelaer (2005, p. 170). The alternation suggests that *tet* should be aligned, at least formally, with a strong pronoun, rather than with a weak form of the pronoun.[4]

(9)	a.	Heeft	dr	(t)et	hier	een	man	gewoond?	
		has	there	*(t)et*	here	a	man	lived	
	b.	Heeft	dr	(h)ij /(h)ie/jij/em		hier	een	man	gewoond?
		has	there	he/him		here	a	man	lived

3.1.1. Strong Pronouns in Initial Position

In spite of its similarity to a strong pronoun and in spite of alternating with a strong masculine pronoun, the distribution of *tet* is unlike that of the regular strong pronoun. As mentioned already, in WF all other strong pronouns may occur as subjects unaccompanied by a doubling element (6a), in which case they receive focal stress. This is not the case for *tet*, which, in my dialect, cannot function as a strong subject (6b). The very fact that *tet* cannot be used as a subject pronoun suggests that, even in cases in which it co-occurs with a weak third person neuter subject (1a), it may well not be an instantiation of an 'ordinary' doubling pronoun. In what follows, I go over additional arguments against treating *tet* as a regular subject doubler.

3.1.2. Subject Doubling and Matching Person Features

The distribution of *tet* in what might at first sight be taken to be 'subject doubling' patterns is quite different from that of 'regular' doubling pronouns. In subject doubling, the weak form of the pronoun and the strong doubling pronoun systematically match in terms of person features; mismatched person features lead to ungrammaticality. So, for instance, the second person weak form *ge* ('you') in (10) can only be doubled by the second person singular strong pronoun *gie* ('you') (10a) or by the second person plural strong pronoun *gunder* ('you') (10b), but not by a third person pronoun (10c).

---

[4]Unlike standard Dutch *-ie*, which is always enclitic, WF *ie* is a strong pronoun: it can be modified (ia) and it can be coordinated (ib):

(i) a. Ie allene weet da nie!
he alone knows that not
He alone doesn't know that.

b. Ie en zie goan der noatoe.
he and she go there to
He and she are going there.

(10) a. Ge kent gie da.
you-2 know you-2SG that
b. Ge kent gunder da.
you-2 know you-2PL that
c. *Ge kent zie da.
you-2 know she-3SG that

But *tet*, which formally corresponds to the third person pronoun, co-occurs with non-matching weak forms: in (11a) *ge* is second person, and in (11b) *me* is first person plural:

(11) a. Ge kent tet da.
you-2 know *tet* that
b. Me kennen tet da.
we-1PL know *tet* that

3.1.3. *Tet* Co-occurs with Doubling Patterns

In the doubling pattern one weak form combines with one strong pronoun. Tripling is excluded in my dialect (12a,b). But, as shown in (12c), *tet* can be added to any independently available doubling pattern. It is thus a pleonastic element which is not part of the regular doubling pattern.

(12) a. *da-ze ze zie da kent.
that-she she SHE that knows
b. *da-ze zie zie da kent.
that-she SHE SHE that knows
c. da-ze tet zie da kent.
that-she *tet* she that knows

Recall that it might appear as if *tet* in (1a) is a doubling pronoun for the weak neuter pronoun *t*. If this were correct, then one might expect to find this instance of *tet* co-occurring with the pleonastic instance of *tet* that co-occurs with doubling patterns (12c). This prediction is incorrect: (13) is ungrammatical, suggesting that *tet* never functions as the strong third person neuter pronoun in the regular doubling pattern.[5]

(13) *T ligt tet tet doa.
it lies *tet* TET there

[5]As suggested by an anonymous reviewer, the non-occurrence of *tet* as a doubler for the third person neuter pronoun is reminiscent of the fact that in Standard Dutch *het* ('the'), the strong form of the neuter pronoun, 'is hardly used in speech'.

3.1.4. *Tet* Co-occurs with DP Subjects

Definite DP subjects (whether pre- or post-verbal) do not allow doubling.[6] Strong forms of the pronouns also cannot co-occur with a DP subject. Unlike the regular doubling pronouns, *tet* can combine with DP subjects:

(14) a. da tet Marie dienen boek a kent.
that *tet* Marie that book already knows

b. Dienen boek kent tet Marie a.
that book knows *tet* Marie already

Summarising the preceding discussion, it is clear that distributionally, *tet* is not simply to be assimilated to a strong pronoun, whether it be a doubling pronoun or one used independently. In the next section, we will see that *tet* does not have the distribution of the weak forms of the pronouns either.

3.2. The Distribution of *Tet* is unlike that of Weak Pronouns

3.2.1. Imperatives in the Lapscheure Dialect

As already pointed out (9), for some speakers *tet* alternates with the strong form of the third person masculine pronoun. This is a first indication that *tet* should probably not be assimilated to the weak forms of the subject pronouns. This conclusion is confirmed by the fact that in certain contexts, weak forms of the subject pronoun are unavailable while *tet* remains possible. One such context is that of imperatives. As shown in (15), WF imperatives either lack an overt subject or they contain the strong form of the second person pronouns, *gie* ('you') for the singular or *gunder* ('you') for the plural. Whether or not there is such a pronoun present, the weak form of the second person subject, *je*, is unavailable, but *tet* can always be inserted:

(15) a. Leest (gie) dienen boek eerst!
read you-2SG(SP) that book first

b. *Leest je (gie) dienen boek eerst!
read you-2(WP) you-2SG(SP) that book first

c. Leest tet (gie) dienen boek eerst!
read *tet* you-2sg(sp) that book first.

The question arises why the weak forms of the subject pronoun are not licensed. As it co-occurs with the negative morpheme *en-* (15d), which is limited to finite contexts (Haegeman 2001, 2002), it can be argued that the imperative is finite.

[6] See De Vogelaer (2005) and van Craenenbroeck and van Koppen (2002) concerning doubling patterns in other Flemish dialects.

(15) d. En-komt (tet) doa nie an.
en come *tet*) there not on
Don't touch that.

However, the imperative does not display all the usual person and number variations of the finite paradigm.[7] We might propose that imperatives are defective in that they lack the full array of φ features. Haegeman (2005, p. 126) postulates that the association of weak subject pronouns with the position C in WF is related to the fact that the WF complementizer of finite clauses displays a full set of agreement features matching those of the subject. We may postulate that WF weak subject pronouns are licensed by a complete set of φ features on C. Because no such full array of φ features is available on imperatives, imperatives do not license weak forms of the subject pronoun.

Tet does not have the distribution of non-subject weak pronouns or clitics either. (For diagnostics that distinguish weak object pronouns and object clitics see Haegeman (1996) and note 11.) For instance, in WF imperatives object clitics may either precede (16a) or follow (16b) the strong subject pronoun, but *tet* has to precede the strong subject (16c):

(16) a. Leest ze gie mor eerst.
read them-CL you-2SG(SP) 'mor' first

b. Leest gie ze mor eerst.
read you-2SG(SP) them-CL 'mor' first

c. Leest (tet) gie (*tet) dienen boek.
Read *tet* you-2SG(SP) *tet* that book

3.2.2. Infinitival Clauses and DP Subjects

In a subset of infinitival clauses in WF, an overt DP subject is possible (17a). When pronominal, this subject has nominative case.[8] In the same context, weak forms of the subject are unavailable (17b). However, *tet* remains available (17c):

(17) a. Mee Marie/ zie da niet te willen doen, moen-me 't
with Marie/she that not to want do must-we it
zelve doen.
self do
Since Marie/she does not want to do that, we have to do it ourselves.

b. *Mee ze (zie) da niet te willen doen, moen-me 't zelve doen.

[7]There seem to exist two forms: with or without the ending *-t*:

(i) Kom(t) en keer ier.
come a time here
Come here.

Both forms can be used with singular and with plural addressees.

[8]Cf. Haegeman (1986) and Haegeman and VandeVelde (2006).

c. Mee tet Marie/zie da niet te willen doen, moen-me
with *tet* Marie/she that not to want do must-we
't zelve doen.
it self do
Since Marie /she does not want to do that, we have to do it ourselves.

Pursuing the hypothesis that the WF weak subject pronouns depend on the availability of a full array of φ features in C, the absence of weak subject pronouns in infinitives can again be accounted for by the assumption that infinitives are φ defective and thus cannot license the weak subject pronoun.

Observe that the availability of *tet* in infinitival clauses correlates with the availability of an overt nominative subject: whenever an infinitive disallows an overt nominative subject, it also disallows the presence of *tet*. For reasons of space, I will merely illustrate the latter point by means of a few examples and I do not go into it in any detail. (18a) is an example of a control infinitive as the complement of *proberen* ('try') and in (18b) there is an infinitival subject clause. In such infinitival contexts a lexical subject is not allowed and *tet* is not possible:

(18) a. M' een geprobeerd [(*tet) dienen tekst te lezen.]
we have try-PART *tet* that text to read
We have tried to read that text.

b. [(*Tet) Dienen tekst eerst lezen] was een misse.
tet that text first read was a mistake
Reading that text first was a mistake.

4. A POSITION FOR *TET*

As mentioned earlier, *tet* has a restricted distribution: it optionally occurs in clause types that are compatible with a nominative subject. In embedded clauses, *tet* is located between the weak form of the subject and its strong form. With DP subjects, *tet* sits between the complementizer and the subject:

(19) a. *da* WP *tet* SP …
b. *da* *tet* DP …

4.1. Interpretation

Adding *tet* to a sentence does not contribute to its descriptive meaning but it does contribute to its expressive meaning: *tet* signals that the content of the sentence contrasts with the discourse context. I illustrate this point by means of an example. The unmarked answer to constituent question (20a) is (20b). (20c), with *tet*, cannot constitute simply an informative answer to (20a): adding *tet* signals there is something unexpected about the answer. (20c) would be an

appropriate answer to (20a) if the speaker had not expected Valère to be there. In the absence of *tet* the speaker may achieve the same effect for instance by stressing *Valère* (20d):

(20) a. Wien is dadde?
who is that

b. Dat is Valère.
that is Valère

c. Dat is tet VALÈRE!
that is *tet* Valère (but I thought he wouldn't be coming!)

d. Dat is VALÈRE!
that is Valère

One might conclude from this interpretive effect that *tet* should be associated with FocP in the left periphery. However, *tet* may occur in *wh*-questions such as (21). It is usually assumed that fronted *wh*-phrases — here *hoevele flassen* 'how many bottles' — themselves target SpecFocP (see Rizzi 1997). Such examples lead to the conclusion that *tet* must occupy a lower position.

(21) Hoevele flassen ee-j tet (gie) gekocht?
how many bottles have-2SG *tet* YOU bought
How many bottles did you buy?

Given its interpretive role, one might be tempted to assimilate *tet* to modal adverbs or particles, or perhaps to interjections. But *tet* differs from all of these in distributional terms. WF adverbs, modal particles, or interjections cannot intervene between the subordinating conjunction and the subject, while *tet* can intervene, and this is indeed its only position. (22a) and (22b) show the distribution of the particle *toch* 'yet', which also signals a contrast between the proposition and the context. (22c,d) show that *tet* has a different distribution. (22e) shows that *tet* can co-occur with *toch:*

(22) a. da Marie toch goa kommen.
that Marie yet goes come

b. *da toch Marie goa kommen.

c. *da Marie tet goa kommen.

d. da tet Marie goa kommen.

e. dat tet Marie toch goa kommen.

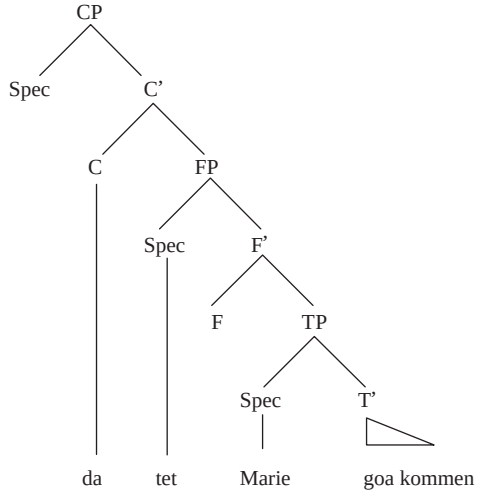
We can assume that (22b) is ungrammatical because the intervening adverb *toch* ('yet') blocks the closest c-command relation (Carstens 2003, 2005) required for complementizer agreement. Interestingly, then, *tet* does not disrupt the agreement relation between the complementizer or the fronted finite verb and the canonical subject position. I return to this later.

4.2. A Functional Projection Between CP and IP

On the basis of its distribution as summarized in (19), *tet* is situated between TP and CP. Adopting and adapting a proposal due to Grohmann (2000), and also found in van Craenenbroeck and van Koppen (2002), van Craenenbroeck and Haegeman (2007) propose that *tet* is associated with an FP, located between CP and IP as in (23).[9]

The question arises as to the nature of this projection. On the one hand, *tet* signals that the content of the sentence is in contrast with what the context would lead us to expect. This expressive function of *tet* is similar to that of discourse modal particles (Kratzer 1999) and it suggests that FP is a specialized modal or discourse-related projection (PolP, EvalP, etc). Support for such a view is the fact that *tet* occupies a unique position in the clause. There have been a number of proposals in the literature to characterize the projection situated between CP and IP. Among them, note especially Grohmann (2000), who proposes that F encodes the point of view. See Haegeman and vandeVelde (2006) for a survey of such proposals.

(23)



We have seen that *tet* has the following properties:

a. It is found in a unique position, between the complementizer and the canonical subject.
b. It alternates with a (masculine) nominative strong pronoun and is licensed only in environments in which a nominative subject is licensed.
c. Though it intervenes between C (*da*(*n*)) and the subject, it does not block C-agreement.

[9]For FP see also Uriagereka (1992, 1995), Raposo and Uriagereka (2005), Carrilho (2005, pp. 45–51).

Tet thus seems to share the syntactic properties of 'subject' elements and on this basis FP might also be identified as a subject-related projection which dominates SpecTP. The hypothesis that *tet* lexicalizes a functional projection in the subject field is inspired by work by Cardinaletti (1997, 2004). She argues that SpecIP should be reinterpreted in terms of an articulated array of projections, the subject field, each of which encodes a specialized subject-related property. The highest position is SubjP which encodes 'subject of predication'. Chinellato (2005) proposes that in the Paduan, Eastern Vicentino and Basso Polesano dialects, Subj can be filled by the invariable *a* morpheme. If Subj is filled by *a* this blocks the movement of the DP subject to the specifier of SubjP. For discussion see Chinellato (2005, pp. 33–34).

(24) $[_{CP}\ \ [_{SubjP}\ [_{Subj^{\circ}}\ a]\ [_{YP}\ [_{XP}\ ]]]]$

In recent work Rizzi and Shlonsky (2006) have postulated the projection SubjP, which connects CP and IP. SubjP shares properties both of the IP layer and of the CP layer. They propose that the requirement to fill the specifier of SubjP is on a par with the requirement that the specifier of FocP or of TopP must be filled.[10]

Inspired by these proposals and taking into account that *tet* is licensed in contexts in which nominative case is licensed, we might postulate that *tet* is inserted in the subject field. Let us assume that FP is SubjP. In the unmarked case, the subject DP moves to its specifier. Inserting *tet* in the highest subject position, SpecSubjP, blocks this position for a DP subject and keeps the DP subject lower. The 'novelty effect' created by the use of *tet* is inferred from the fact that SubjP is not lexicalized by the subject DP itself.

5. SPECULATIONS ON *TET* AND COMPLEMENTIZER AGREEMENT

5.1. The Data

In WF the complementizer must agree with the subject. (25) provides examples with DP subjects:

(25) a. kpeinzen dat/*dan tet Valère da weet.
I think that-SG/that-PL *tet* Valère that knows

b. kpeinzen dan/*dat tet Godelieve en Valère
I think that-PL/that-SG *tet* Godelieve and Valère
da weten.
that know

[10]Branigan (1996) offers an early proposal according to which the canonical subject position is higher than IP and combines A and A' properties. See Haegeman and VandeVelde (2006) for an evaluation of his analysis in relation to the distribution of *tet*.

Apart from object clitics,[11] nothing can intervene between the complementizer and the definite subject DP:

(26) a. *da toch Marie goa kommen.
that yet Marie will come

b. *da dienen boek Marie goa lezen.
that that book Marie goes read

In other Dutch dialects, intervening objects or adjuncts also block complementizer agreement. Some such dialects allow a non-agreeing form to show up when the complementizer is not adjacent to the subject. (27) is from Carstens (2005, p. 398): in (27a) a weak pronoun intervenes, in (27b) a PP intervenes. The WF variants of these examples are ungrammatical, whether or not the complementiser agrees.

(27) a. Ik dèènke dat /*datte oons zölfs Jan
I think that /that-1PL us even Jan
nie mag (Helledoorn Dutch)
not likes
I don't think even Jan likes us. (Carstens 2003, p. 399, her (12))

b. dat/*datte op den wärmsten dag van 't joar wiej tegen
that/*that-1PL on the warmest day of the year we against
oonze wil ewärkt hebt. (Helledoorn Dutch)
our will worked have
that on the warmest day of the year we have worked against our will.
(Carstens 2003, p. 398, her (9))

To account for the adjacency requirement on the agreeing complementizer and the DP subject illustrated by (27), Carstens proposes that C-Agree is subject to closest c-command. The intervening pronoun in (27a) and the intervening adverbial PP in (27b) are defective interveners. I refer to Carstens (2003, 2005) for further discussion.

5.2. *Tet* does not Intervene in Complementizer Agreement

5.2.1. The Problem

The question arises why *tet*, which sits between C and the subject DP, does not block C-agreement. The fact that *tet* is licensed in a nominative environment suggests it has case. If case makes a constituent a potential intervener

[11]For a motivation of the contrast between object clitics and weak object pronouns see Haegeman (1996) and Grohmann (2000). Three elements qualify as object clitics: *ze* ('her', 'them'), *t* ('it') and *der* ('of-them'). These can intervene between C and the definite subject. Haegeman (1996, 1999) shows that the object clitics give rise to Principle C effects. The weak object pronouns *men* ('me'), *jen* ('you'), *em* ('him'), *eur* ('her') *ons* ('us'), *under* ('you', 'them') cannot intervene between C and the definite subject and they do not create principle C effects.

Grohmann proposes that object clitics move to F. This proposal is adopted in Van Craenenbroeck and Van Koppen (2002) and in Van Craenenbroeck and Haegeman (2007).

(cf. Carsten 2003, 2005), then nominative case would make *tet* a potential intervener. Moreover, *tet* seems to be a third person neuter pronoun, so one may wonder why it does not induce singular C-agreement (28a). The same question arises for those speakers who allow what looks like the nominative masculine singular pronoun to intervene between C and the subject (28b).

(28) a. kpeinzen dan/*dat tet Godelieve en Valère
I think that-PL/that-SG *tet* Godelieve and Valère
da weten.
that know

b. kpeinzen dan/*dat tjij Godelieve en Valère
I think that-PL/that-SG he Godelieve and Valère
da weten.
that know

One account for the apparent 'transparency' of *tet* is to assimilate its analysis to that of existential *der*. For instance, van Craenenbroeck and van Koppen (2002), whose account of complementizer agreement is similar to Carstens', assume that in existential constructions the subject moves into SpecAgrSP, the higher copy of the subject in SpecAgrSP triggers agreement but this copy is not pronounced and spells-out as *dr*.

(29) a. da-n dr veel mensen gaa zijn.
that-PL there many people go be
that there will be a lot of people.

b. [$_{CP}$[$_{C^{\circ}}$da-n] [$_{AgrSP}$ [$_{Spec,AgrSP}$ ~~veel mensen~~$_i$] [$_{TP}$ [$_{SpecTP}$ veel mensen$_i$] gaa zijn]]]
(Waregem; van Craenenbroeck and van Koppen 2002, p. 7)

However, the distribution of *tet* is different from that of *der*. When the subject is a definite DP in the IP domain nothing can intervene between *tet* and the definite subject (30a). On the other hand, when the subject is indefinite and *der* is inserted, there may be material intervening between *der* and the indefinite DP (30b).[12] Moreover, expletive *der* may co-occur with *tet* (30b):

(30) a. da tet (*tnoaste weke) Valère doa nie goa zyn.
that-SG *tet* (*the next week) Valère there not goes be
that Valère won't be there next week.

[12]De Vogelaer (2005, p. 170) signals that in some dialects *tet* seems to be able to take over the function of expletive *der*. This is not the case in my dialect.

b. da-n dr (tet) tnoaste weke verzekerst veel mensen
that-PL there (*tet*) the next week probably many people
gaan zijn.[13]
go be
that there will probably be many people next week.

Though *tet* cannot be fully assimilated to existential *der,* it does seem to have a similar pleonastic function. In the next section I will first examine its feature specification and then return to the fact that it does not seem to block C-agreement.

5.2.2. Neuter Pronouns and Feature Specification

Formally *tet* seems to be the third person neuter singular pronoun. Following Rooryck (2001, p. 9) I assume that, as a neuter third person singular pronoun, *tet* is radically underspecified for its φ features. In fact, given that it is a pronoun with the feature make-up 'third person', 'singular number', 'neuter gender', each of the featural properties of *tet* may actually be said to be unspecified. The feature 'third person' can be seen as unspecified for person in not being specified for the opposition speaker/hearer; the feature 'singular' can be said to correspond to an unspecified number feature; 'neuter gender' might be seen as the radically unspecified form. With respect to this last point, Rooryck (2001) offers a formalism to encode three levels of gender-specification:

> […] *neuter seems to function as a 'default' value, since the neuter value of the article functions as a pronominal expletive (het regent 'it rains'). This observation then argues for a binary representation of Gender values, with neuter separate from the gender subset masculine/feminine, which I will designate informally as Subgen for lack of a better label.* […]

(31) [Gen: [Subgen: fem]] FEMININE
[Gen: [Subgen:]] MASCULINE
[Gen:] NEUTER

(Rooryck 2001, p. 5)

Assume then that *tet* is characterized as in (32).

(32) *tet* [person: __, number: __ gender: __]

[13]As a first approximation, I assume that expletive *der* has the distribution of weak subject pronouns/clitics and that it moves through SpecTP before cliticising to C. The associate of *der* remains in a lower position. I will not go into this issue here, which would lead us too far.

I assume that the underspecified features of *tet* can be specified contextually through agreement. Concretely, we can assume the following derivation. The subject DP has interpretable φ features. T has uninterpretable φ features. By agreement with the subject DP its uninterpretable features are checked. The subject DP moves to SpecTP to satisfy the EPP feature of T (33a). After merging of Subj, SpecSubjP is either filled by the subject DP or the subject remains in SpecTP[14] and SpecSubjP is filled by *tet* (33b). The φ features of *tet* are checked by Agreeing with the subject DP (33c). Let us assume, following Carstens (2003, p. 399), that the checked features of *tet* remain available for agreement until the next phase and that the φ features of C can be checked by agreement with *tet* (33d):[15]

(33) a. $[_{TP}\ SU\ _{[PERSON\ NUMBER\ GENDER]}\ T_{\varphi\ \sout{EPP}}\ [_{vP}\ t_{SU}\ \ldots]]$

b. $[_{SubjP}\ tet\ _{[PERSON\ \_\_\ NUMBER\ \_\_GENDER\_]}\ SU\ \sout{EPP}\ [_{TP}SU\ _{[PERSON\ NUMBER\ GENDER]}\ T_{\varphi\ \sout{EPP}}\ [_{vP}\ t_{SU}\ \ldots]]]$

c. $[_{SubjP}\ tet\ _{[PERSON\ NUMBER\ GENDER]}\ [_{TP}\ SU\ _{[PERSON\ NUMBER\ GENDER]}\ T_{\varphi\ \sout{EPP}}\ [_{vP}\ t_{SU}\ \ldots]]]$

d. $[_{CP}\ C_{\varphi}\ [_{SubjP}\ tet\ _{[PERSON\ NUMBER\ GENDER]}\ [_{TP}\ SU\ _{[person\ number\ gender]}\ T_{\varphi\ \sout{EPP}}\ [_{vP}\ t_{SU}\ \ldots]]]]$

Being featurally underspecified, *tet* as it were relays the features of the subject for C-agreement.

5.2.3. *Tet* is Immobile

The analysis presented in the preceding section raises a number of problems. If *tet* acquires a feature specification, it might be argued that *tet* is like an (expletive) pronoun. So one might expect *tet* to be able to also be attracted by the EPP feature of some probe and to move. However, this is clearly not the case. *Tet* cannot move to the initial position of a V2 sentence:

(34) *Tet weet Valère da.
tet knows Valère that

I proposed that *tet* is inserted in the specifier of SubjP, the highest subject position. For Rizzi and Shlonsky (2006), the specifier of SubjP must be filled to satisfy the Subject Criterion. Other criterial positions are SpecFocP, SpecTopP etc. Rizzi and Shlonsky (2006, p. 2) propose that once a constituent has moved to a criterial position, it is frozen there by 'Criterial Freezing'. I assume that *tet* is inserted in SpecSubjP in order to satisfy the Subject Criterion. By Criterial Freezing, *tet* is immobile.

[14]Cf. Cardinaletti (1997, 2004), Chinellato (2005) and Cardinaletti and Repetti (2005).

[15]The analysis does not take into account the hypothesis that T inherits its features from C (Chomsky 2005, 2006). See Van Koppen (2007).

There remain other problems for the analysis outlined earlier, though. I will discuss two of them here. One problem is that in examples such as (35), in order to move to the initial position in a V2 sentence, the subject DP *Valère* must have crossed *tet*. At this point, and given the analysis I propose earlier, it is not clear how this is possible: if *tet* has acquired the feature specification from *Valère* by the relay mechanism, the probe that attracts *Valère* should in fact first find *tet* rather than the lexical DP subject. *Tet* does not intervene in the movement of the subject to the C-domain.

(35) Valère weet tet da.
Valère knows *tet* that
Valère does know that.

This property is reminiscent of the distribution of the subject clitic in French complex inversion:

(36) Jean est-il venu?
Jean is –he come

In (36) the subject DP *Jean* has moved to a higher position, crossing the subject clitic *il* ('he').

If *tet* satisfies an EPP feature of Subj, and is thus a kind of expletive subject, the question also arises why it cannot also play that function in Spec T. In other words, at stage (33a) of the derivation, why can SpecTP not be filled by *tet* directly with the subject remaining in a lower position? I hope to return to this issue, which revolves around the difference between *tet* and *der*, in future work.

5.2.4. An Alternative: PF Insertion of *tet*

From the discussion of the properties of *tet* sketched above we conclude that (i) *tet* is immobile in the structure and (ii) it fails to interact with the syntactic processes around it. That is: *tet* allows a c-commanding complementizer to agree with a lower subject, and it allows a subject to move across it. Put differently, *tet* cannot be attracted by a probe and it is invisible for syntactic operations. In other words, to all intents and purposes, it is as if *tet* were not there at all.

This could lead us to envisage an alternative hypothesis: rather than assuming that *tet* is inserted in the narrow syntax and functions as a kind of relay element for complementizer agreement in the way described, one might postulate that *tet* is inserted at PF.[16] In this way of seeing things one might assume a derivation in which SpecSubjP may remain unfilled in the syntax. Agreement takes place between C and the canonical subject; there is no intervener in SpecSubjP. Later, at PF, *tet* is inserted. Under this view *tet* is a pure PF element that is invisible to syntactic operations.

[16]Thanks to Susi Wurmbrand for bringing up this possibility.

Note, though, that if Agree itself were also taken as a PF phenomenon (see Bobaljik 2006), this would imply that in order to avoid interference of *tet* with C-agreement some ordering of PF agreement and PF insertion of *tet* would be required.

6. THE ALTERNATION *TET/IE*

As already pointed out, De Vogelaer (2005, p. 209) signals that some dialects seem to use a nominative masculine third person singular pronoun instead of the 'neuter' *tet*. (37a) is his own example, (37b) and (37c) are from the Wetteren dialect:[17]

(37) a. Heeft dr (h)hij /(h)ie/jij/em[18] hier een man gewoond?
has there he/him here a man lived
Did there used to live a man here?

b. De studenten willen hij dat tegenwoordig niet meer!
the students want he that nowadays no more
Nowadays, the students don't want that any more.

c. Het is erg dat hij de studenten dat tegenwoordig
it is pity that he the students that nowadays
niet willen doen.
not want do
It's a pity that nowadays the students don't want to do that.

If the pleonastic use of the neuter pronoun seems intuitively plausible, neuter pronouns being maximally underspecified for syntactic features, one may wonder how a third person masculine pronoun can be so used. If we adopt the analysis in Rooryck (2001), the fact that *ie* also functions as a pleonastic element is not surprising. The essence of his proposal is that, contrary to first appearances, *ie* is not intrinsically the masculine singular pronoun.

Some speakers of the Lapscheure dialect use *ie* instead of *tet* with the expressive function described above. If we consider the paradigm for the personal pronouns in (38) in this dialect, though, it would appear at first sight that the formative *ie* is specified for singular as opposed to the plural *under*:

(38)

		weak forms	strong forms
a.	2SG	ge	gie
b.	3SGMASC	je	ie
c.	3SGFEM	ze	zie
d.	1PL	me	wunder
e.	2PL	ge	gunder
f.	3pl	ze	zunder

[17]Thanks to Marleen van Peteghem for the data.

[18]From De Vogelaer (2005, Map 19) we can conclude that the form *em* is relatively rare. I will not take it into consideration here.

However, note that in the dialect the formative *ie* occurs in other contexts in which it is compatible with plural specification. For instance, interrogative *wie* triggers either singular or plural agreement (cf. Rooryck 2001 who first developed this argumentation).

(39) Wien was/woaren ter doa?
who was/were there there

When we consider other West Flemish dialects, it becomes clear that *ie* is not specified as [SINGULAR]. For instance, the Heist dialect has the following paradigm:

(40)			weak	strong
	a.	2SG	je	gie
	b.	3SG.MASC	em	ie
		3SG.FEM	ze	zie
	c.	1PL	me	wieder
	d.	2PL	je	gieder
	e.	3pl	ze	zieder

Here the formative *ie* is found both in the singular and in the plural. Similar oppositions are found in other WF dialects (see Vallaeys 1997 for the Poperinge dialect).

Rooryck (2000) proposes that the Dutch and Flemish formative *ie* is similar to French *i(l)* 'he/it' in that both are underspecified for person, number and gender features. For Rooryck, the fact that, when used as arguments, French *i(l)* and Dutch *ie* can only be interpreted as 3rd person singular masculine results from a 'default' interpretation of the underspecified person, number and gender features. Rooryck assumes that the default interpretation is not triggered when the formative *ie* combines with /-d-/ and /w-/. In such contexts Dutch *ie* does become compatible with singular and plural interpretation. (41) is from Rooryck (2001, p. 10). I refer to Rooryck (2000, 2001) for further discussion and motivation.

(41) a. Wie heeft/hebben dat gedaan? Marie/Jan.
who has/have that done Marie/Jan

b. Die heeft/hebben dat gedaan.
that/those has/have that done

On the basis of the data cited earlier and following Rooryck (2000, 2001), let us assume that in the relevant dialects the formative *ie* is also not inherently specified for third person masculine singular, but rather that like *tet* it is featurally underspecified. Given this assumption, its use as a pleonastic subject is not surprising. When used as an argument, however, the default value will be triggered by which *ie* is interpreted as masculine singular.

7. CONCLUSIONS

I have shown that its semantic and distributional properties set pleonastic *tet* apart from regular doubling pronouns. Adopting the articulated subject approach as elaborated by Cardinaletti (1997, 2004), Chinellato (2005) and Rizzi and Shlonsky (2006), I have proposed that *tet* lexicalizes the highest subject projection (SubjP), thus preventing the DP subject from becoming the subject of predication. This leads to the 'novelty effect' associated with the clause. Because *tet* is inserted to satisfy the Subject Criterion (Rizzi and Shlonsky 2006) it is immobile.

I assume, inspired by Rooryck (2000, 2001) that *tet* is featurally underspecified and picks up the features of the subject of the clause by Agreement. The fact that *tet* alternates with the form *ie* is not surprising if we adopt Rooryck's (2000, 2001) proposals that this element too is featurally underspecified.

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10

BEYOND DOUBLING: OVERT EXPLETIVES IN EUROPEAN PORTUGUESE DIALECTS

Ernestina Carrilho

ABSTRACT

This chapter examines constructions which are tangential to syntactic doubling: overt expletive constructions in non-standard European Portuguese (EP), with special reference to instances occasionally equated with multiple-subject constructions. It is argued that, given the special status of the EP overt expletive, subject doubling is only illusive in such constructions. More specifically, the syntactic distribution of the EP expletive and the discourse effects displayed in EP expletive constructions substantiate the proposal that, differently from expletive subjects, this expletive is related to a high projection within the left periphery of the sentence, which has special import for the mapping between syntax and illocutionary force in discourse (arguably ForceP).

1. INTRODUCTION

Given the primordial link between expletives and subjects, the co-occurrence of an overt expletive and an argumental subject suggests a particular case of syntactic doubling, where the sentential subject is the prolific category. In fact, such expletive constructions have often been referred as 'double-subject' or,

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more generally, 'multiple-subject constructions' (MSCs). Well-documented in Germanic languages, MSCs have assumed a pivotal role in important advances in the understanding of the structural manifestation of subjects (Chomsky 1995; Bobaljik and Jonas 1996; Boeckx 2002; Vangsnes 2002, a.o.).

EP dialects provide evidence for a construction that could be — and in fact has occasionally been — taken as a case of MSC (see in particular Silva-Villar 1998, p. 256 and Boeckx 2002, p. 60). A relevant example is given in (1), where the subject-like expletive *ele* co-occurs with the argument *eu*, which itself appears to occupy the canonical (preverbal) subject position.

(1) Ele eu gosto de socorrer as pessoas! (COV23)[1]
EXPL I like.1SG of help.INF the people
I like to help people!

In this chapter, it will be argued, however, that 'subject doubling' is illusive in such constructions. In particular, after inspection of the status of the subject-like expletive *ele*, it will be concluded that this element must be distinguished from ordinary expletive subjects. As a consequence, the apparent case of 'subject doubling' must be understood otherwise. The proposal put forward capitalizes on the left-peripheral status of the overt expletive in EP dialects, in line with ideas proposed and developed by Uriagereka (1988, 1992, 1995, 2004). Departing from Uriagereka's proposals, however, it is posited that the EP overt expletive lexicalizes the left-peripheral projection of ForceP (cf. Rizzi 1997), in a procedure that appears to be fairly independent from any regular manifestation of the sentential subject (Carrilho 2005). Accordingly, the supposed EP doubling construction turns out to shed light well beyond the subject position, on the span of the sentential structure known as the left periphery — more particularly on its higher portion, which arguably mediates the interface between the syntax of different clause types and the illocutionary force that a sentence adopts in particular communicative situations.

The organization of the chapter is as follows. First, I will discard the doubling analysis of sentences like (1) above, consolidating the view that, in general, expletive *ele* differs from expletive subjects, on the basis of: (i) its syntactic distribution (shown in Section 2); and (ii) the discourse effects with which it correlates (considered in Section 3). Then, in Section 4, an alternative to the doubling

[1]Most data presented here come from the Syntax-Oriented Corpus of Portuguese Dialects, CORDIAL-SIN (available at http://www.clul.ul.pt/english/sectores/variacao/cordialsin/projecto_cordialsin.php). Given the characterization of this corpus, the examples are drawn from selected excerpts of spontaneous or semi-directed speech produced by non-instructed, old, and rural speakers during dialectal interviews for traditional linguistic atlases. Throughout the chapter, CORDIAL-SIN examples are identified by five character codes (corresponding to the location initials plus the number of the source file, e.g., AAL01). Whenever necessary (and possible), intuitive data are also considered (examples for which no source is indicated).

analysis is formulated; the present proposal builds on the left-peripheral status of the expletive in the relevant construction, exploiting in particular its connections with the ForceP projection. Finally, Section 5 concludes the chapter.

2. EXPLETIVE CONSTRUCTIONS ARE NOT MSCS IN EP DIALECTS: EVIDENCE FROM THE SYNTACTIC DISTRIBUTION OF EXPLETIVE *ELE*

2.1. Preliminaries

First of all, a word must be said about EP expletives in general. Note that overt expletives are fairly unexpected elements in a null subject language (henceforth NSL) like EP. In fact, the standard variety of EP appears to conform to the well-established empirical generalization stating the lack of overt expletives in NSLs (Rizzi 1982, 1986; Burzio 1986; Jaeggli and Safir 1989, a.o.). Accordingly, alongside the possibility of dropping out an argumental subject in a finite clause like (2), EP generally displays non-overt non-argumental subjects (see examples in (3)).[2]

(2) (O carteiro/ele) tocou a campainha.
the postman he rang the bell

(3) a. (*Ele) choveu.
EXPL rained

b. (*Ele) está um desconhecido à porta.
EXPL is a stranger at.the door

c. (*Ele) é óbvio que estás cansado.
EXPL is obvious that are.2SG tired

Nevertheless, some non-standard EP varieties display an element that looks like an expletive subject, which has often been noticed in impersonal constructions (examples from Mateus et al. 2003, p. 283, footnote 5):[3]

(4) a. Ele choveu toda a noite.
EXPL rained all the night
It (really) rained all night long.

b. Ele há cada uma!
EXPL has such one
There are such things!

[2]I will systematically ignore further distinctions between non-argumental and quasi-argumental subjects, which in fact are irrelevant for the purpose of this chapter. The 'non-argumental' label will accordingly apply to both types of expletives (*latu sensu*).

[3]The cited examples are, in fact, tolerated in near-standard varieties of EP — see Section 3.2.

c. Tudo está mais caro: ele é o leite,
everything is more expensive EXPL is the milk
ele é a fruta, ele é o peixe.
EXPL is the fruit EXPL is the fish
Everything is getting more expensive: milk, fruit, fish...

In fact, just like expletive subjects in other languages, *ele* has a pronoun-like shape, actually homophonous with the masculine third person singular subject pronoun (within a system displaying a two-way gender distinction between masculine and feminine). Accordingly, grammarians and dialectologists who notice this non-standard phenomenon most often compare such *ele* to the sort of obligatory expletive subject that occurs in non-null subject languages like English, and such observations usually appear as sporadic and marginal remarks about impersonal constructions (Leite de Vasconcellos 1901; Dias 1918; Cunha and Cintra 1984; Raposo 1992; Mateus et al. 2003, a.o.). Besides *ele*, the neuter demonstrative pronouns *isto* 'this', *isso*, and *aquilo* 'that' have equally been taken as expletive subjects in impersonal sentences:[4]

(5) a. Isto é noite.
this.EXPL is night
It's night. (example from Dias 1918, 1933, p. 21)

b. Aquilo há cardos. (AAL75)
that.EXPL has thistles
There are thistles.

Under the view that, at least in some EP varieties, *ele* and the neuter demonstrative pronouns may correspond to expletive subjects, a fairly straightforward move is to compare examples like (6) (and (1) above) to MSCs (cf. Silva-Villar 1998; Boeckx 2002, especially with respect to examples (6a) and (6b)). In fact, the hypothetical expletive subject co-occurs in such examples with an argumental subject which arguably appears in the canonical (preverbal) subject position.

(6) a. Ele aqueles campos estão bem cultivados.
EXPL those lands are well farmed
± Indeed, those lands are well farmed. (Leite de Vasconcellos 1928, p. 222)

b. Ele os lobos andam com fome. (*ibid.*)
EXPL the wolves go.3PL with hunger
± Indeed, wolves are hungry.

[4]Although neuter gender is not usually marked in EP, demonstrative pronouns display a three-way gender distinction.

c. Aquilo o forno levava ali três ou quatro
that. EXPL the oven took there three or four
tabuleiros... (AAL18)
trays
± The oven took about three or four trays.

In contrast to this view, however, a non-doubling approach to such sentences will be pursued in this chapter, for which I strongly rely on a more general account of expletive constructions in EP dialects.[5] In particular, I will elaborate on the idea that EP overt expletives substantially differ from expletive subjects and must instead be connected to the left periphery of the sentence (as proposed for Iberian expletives by Uriagereka 1988, 1992, 1995).[6] The data discussed in Section 2.3 below help to consolidate this idea but, concomitantly, motivate the more specific proposal that EP expletives are to be related to ForceP, a high projection in the structure of the left periphery of the sentence.

Before proceeding, some crucial differences between EP expletive constructions in (6) and MSCs will still be pointed out.

2.2. Some Differences with MSCs

The parallel between the sentences in (6) and MSCs of the German type is in fact only remote. What they have in common is that both of them display an expletive-like element co-occurring with a lower argumental subject, which arguably appears in a position outside VP (see Bobaljik and Jonas 1996). Differently from Germanic MSCs, however, EP examples show no restrictions

[5]Reasons of space preclude me, however, from dealing here with the whole range of phenomena involved in non-standard EP expletive constructions (and developed in Carrilho 2005). I leave aside, for instance, a different type of construction where expletive *ele* may also co-occur with an argumental subject, as represented in (i):

(i) Eu tinha ele um irmão que trabalha de carpinteiro também. (PFT17)
I had EXPL a brother who works as carpenter also
±Even me – I had a brother, who works as a carpenter,...

In Carrilho (2005), it is argued that such (postverbal) *ele* must be distinguished from the instances of expletive *ele* at stake here, so that the expletive in (i) may hardly be mistaken for a subject (see also Haegeman and Van de Velde 2006). Additionally, evidence for this type of expletives is very meager in the corpus considered in Carrilho (2005), which of course calls for additional empirical support (for a universe of about 300 expletive sentences, postverbal *ele* corresponds to no more than 7%).

[6]One of the reviewers points out that at least a traditional source — the *Aurélio* dictionary (Ferreira 1986) — mentions the use of *ele* besides impersonal constructions, as a kind of pragmatic marker related to some emphasis on the subject. This source has actually been taken as a fairly informal starting point in Carrilho (2005, p. 6) motivating the inspection of the status of expletive *ele* well beyond impersonal subjects. As will become clear in Section 3, however, the pragmatic role of expletive *ele* cannot be accurately described as an emphatic effect on the subject.

on the type of subject that co-occurs with the expletive, as also mentioned by Boeckx (2002, p. 60). In fact, regardless of the verb class involved, the argumental subject may well be a non-specific indefinite (as in (7)), a generic DP (as in (8)), a definite description (example (9)) or even an overt pronoun (as in example (1)):

(7) Ele ninguém me era capaz de abrir a
EXPL nobody me.DAT was able of open.INF the
cabeça... (LVR23)
mind
± In fact, nobody could change my mind.

(8) Ele a folha do pinheiro é em bico. (ALC19)
EXPL the leaf of.the pine-tree is in point
± Indeed, pine tree leaves are pointed.

(9) Ele o nosso governo não protege nada
EXPL the our government NEG protects nothing
a agricultura. (COV14)
the agriculture
± Indeed, our government does not really protect agriculture.

Expletive *ele* is also allowed in null subject sentences involving different types of verbs:

(10) Ele voltámos lá todos a ver. (COV32)
EXPL went.back.1PL there all to see.INF
± We all went back there to see [that].

(11) … esses não morreram. Ele escaparam. (COV32)
those NEG died.3PL EXPL escaped.3PL
± Those didn't die. In fact, they escaped.

(12) … cheguei, ele lá dormi. (COV27)
arrived.1SG EXPL there slept.1SG
± … I arrived [there], I slept there.

(13) Ele dão-lhe outro nome. (AAL95)
EXPL give.3PL-to.it other name [3PL arbitrary subject]
± Indeed, people give it a different name.

In sum, the alleged MSC in EP displays no special constraint regarding (i) the type of subject with which the expletive co-occurs (namely, regarding its specificity and grammatical shape) and (ii) the type of verb (as illustrated earlier, not only transitive verbs, but also intransitive and unaccusative verbs).

In addition, it must be noted that, despite the nominative shape, the connection between expletive *ele* and the subject position is not straightforwardly

granted. Nominative case alone does not seem to tell us much about the true status of this element: although this is the case manifested by subjects, it is true that nominative may equally act as a sort of default case for detached elements (just like *nominativus pendens* in Latin). In the following example, for instance, nominative is the case borne by a topic (first person) pronoun (*eu*), which is connected with a dative pronoun (*me*) inside the comment sentence:

(14) Eu parece-me que isto está certo.
I.NOM seems-me.DAT that this is right
As for me… it seems to me that this is right.

2.3. The Peripheral Position of Expletive *Ele*

Besides the mentioned differences between MSCs and EP expletive constructions, we may further consider the peripheral position of the EP expletive; in fact, the distribution of expletive *ele* strongly suggests that this element occurs outside of the IP-domain. Below, I will consider a collection of contexts that unequivocally show that expletive *ele* occupies a position in the left periphery. More precisely, besides occurring before an overt preverbal subject (as illustrated in examples (7)–(9)), this expletive may equally precede several types of elements that typically appear in the left periphery of the sentence. In examples (15) and (16), for instance, the expletive appears before an adverb in initial position:

(15) Ele agora já ninguém costuma cozer. (OUT32)
EXPL now already nobody uses bake.bread.INF
± Now nobody is in the habit of baking bread anymore.

(16) Ele aqui nem se diz 'nublado'. (AAL69)
EXPL here not.even SE says 'nublado'
± We do not even call it 'nublado' [=cloudy] here.

Expletive *ele* may also occur before different types of topical elements. In example (17), *eu* 'I' is a sort of hanging topic: this is in fact a left-detached (nominative) form that is only referentially connected with a different category inside the comment sentence (the oblique form *mim*, which occurs inside a PP):

(17) E ele [eu]$_i$, o homem leu aquilo diante de [mim]$_i$! (COV18)
and EXPL I.NOM the man read.3SG that before of me
± And, as for me... the man read that before me!

Example (18) illustrates a different case of topic construction displaying expletive *ele*: object topicalization. In this example, the expletive precedes the topicalized complement of the existential and impersonal verb *haver*

(etymologically 'to have'):

(18) Ele [a fome]$_i$ não havia [-]$_i$! (VPA06)
EXPL the hunger not had.3SG
± Hunger didn't exist!

Remark that in impersonal constructions with the verb *haver* the argument which usually occurs in postverbal position behaves much like an object — in many EP varieties (including standard EP and the kind of dialectal data inspected here), this argument does not control verb agreement (which typically appears as impersonal third person singular, as in example (19)) and, above all, it appears as an accusative pronoun, as shown in example (20):[7]

(19) {Havia, *Haviam} muitos caminhos.
had.3SG had.3PL many ways
There were many ways.

(20) Havia-os.
had.3SG-them.ACC

Thus, the phrase that follows the expletive in (18) corresponds to a left-peripheral topicalized object, which arguably has moved out from the comment sentence, where it leaves an argumental gap.[8]

Another case where the overt expletive is peripheral to other left-peripheral constituents comprises wh-movement contexts, as illustrated by example (21). Here, the expletive precedes a wh-word combined with the focalizing expression *é que* in a rhetorical question:

(21) Não sendo no Natal, ele quem é que os
NEG be.GER in.the Christmas EXPL who is that them.ACC
come?! Ninguém. (OUT50)
eat nobody
If it is not by Christmas, who will eat them?! Nobody.

Finally, the expletive is also found in contexts involving a dislocated affective phrase (in the sense of Raposo 1995, after Klima 1964) — and, again, expletive *ele* precedes the left-peripheral phrase:

(22) Que ele até com um pau se malha. (MST37)
QUE EXPL even with a stick SE threshes
± Actually we thresh even with a stick.

[7]In some varieties of non-standard EP, agreement may be established between the postverbal argument and the verb. However, this appears to be a rather cultivated urban phenomenon, not unusual in highly-educated speakers (found in informal, uncontrolled speech situations).

[8]For an exhaustive analysis of topicalization in EP, see Duarte (1987).

In sum, the evidence presented in this section unequivocally points out the peripheral status of the expletive in EP dialects. It should additionally be noted that such peripheral instances are highly frequent in non-standard EP. For instance, in the corpus inspected in Carrilho (2005), the peripheral occurrences under consideration amount to almost 55% out of a collection of about 300 expletive sentences.

An approach along the same lines could, in principle, be extended to expletive *ele* in impersonal constructions in general. What I am suggesting is that even examples such as (4b), here repeated as (23), may correspond to an instance of peripheral *ele* (as independently proposed by Uriagereka 2004):

(23) Ele [-] há cada uma!
EXPL has such one
There are such things!

Such examples may thus compare to expletive constructions involving referential null subjects (see example (24), repeated from (10)), with the difference that the null subject is non-argumental in examples like (23).

(24) Ele [-] voltámos lá todos a ver. (COV32)
EXPL went.back.1PL there all to see.INF
± We all went back there to see [that].

The overt expletive in fact seems to have the same effect in both kinds of examples (as will become clearer in the next section). Furthermore, there is empirical evidence for the presence of a peripheral expletive in impersonal constructions — remember, for instance, example (18). The unified approach here suggested straightforwardly accounts for the peripheral position occupied by the expletive in such examples — which would otherwise be a fairly unexpected position for an expletive subject.

At the end of this section, it must then be acknowledged that the left-peripheral syntactic distribution of expletive *ele* strongly supports the idea that this element is not a subject in EP. As a corollary, no instance of an expletive construction in EP can in fact be equated with a MSC.

3. EXPLETIVE *ELE* AND DISCOURSE

A different piece of evidence for the non-subject status of EP expletive *ele* is provided by the discourse effects displayed by expletive constructions, which will be considered in the following sections.

3.1. General Connections

Expletive subjects are frequently identified 'by their lack of semantic content' and by 'their resolutely grammatical nature' (Svenonius 2002, p. 5, a.o.). Similarly, expletive *ele* appears to be devoid of meaning, thus making no contribution to the propositional content of the sentence.

However, it is not true that sentences displaying this expletive strictly correspond to their non-expletive counterparts in the relevant EP varieties. This is evident when we consider the impersonal expletive constructions that are tolerated in (near-)standard EP (illustrated in examples (4) and (23)). In these cases, the use of expletive *ele* by educated speakers generally corresponds to a more expressive way of saying things, allowed both in spoken and in written (even literary) EP, and most often connected with exclamative or emphatic sentences.[9] The expletive has the effect of strengthening the expressive value of such sentences, an effect that can be extended, in other EP varieties, to other expletive constructions (besides impersonal constructions and expressive sentences).

In a sense, thus, the overt expletive does not correspond to a mere grammatical device optionally displayed by some EP varieties. On the contrary, whenever present, expletive *ele* makes a contribution to the sentence, operating on the non-propositional part of its meaning. As such, this EP expletive rather relates to the interface syntax-discourse and, to a certain extent, it may be equated with a sort of pragmatic marker (in the sense of Fraser 1996), whose effects will be elucidated in the next section.

Before proceeding, however, we may still invoke a different connection: the case of a different expletive related to discourse conditions rather than to a visibility requirement on the subject position. This is arguably the case of the expletive *sitä* in Finnish, a topic-prominent NSL. Holmberg and Nikanne (2002) relate the presence of the overt expletive in Finnish to a (quasi-)generalized requirement for the topic position to be visible — whenever no argument in a sentence qualifies as presupposed (thus carrying a [-Foc] feature), merging of the overt expletive saves the derivation and fulfills the requirement for a Spec in the presupposition domain to be filled up. Accordingly, '*sitä* is not an expletive subject but an expletive topic' (Holmberg and Nikanne 2002, p. 96).

Nevertheless, the discourse effects displayed by EP expletive *ele* significantly differ from the discourse import of the Finnish expletive. In fact, a sharp contrast arises if we try to extend Holmberg and Nikanne's proposal to the sort of EP

[9]However, for these speakers, the expletive does not seem to be a productive means allowed in any type of impersonal construction — the presence of expletive *ele* is essentially limited to sentences involving existential *haver* and presentative *ser* 'to be', thus suggesting that, in standard EP, the expletive is lexically restricted to some fixed expressions.

data presented in the previous sections of this chapter. Consider, for instance, example (25):

(25) Ele o tear do pardo era muito largo. (OUT21)
EXPL the loom of.the dun [cloth] was very wide
± Indeed, the loom for dun cloth was very wide.

The expletive co-occurs here with a preverbal subject, just like in some of the examples considered earlier. In the non-expletive counterpart of this sentence (i.e., *o tear do pardo era muito largo*), the preverbal subject normally corresponds to a (non-marked) topic reading in EP (Duarte 1987; Martins 1994; Costa 1998). In other words, the phrase *o tear do pardo* establishes the entity for which the comment *era muito largo* is relevant, in a categorical judgment (Kuroda 1972) corresponding to the topic-comment articulation. At first glance, one might speculate that the expletive exerts a sort of detopicalizing effect on the preverbal subject. That is, just like the Finnish expletive, *ele* would become itself a kind of topic, while the remaining sequence would correspond to a sort of thetic judgment. This is not the case, however; the context where the mentioned example occurs provides evidence for discarding such a speculation. In fact, the expletive construction answers the following question: *Mas o tear era igual ou era mais largo?* 'But did the loom have the same width or was it wider?' In the answer, the expletive does not seem to affect the regular distribution of information: *o tear do pardo* has a topic reading (mentioned as *o tear* 'the loom' in the question — in a wider context, the loom is the topic of the conversation at that moment of the interview); *era muito largo* actually acts as the piece of new information which answers the question. Thus, the analysis proposed by Holmberg and Nikanne (2002) cannot be extended to the EP expletive facts; in an example like (25), there is actually a part of the sentence which is [+focus] (namely, *era muito largo*) and, accordingly, there is already some [-focus] element (*o tear do pardo*). Consequently, there would be no need for the EP expletive, if this element was to be related to the sort of [-focus] checking relevant in Finnish expletive constructions.

Furthermore, one may remember (from Section 2.3) that expletive *ele* may co-occur with topics — namely with marked topics different from the subject of the sentence, as in examples (17) and (18).

Hence, although the EP overt expletive displays a general connection with the syntax–discourse interface, it must be acknowledged that its discourse effects are not connected with information distribution patterns (to which the notions topic and focus pertain).

3.2. Particular Effects

How, then, is expletive *ele* related to the discourse level? From the inspected data, a common discourse effect seems to emerge: the different occurrences of *ele* (in impersonal constructions and beyond) generally correlate with some

emphatic (though slightly fuzzy) value in both quasi-standard and dialectal examples. In order to help determine the nature of such a vague effect, let us now consider some additional examples.

As already mentioned, expletive *ele* seems to have the effect of emphasizing the expressive value displayed by some sentences. This is the case for exclamative sentences, for which even the standard variety uses the expletive as a more expressive means, albeit restricted to some impersonal constructions (see example (23)). In other EP dialects, this emphasizing effect extends to other types of constructions (see also example (1)):

(26) Ele ele disse que era (…) de São João da Madeira, homem!
EXPL he said that was from São João da Madeira man.INTJ
Actually, he said that he was from São João da Madeira, man! (COV21)

(27) Ele nunca me olhava a nada, nunca tinha
EXPL never me regarded1SG to nothing never had.1SG
medo nenhum! (ALV25)
fear none
± I avoided nothing, I was never afraid of anything!

As a general observation, it can be pointed out that in this type of sentence the role of the expletive is always that of adding some emphasis to the exclamative's expressive value.

A similar effect may also be found in other sentence types. In examples involving imperative sentences, such as (28), expletive *ele* again seems to relate to some emphasis on a specific pragmatic value of the sentence; in this case, it is the directive force of the imperative that ends up being amplified.

(28) -Quer passar por lá para ver?
-Do you want to go there to see it?'
-Ele vamos embora! (FIG27)
EXPL go.PRES.SUBJ.1PL away
± Let's go [right now]!

Although such imperative examples are not frequent in the inspected corpus, this observation can be further developed by some intuitive data, which provide the following contrast: while expletive *ele* may well co-occur with other words that strengthen the directive value of the imperative (like *já* 'right now', *mesmo* 'really', in example (29)), the result is fairly awkward when we try to combine the expletive with an expression that mitigates the directive force (as in example (30)):

(29) Ele vamos {já, mesmo} embora!

(30) #Ele vamos embora, {se não se importam, por favor}!
… if you don't mind, please!

Thus, the discourse effect obtained by the expletive appears to be analogous to that found in exclamatives: *ele* reinforces a specific pragmatic value of the sentence (expressive in exclamatives, directive in imperatives). It remains now to be seen whether a related effect may be found in declarative sentences and in questions.

Let us first turn to declaratives. In Sections 2.2 and 2.3, several declarative examples were presented. In all those examples, the expletive may in fact correlate with some emphatic effect on the assertive value of such declarative sentences. Remember, for instance, example (9), here repeated as (31), for ease of reference:

(31) Ele o nosso governo não protege nada a
EXPL the our government NEG protects nothing the
a agricultura. (COV14)
the agriculture
± Indeed, our government does not really protect agriculture.

Such an example could easily be paraphrased with a sentence involving some sort of assertive emphatic expression, such as *de facto* 'in fact', *realmente* 'indeed', *é verdade que*… 'it is true that'.

(32) {De facto, realmente, é verdade que} o nosso governo não protege nada a agricultura.

In other words, the main effect of the overt expletive corresponds, in such declarative cases, to a general emphasis on the assertive value of the utterance. To the extent that such emphasis indicates how much the speaker stands for the truth of the statement that he is making, the expletive can thus be equated, in such declarative sentences, with a sort of (strong) evidentiality marker, as suggested in Uriagereka (2004).

Remark, in this respect, that, intuitively, the expletive is not felicitous in declarative sentences that adopt pragmatic values other than assertion, as in example (33) (if uttered as a polite request):

(33) #Ele (eu) queria um café.
EXPL I.NOM want.IMPERF a coffee
I would like (to have) a coffee.

If we now turn to interrogative sentences, an important difference must be acknowledged. In questions, expletive *ele* does not seem to display the effect found in other sentence types, namely that of emphasizing the usual pragmatic value (assertive in declarative sentences, directive in imperatives, expressive in exclamatives). In fact, expletive *ele* cannot occur in genuine information questions. Contrary to expectation, thus, the expletive cannot turn an interrogative

into an emphatic request for information. The interesting question why this should be so is left open here.

A related effect of the expletive in questions is, however, worth mentioning. Remember example (21), here repeated as (34):

(34) Não sendo no Natal, ele quem é que os
NEG be.GER in.the Christmas EXPL who is that them
come?! Ninguém. (OUT50)
eat nobody
If it is not by Christmas, who will eat them?! Nobody.

This is an instance of a rhetorical question, which arguably shares with exclamatives some expressive pragmatic value (see Benincà 1995, p. 129 and Mateus et al. 2003, p. 481). The relevant point is that interrogative sentences displaying the expletive *ele* always involve an expressive reading and cease to be interpreted as pure requests for information; besides rhetorical questions, other 'special interrogatives' (in the sense of Obenauer 2006) can be obtained, just like 'surprise-disapproval questions', and 'Can't-find-the-value-of-x questions' (Obenauer 2004, 2006).

This seems similar to the effect displayed by 'aggressively non-D-linked' *wh*-phrases (Pesetsky 1987), like *que raio/que diabo* 'what lightning/what devil' in EP. Although this type of *wh*-phrase allows for both (i) a genuine information request interpretation, and (ii) a rhetorical question interpretation (both of them illustrated in example (35)), the fact is that such *wh*-phrases also signal the involvement of the speaker in such a way that they become totally inadequate in neutral questions formulated in formal situations (e.g., an exam).

(35) -Que raio de gente come estes bolos?
what 'the hell' people eat these cakes
Who the hell eats these cakes?
A: - As crianças.
the children
Children do.
B: - Ninguém.
nobody

Similarly, the overt expletive may not occur in such neutral interrogatives. Instead, *ele* seems to always correlate with some involvement of the speaker, which is characteristic of expressive questions. Accordingly, the expletive may perfectly co-occur with a '*wh*-the-hell'-phrase in such interrogatives.

(36) - Ele que raio de gente come estes bolos?

We may thus acknowledge that the effect of expletive *ele* in interrogative sentences sounds already familiar; an effect connected with the illocutionary

force of a sentence, that of emphasizing a particular pragmatic value. In this case, however, this effect is limited to the expressive value that can be found in special questions.

Summarizing thus far, then, we have seen in this section that: (i) EP expletive sentences differ from their non-expletive counterparts; (ii) just like expletive subjects, expletive *ele* does not contribute to the propositional part of sentence meaning; (iii) the contribution of this overt expletive is to be related to the syntax–discourse interface; and (iv) the relevant discourse effect operates at the level of the illocutionary force assumed by sentences in use. More precisely, expletive *ele* is connected with a particular pragmatic value assumed by each sentence type: its presence correlates with an emphatic effect on the (i) expressive, (ii) command, or (iii) assertive values, respectively assumed by (i) exclamatives and special questions, (ii) imperatives, and (iii) declarative sentences.

4. EXPLETIVE *ELE* AND ForceP

Such connections with discourse straightforwardly fall into place with the expletive's distributional behavior in the left periphery of the sentence (seen in Section 2), a space where discourse notions often appear codified. Accordingly, the proposal put forward in this section states that the overt expletive in EP occupies a structural position in the left periphery which is relevant to the sort of discourse effect displayed in EP expletive constructions. Such a proposal gives additional substance to the idea that overt expletives in a NSL such as EP are special (i.e., different from subject expletives) and must be related to the space above IP (Uriagereka 1992, 1995).

If we recall now the interplay between expletive *ele* and other left-peripheral elements in EP (Section 2.3), the general observation that arises is that the expletive occupies a high position when it occurs in a fairly 'crowded' left periphery. In fact, the expletive may actually precede different types of marked topics, dislocated affective phrases, and dislocated wh-phrases, for instance. That such elements are peripheral in the sentence structure is a fairly uncontroversial matter.

In some examples, the peripheral positions involved are arguably located in the high space of the left periphery. Consider, for instance, the sort of topic constructions illustrated in (37) (repeated from (17)):

(37) E ele [eu]$_i$, o homem leu aquilo diante
and EXPL I.NOM the man read.3SG that before
de [mim]$_i$! (COV18)
of me
± And, as for me... the man read that before me!

Here, the topic *eu* and the element to which it is linked inside the comment (*de mim*) are only loosely connected; both of them are first singular person pronouns, but

there is no additional syntactic connection between them (they are in fact differently marked for case). In this respect, this example is very similar to hanging topic constructions. Arguably, hanging topics occupy a high position in the left periphery, higher than other types of marked topics (Benincà and Poletto 2001, a.o.).

Another case to consider is that of rhetorical questions. In such sentences, the expletive precedes the *wh*-phrase (remember example (21)), which again implies that *ele* occupies a high peripheral position. To the extent that special questions may be argued to activate a portion of the left periphery higher than that activated by standard questions (see in particular Obenauer 2006), EP expletive *ele* again appears straightforwardly connected with such a high portion of the sentential structure.

Since negative evidence cannot be found in the inspected corpus, we may at this point appeal to some intuitive data, which in fact appear to confirm the idea that expletive *ele* must be related to the leftmost position in the left periphery. Indeed, a sentence in which the expletive occurs below the hanging topic seen above sounds fairly weird.

(38) #[Eu]$_i$, ele o homem leu aquilo diante de [mim$_i$]!

A related issue to consider is the distribution of expletive *ele* in embedded contexts. In fact, if the EP expletive is to be connected with a high position in the left periphery, we would expect at least some restrictions on its distribution in embedded clauses. If we take into consideration the inspected data from CORDIAL-SIN, we must acknowledge that, although most examples occur in independent or matrix contexts, the expletive also appears in some embedded contexts, as in the example given below, which involves a *that*-clause:

(39) Tu sabes bem que ele em Paçô eles viram para aquele lado. (COV28)
you know well that EXPL in Paçô they turn to that side
You know well that, at Paçô, they turn to that side.

It seems fairly natural to find the overt expletive in such an embedded context, which is dependent on an assertive predicate (cf. Torrego and Uriagereka 1992). Since the matrix predicate implies the existence of a claim to truth (i.e., an assertion) in its finite complement, the expletive can play in this kind of environment the expected discourse effect on the embedded assertion. In such embedded clauses, the expletive appears below the complementizer (*que* in the example), even if it precedes some peripheral phrase (like the preposed PP *em Paçô* in example (39)).

By contrast, and in conformity with our expectation, the expletive does not seem to be felicitous in finite clauses embedded under verbs of questioning — remember that, in matrix contexts, expletive *ele* only appears in special questions.

(40) a. Perguntaram-me (#ele) quem (#ele) me convidou.
asked.3PL-to.me EXPL who EXPL me invited.3SG
They asked me who invited me.

b. Perguntaram-me se (#ele) eu tinha sido convidado.
asked.3PL-to.me whether EXPL I had been invited
They asked me whether I had been invited.

The embedded contexts that allow the EP expletive are not limited to assertive *that*-clauses, however: they also include some adverbial clauses, such as *if*- and *when*-clauses, and even purpose inflected infinitive clauses. In other words, contrary to expectation, the distribution of expletive *ele* is not in fact strictly restricted in embedded contexts and may involve clauses that are taken to involve a more contained C-domain.

In view of all this, it remains to be determined how high the EP expletive appears within the structure of the left periphery. First, let us briefly consider the nature of the left-peripheral space in connection with the discourse notions involved in EP expletive constructions.

As is well known, the C-domain above IP has been decomposed into several functionally specialized projections, thus mediating a privileged codification of particular discourse properties (Rizzi 1997; Ambar 1997, 1999; Benincà and Poletto 2001, a.o.). Under Rizzi's initial proposal, these projections consist of two basic systems: (i) one which provides the upper and lower bounds for the C-domain, encoding the relationships between CP and the higher structure or the articulation of discourse, on the one hand, and the relationship between CP and the 'inside', i.e., the IP embedded under it, on the other; (ii) a second system relating to the informational articulation of topic-comment and of focus-presupposition. The crucial heads to the former system are Force and Finiteness, encoding respectively the specification of force (often also the clausal type) of a sentence and the relationship to certain properties of the verbal system of the clause. Such Force–Finiteness system is taken as the essential (and ubiquitous) part of the C-domain, while the second system, including the Topic and Focus heads, is assumed to be present in a structure only if needed. When activated, such Topic-Focus system appears 'sandwiched' in between Force and Finiteness. Subsequently, several extensions of this proposal have further expanded different fields within the C-domain, leading to a collection of projections which may appear subsumed under the 'topic field' and the 'focus field' (Benincà and Poletto 2001), and under what one might call the 'force field' (e.g., the elaboration on the force of interrogatives in Poletto and Pollock 2000, Obenauer 2004; or the expansion of ForceP on the basis of the internal structure of adverbial clauses in Haegeman 2002). Thus, a fairly inflated structure of the left periphery has come to closely encode specific pragmatic features, resulting in an extremely detailed mapping between syntax and discourse. Besides focus/presupposition and topic/comment articulations, other pragmatic notions have gained a space within the left periphery, such as several

aspects relating to speech act systems, like those involved in different types of questions (Obenauer 2004).

It thus seems fairly intuitive to find a place for expletive *ele* in such a left periphery. Remember that the main discourse effects of the presence of the overt expletive relate to aspects having to do with the illocutionary force of sentences (namely, the emphasis on particular pragmatic values expressed by exclamatives and some interrogatives, imperatives and declaratives in specific speech acts). Since the structure of the left periphery includes a space dedicated to the codification of aspects related to the force of a sentence (ForceP in Rizzi 1997 and subsequent works), it seems natural to find a place for the EP expletive there.

The main problem for such an approach seems to be the fairly permissive distribution of the expletive in embedded contexts. First, as noted earlier, the expletive must follow, in such contexts, the complementizer. If this element is taken to appear as a Force head, then there seems to be no additional room for the expletive inside the projection of Force. Second, it is not evident that all the cases of embedded clauses that allow the overt expletive must include a Force projection. Although these issues cannot be extensively developed here, I would like to suggest a possible way to circumvent this problem. First, the order complementizer-expletive would straightforwardly follow if one adopts a further expansion of Force into two different heads (and respective projections), along the lines of Haegeman (2002, p. 162). Thus, subordinate clauses would count with a head (Sub) that serves to subordinate the clause and another head that encodes force, as also proposed in Bhatt and Yoon (1992), a.o. Second, concerning the structure of the left periphery in different types of embedded clauses, it must be acknowledged that this is to a great extent an issue still open to debate (cf. Heycock 2006) and that the presence of the expletive could be seen as one among several unexpected root phenomena that may occur in such contexts. This is, however, a matter that I will not pursue here.

Thus, it may be conceived that in EP expletive constructions the overt expletive appears in the spec position of the high peripheral projection ForceP, as represented in (41).

(41) [$_{\text{ForceP}}$ [$_{\text{EXPL}}$ Ele] [FORCE^{0} [$_{\text{IP}}$ o nosso governo não protege nada a agricultura]]].
EXPL the our government NEG
protects nothing the agriculture

In structural terms, such an analysis would correctly predict the sort of interactions that the expletive displays in the left periphery: namely, it would accurately account for the fact that expletive *ele* appears as the leftmost peripheral element when combined with other peripheral material, such as topics, dislocated *wh*-phrases or dislocated affective phrases (see Section 2.3). Additionally, the speaker involvement that EP expletive constructions

convey could also be straightforwardly related to such a space, strengthening Haegeman's idea that:[10]

> […] *the presence of the functional head Force* […] *directly correlate*[s] *with what is referred to as 'illocutionary force', the fact that the speaker takes on the proposition as part of a speech act (assertion, prediction, question, etc.). To be licensed, Force, being about speaker commitment, must be anchored to a speaker or a potential speaker*. (Haegeman 2002, p. 159)

Such a proposal for EP expletive constructions inevitably interacts with issues concerning the syntactic representation of clause types. In this respect, remark, first, that this proposal is not necessarily incompatible with the view that the *sentential force* (the one relevant for clause typing, following Chierchia and McConnell-Ginet 1990) must be distinguished from the *illocutionary force* obtained with the intentional use of a sentence as a speech act (Searle 1965). While remaining agnostic as to the question whether (or how) different clause types or sentential forces are differently codified in the syntactic structure, the present proposal could in fact be compatible with different understandings of ForceP. The analysis here suggested specifically concerns emphatic sentences involving the use of the expletive *ele*. It is for such constructions that it is proposed that a projection headed by Force is involved and that the EP expletive occupies its Spec position, thus behaving fairly differently from an expletive subject. In this sense, in line with Haegeman's terms earlier, ForceP is to be related to the illocutionary force, which may in fact be independent from the codification (or manifestation) of different sentential forces (see example (36), for instance). In exclamative, interrogative, imperative, or declarative sentences, the expletive would involve the same sort of visibility for the ForceP projection, without affecting the internal structure of the remaining sentence. This, in principle, appears to be compatible either with the view that different clause types result from different grammatical configurations or with the idea that particular sentential types are codified by a particular grammatical feature, which could also be related to ForceP. Similarly, the articulation holding the view that clause typing arises from the pairing of syntactic configurations and their semantic properties (as developed in Zanuttini and Portner 2003) could also be explored.[11]

The EP expletive, here related to [spec, ForceP], does not change an independently obtained illocutionary force (even special questions are possible

[10]A natural extension of this idea would be to endow the EP expletive with some formal feature related to speaker involvement, which must be checked in spec ForceP. Limitations of space preclude me from motivating and developing such a proposal here.

[11]Interesting as they are, such issues would go far beyond the purpose (and space) of this chapter, so that I leave them aside for now.

without the presence of the expletive). However, not every illocutionary value allowed for a particular clause type (given the appropriate discourse conditions) can be maintained in EP expletive constructions. For instance, declarative sentences including an expletive may not assume a command value, while their non-expletive counterparts may (just like in the case of English *I want you to do this job today*). Instead, expletive declarative sentences always appear as emphatic assertions. Similarly, imperatives displaying the expletive *ele* appear as emphatic commands (but not as polite requests). In the case of interrogatives, the presence of the expletive strictly correlates with expressive readings (thus limited to special questions), with the result that no expletive question can be interpreted as a standard and mere information request.

The proposal here sketched for the EP expletive could, in principle, be extended to overt expletives in other Romance NSLs, such as Galician (Álvarez 1981, 2001; Uriagereka 1995), some varieties of American Spanish (Henríquez Ureña 1939; Fernández Soriano 1999) and some varieties of Catalan (Spitzer 1941; Solà et al. 2002). In all such languages, overt expletives also seem to be connected with some emphasis on specific illocutionary values. For instance, in Galician, which is very close to EP, expletive *el* largely conforms to the EP pattern, thus depending on illocutionary values relating to expressivity in exclamative (see example (42)) and interrogative clause types (again, the expletive appears to be confined to special questions), but also (strong) assertion in declarative clause type (see Álvarez 2001).

(42) El tamém son ben caras! [as sardiñas]
EXPL even are very expensive the sardines
They [the sardines] are very expensive!

Likewise, a looser connection could in principle be established with the expletive *ell* in some Balear Catalan varieties, which is currently understood as an 'exclamatory particle' (Solà et al. 2002).

(43) Ell això no acaba mai!
EXPL this NEG ends-up never
This does not end up!

In this case, such an expletive would only correlate with the expressive value of ForceP.

5. CONCLUSION

In this chapter I have considered a supposed case of subject doubling from the angle of expletive constructions in EP dialects. It has been argued that the overt expletive appearing in such constructions must be distinguished

from a regular expletive subject. On the basis of the syntactic distribution of this expletive and the discourse effects thus displayed, it has been proposed that expletive *ele* lexicalizes the ForceP projection in the C-domain, which is assumed to mediate the mapping between the sentential force and the illocutionary force that a sentence may have as a speech act. As a consequence, the alleged subject doubling in such expletive constructions vanishes into a discourse relevant device, independent from the structural manifestation of subjects, but providing new clues about the fine structure of the left periphery of the sentence and thus widening the limits within which the interface discourse–syntax must be discussed.

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11

SUBJECT DOUBLING IN FINNISH: THE ROLE OF DEFICIENT PRONOUNS

Anders Holmberg and Urpo Nikanne

ABSTRACT

In colloquial Finnish finite clauses, the subject can be doubled by a pronoun. This pronoun has number but not person, and therefore can double a first or second person pronoun as long as number matches. The doubling pronoun is in SpecF(inite)P, the 'EPP-position', while the doubled subject remains within the TP, when it is not moved to SpecCP. Finnish also has subject trebling, with a second doubling pronoun occupying SpecCP. Doubling of a pronominal subject is shown to follow from the partial copying theory of Barbiers et al. (2007), in conjunction with a particular analysis of the internal structure of pronouns. Cross-dialectal and cross-linguistic variation as regards doubling is ascribed, at least in part, to a lexical difference: whether or not the lexicon includes deficient pronouns.

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1. INTRODUCTION

In colloquial Finnish the subject can be doubled by a pronoun, as in (1a,b):

(1) a. Se on Jari lopettanut tupakoinnin.
he has Jari quit smoking
Jari has quit smoking.

b. Ne sai kaikki lapset samat oireet.
they got all children same symptoms
All the children got the same symptoms.

This doubling is typically used to express an all-new sentence about a familiar subject, often with a subtle 'believe-it-or-not' effect.[1] That is to say, it typically has a form of thetic reading (Sasse 1995). Often the doubled subject is focus-marked by the clitic *-kin* 'too/even'.

(2) Nyt se on Tarjakin lopettanut tupakoinnin.
now she has Tarja-too quit smoking

The questions that will be addressed in this chapter are, first, how Finnish doubling is derived, and second, what it is about Finnish that makes this form of doubling possible in this language as opposed to many other languages? More specifically, we will first discuss properties of the doubling pronoun, then properties of the doubled subject, and then properties of the syntactic structure. It will be shown that the pronouns used for doubling are deficient in a particular way, being marked for number but not person, a fact which is crucial for the doubling construction.

The chapter includes some discussion of inter-speaker variation as regards doubling in Finnish. This is not, however, based on any systematic investigation, but instead based mainly on our own judgments and impressions of the linguistic situation in varieties that we are familiar with. A systematic investigation remains to be done.

2. PROPERTIES OF THE DOUBLING PRONOUN

Finnish has two series of third person pronouns: *se* (SG)/*ne* (PL), referring to things and in colloquial Finnish also to humans, and *hän* (SG)/*he* (PL) referring to humans only.[2] Pronouns do not distinguish gender.

[1]They are not exclamative, though, as suggested by a referee.

[2]Use of *se/ne* to refer to humans is traditionally proscribed in Finnish normative grammar. The distinction between *se/ne* and *hän/he* when referring to humans is, however, grammatically significant and systematic in at least some varieties of spoken Finnish: In those varieties *hän/he* are used

Of the two series *se*/*ne* are the unmarked doubling pronouns, while *hän*/*he* are at best marginal in that function.

(3) a. ?Hän on Tarjakin lopettanut tupakoinnin.
she has Tarja-too quit smoking

b. ?He sai kaikki lapset samat oireet.
they got all children same symptoms

The doubled subject can be first or second person singular (with or without a focus clitic).

(4) a. Se ole-n minä-kin lopettanut tupakoinnin.
SE have-1SG I-too quit smoking
I, too, have quit smoking.

b. Se ole-t sinä-kin …
SE have-2SG you-too …

It can also be a third person singular pronoun, either *se* or *hän*.

c. Se on se-kin lopettanut tupakoinnin.

d. Se on hän-kin lopettanut tupakoinnin.
SE has-3SG he-too … (or *she* or *it*)

Completely impossible is doubling *se* by *hän*.

e. *Hän on se-kin lopettanut tupakoinnin.

With plural pronouns a problem appears, however. The 1PL pronoun cannot be doubled by singular *se*. Some speakers but not others accept doubling by plural *ne*, while all speakers[3] accept doubling by the 1PL pronoun itself.[4]

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as same-subject pronouns in embedded clauses, while *se*/*ne* are used for any other function. The following sentences are thus unambiguous, in that variety of Finnish.

(i) Jari sanoo että hän/se tulee huomenna.
Jari says that he/he comes tomorrow
with *hän* : Jari says that he (Jari) is coming tomorrow.
with *se*: Jari says that he (someone else) is coming tomorrow.

[3]More precisely, all speakers consulted so far (quite a random collection) accept it. As mentioned, a systematic survey remains to be done.

[4]The example uses the colloquial 1PL form, which is homonymous with the impersonal form otherwise used in the passive (or impersonal) construction (see Reime 1993). It also has the colloquial invariant form of the participle. The doubling facts are essentially the same if the standard 1SG form and the participle inflected for plural are used, apart from a certain stylistic incongruity.

(i) *Se/(*)ne ole-mme me-kin lopettaneet tupakoinnin.
SE NE have-1PL we-too quit-PL smoking

e. *Se ollaan me-kin lopettanut tupakoinnin.
SE are-1PL we-too quit smoking

f. (*)Ne ollaan me-kin …
they are-1PL we ...

g. Me ollaan me-kin …
we are-1PL we ...
We have quit smoking, too.

The same pattern is seen with the 2PL pronoun *te*.

h. *Se olette te-kin lopettanut tupakoinnin.
SE are-2PL you …

i. (*)Neolette te-kin …
NE are-2PL you...

j. Te olette te-kin …
you are-2PL you ...
You all have quit smoking, too.

The 3PL pronoun, either *ne* or *he*, can only be doubled by 3PL *ne*.[5]

k. *Se on ne-kin/he-kin …

l. Ne on ne-kin/he-kin … (or: Ne ovat ne-kin/he-kin …)
they be.3SG they-too/they-too… they be.3PL they …

Completely impossible is doubling *ne* by *he*.

m. *He on ne-kin … (or *He ovat ne-kin …)

Consider first the variety which accepts doubling of 1PL *me* and 2PL *te* by *ne*. The facts under (4) then follow from (5a,b):

(5) a. The features of the doubling pronoun must be a subset of the features of the doubled subject NP with matching values.

b. The doubling pronouns *se* and *ne* have number, SG and PL, respectively, but no person.

The subset in (5a) need not be a proper subset, so the doubling pronoun and the doubled subject may be identical, as when *se* doubles *se* (4c), or *me* doubles

[5]The example uses the colloquial third person finite verb form which is unmarked for number and the colloquial invariant form of the participle. The judgements are the same if the standard plural-marked forms are used.

(i) *Se ovat nekin lopettaneet tupakoinnin.
(ii) Ne ovat nekin lopettaneet tupakoinnin.

me (4g). Having singular number but being neutral for person, *se* can double first or second singular pronouns (4a,b). It cannot, however, double any plural pronouns (4e,h,k), as the SG value of *se* does not match the PL value of the plural pronouns *me, te, he, ne*. The pronoun *ne*, having PL number but being neutral for person, can double any plural pronouns.

For the variety in which *ne* cannot double any other pronoun than *ne*, and more marginally *he*, we must assume that it is marked third person in addition to PL. As such its feature values will not match those of 1PL *me* and 2PL *te*.

The difference between *hän/he* and *se/ne* is that the former are specified for third person, and furthermore are specified [+human], while the latter are unmarked for person (with some variation regarding *ne*) as well as for humanness. We conjecture that this is the reason why *hän/he* are not good as doubling pronouns: They are too richly specified to be interpreted as non-referential, which is required if they are to double, i.e., share a theta role with an argument (see Section 7).[6,7]

Assume that a category specified for person is a D, meaning that it is necessarily referential. Then it cannot bind another DP without violating Principle C of the classical Binding Theory (Chomsky 1981). The only category it can bind is a referentially deficient category such as an anaphor.[8]

(6) Hän$_i$ on itse$_i$ lopettanut tupakoinnin.
he has self quit smoking
He himself has quit smoking.

Se occurs as a quasi-argumental pronoun as well, commonly in constructions with extraposition, but also, marginally, as the subject of weather predicates. Alternatively (and preferably in the case of weather predicates) there is no overt subject in these constructions (see Holmberg and Nikanne 2002).

(7) a. (Se) oli hauskaa että sinä tulit käymään.
it was nice that you came visiting

b. Nyt (se) taas sataa.
now it again rains
Now it's raining again.

[6]We are now ignoring the observation that *hän/he* are marginally acceptable as doubling pronouns for at least some speakers.

[7][+human] alone does not make a pronoun referential: The generic pronoun *one* and its counterparts in other languages is [+human] but is not referential. *One can't stand up straight in this room* is a generic statement only about humans, not for example plants.

[8]Another indication that *hän/he* pattern with the first and second person pronouns, while *se/ne* do not, is that *hän/he* and the first and second person pronouns have a special accusative form (marked by a suffix -t), while *se/ne* is like other nouns, having the same form for accusative and genitive (marked by a suffix -n). Furthermore, while *se/ne*, along with lexical DPs, have nominative case when occurring as objects of various impersonal verb forms, *hän/he* along with the first and second person pronouns have accusative case; see Reime (1993).

The fact that, in the doubling construction, *se* alternates with *ne* depending on the number of the doubled subject means that it is not expletive in the sense of lacking φ-feature specification altogether. On the other hand, the fact that *se* occurs in the constructions (7a,b) shows that there is an expletive variant of *se* as well.

What case does the doubling pronoun have? In the examples shown so far, the case is nominative. This could be because the pronoun has the same case as the subject which it doubles, or it could be because it has no case, if nominative is the default form. This can be tested by picking a predicate which selects a non-nominative subject. For example, in the possessive construction in Finnish the possessor subject has adessive case (while the possessee has nominative, and no agreement is triggered on the finite verb). As shown in (8), there is variation regarding the pronoun: Some speakers do, other speakers do not, allow the nominative form *ne* to double an adessive (ADE) subject.

(8) a. Kaikilla lapsilla on samat oireet.
all-ADE children-ADE is same symptoms
All the children have the same symptoms.

b. Niillä on kaikilla lapsilla samat oireet.
they-ADE is all-ADE children-ADE same symptoms

c. (*)Ne on kaikilla lapsilla samat oireet.
they-NOM is all-ADE children-ADE same symptoms

Necessive predicates are another class which require a non-nominative subject, namely genitive. Again, there is speaker variation: Some require the same case on the doubling pronoun, others allow the nominative form.

(9) Se-n/ se-0 pitäisi Marja-n lopettaa tupakointi.
she-GEN/ she-NOM should Marja-GEN quit smoking

Informally speaking, the doubling pronoun is more deficient in the varieties which allow nominative.[9]

[9]Finnish has a class of predicates which take an experiencer argument with partitive case.

(i) Meidän lapsia ei vielä väsytä.
our children-PART not yet tire
Our children are not getting tired yet.

This argument cannot be doubled at all, neither with a partitive nor with a nominative pronoun.

(ii) *Niitä/ *Ne ei meidän lapsia vielä väsytä.
they-PART/ they-NOM not our children yet tire

The reason for this is unclear. It may have to do with the fact that the verbs in question have a second argument, which may be implicit, referring to the causer of the state. In a singular doubling

(10) occurs as well (subject to inter-speaker variation):

(10) Se on kaikilla lapsilla samat oireet.
SE has all-ADE children-ADE same symptoms
All the children have the same symptoms.

Here the pronoun agrees neither in number nor in case with the lexical subject. In this case, then, it seems that *se* is used as a pure expletive (an alternative to the pure expletive *sitä*; see later).

3. PROPERTIES OF THE DOUBLED SUBJECT

The doubled subject cannot be an unstressed/unfocused pronoun (*mä* in (11b) is a colloquial unstressed form of the 1SG pronoun). With focus, either supported by a focus particle or by focus intonation, the subject can be a pronoun.

(11) a. *Se on se lopettanut tupakoinnin.
SE has he quit smoking

b. *Se olen mä nyt menossa saunaan.
SE is I now going sauna-ILL
I'm on my way to the sauna.

c. Se on se-kin lopettanut tupakoinnin.
SE has he-too quit smoking

d. Se olen MINÄ menossa nyt saunaan.
SE am I going now sauna-ILL
I'm on my way to the sauna now.

This is arguably the only syntactically conditioned constraint on the doubled subject. Other properties follow from the semantic-pragmatic properties of the construction, that of being a thetic expression with, typically, a known subject. Doubling an indefinite subject is therefore often not felicitous.

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construction, nominative *se* will be interpreted as referring to the causer, seemingly blocking the doubling analysis.

(iii) Se ei Jaria vielä väsytä.
It doesn't make Jari tired.

The partitive singular form of the pronoun, *sitä*, ís analyzable as the expletive *sitä* (see Holmberg and Nikanne 2002).

(iv) Sitä ei Jaria vielä väsytä.

This does not on its own explain why the plural forms in (ii) are not well-formed, though.

(12) ??Se seisoo joku oven takana.
SE stands someone door behind
Someone is standing behind the door.

This is not, however, a syntactic condition. In the right context the subject can be indefinite.

(13) a. Se on taas joku jättänyt oven auki.
SE has again someone left door open
Someone has left the door open again.

b. Se voi semmonen auto tulla kalliiksi.
SE can such car become expensive
Such as car can become expensive.

(13a) implies that the subject is someone from a contextually determined set of people, while in (13b), the subject is a contextually defined type of car. The subject can be a wh-phrase, moved to SpecCP (see Section 4).

(14) Kuka se on *t* taas jättänyt oven auki?
who SE has again left door open
Who has left the door open again?

The implication is that the answer will name a person from a contextually established set of persons.

SpecCP can be, and often is, filled with a predicate noun or adjective in combination with a doubled subject. Consider for instance the following examples, taken from the Internet, with the structure [$_{CP}$ *NP/AP* [$_{FP}$ *se* '*be*' *NP-kin*]] (*-han* is a modal clitic, glossed as CL).

(15) a. Uskovainenhan se olen minäkin.
religious.person-CL SE am I-too
I am a religious person, too.

b. Ihminen se olen minäkin siinä missä muutkin ja
human-being SE am I-too there where others-too and
kaikessa inhimillisyydessäni olen myös heikko ja
all-INE humanity-INE am also weak and
hyväksyntää kaipaava.
acceptance-PAR wanting.
I am a human being just like everyone else, and as a human I am weak and want to be accepted.

c. Vaikea se olen minäkin...
difficult SE am I-too
I am also difficult.

Se is not doubling the fronted predicate in this construction but the subject (*se* is never used as a predicate proform). In these examples *-kin* 'too' is an essential part of the meaning, contributing the entailment that there are other people having the property named by the initial predicate noun or adjective. In other, structurally parallel cases, the semantic contribution of *-kin* is minimal. Thus (16a,b), also from the Internet, do not necessarily imply that there are other people with the named property (ELA = elative, ESS = essive).

(16) a. Minun äitini se on vähän pyylevämpi, mutta iäkäs se
my mother SE is little fatter but old SE
on hänkin ja ihastuu varmasti, kun saa talonpojan
is she-too and is-delighted for-sure as gets farmer-GEN
tytöstä miniän.
girl-ELA daughter-in-law-ACC
My mother is a little fat but she is old, after all, and is certainly delighted as she gets a farmers daughter for her daughter in law.

b. Ihme jätkä se olet sinäkin kun olet tietävinäs
strange guy SE are you-too as are know-PL-ESS-2SG
mitä mä olen ton kanssa puuhannut.
what I have that-GEN with done.
(I must say that) you are a strange guy as you think you know what I have done with it.

This is all the more striking as *-kin* is structurally obligatory in this construction.

(17) a. ??Uskovainen se olen minä [..] (compare (16a))
b. ??Ihminen se olen minä […] (compare (16b))
c. ??Vaikea se olen minä […] (compare (16c))
d. ??[..] mutta iäkäs se on hän ja ihastuu […] (compare (17a))
e. ??Ihme jätkä se olet sinä, kun […] (compare (17b))

As mentioned earlier, although subject doubling is often found with *-kin*, this is not generally compulsory (as the subject can be focused without *-kin*). In other ways, too, which, for reasons of space, we will not go into here, the pragmatic interpretation of the examples in (16) and (17) is not transparently derivable from the structure. Apparently this form of expression has developed into a construction in the sense of Fillmore and Kay (1996), Nikanne (2005).

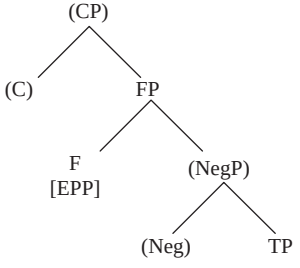
4. STRUCTURAL PROPERTIES

Holmberg and Nikanne (2002) investigated another 'multiple subject construction' in Finnish, featuring the expletive *sitä*, morphologically the partitive of *se*, but formally a pure expletive.

(18) Sitä ovat nämä lapset jo oppineet uimaan.
EXP have these children already learnt swim
These children have already learnt to swim.

They showed that the expletive is in the spec of F, a position which in the unmarked case is occupied by the subject. Vilkuna (1989, 1995) and Holmberg and Nikanne (2002) have shown that the structure of the Finnish finite sentence is (19), where F = Finite. The finite verb or auxiliary moves to F. At least one XP must precede F (a property encoded here as an EPP- feature on F), and at most two XPs can precede F, the outermost one, by hypothesis, in SpecCP.

(19)



In the unmarked case SpecFP is the subject but, as shown by (20b), it may also be another argument or adverbial, which in that case is interpreted as topic, while the subject left *in situ* is focused (see Vilkuna 1995; Holmberg and Nikanne 2002).

(20) a. [$_{FP}$ Jari on+F maalannut olohuoneen].
Jari has painted living.room
Jari has painted the living room.

b. [$_{FP}$ Olohuoneen on+F maalannut Jari].
living.room has painted Jari
The living room has been painted by Jari./ The one who has painted the living room is Jari.

SpecCP is either a whP or a category with contrastive interpretation (Vilkuna 1989, 1995).[10]

[10] Vilkuna's generalisation is too strong, since the initial constituent preceding a subject or topic can be an adverb which need not, and in some cases cannot, be contrastive. It still holds that there can only be two constituents preceding the finite verb, implying that the adverb occupies SpecCP.

(i) Ilmeisesti olohuoneen on maalannut Jari.
apparently living.room has painted Jari

(ii) *Ilmeisesti tämän huoneen Jari on maalannut.
apparently this room Jari has painted

(21) a. Mitkä huoneet C [$_{FP}$ Jari on+F maalannut]?
which rooms Jari has painted
Which rooms has Jari painted?

b. Tämän huoneen C [$_{FP}$ Jari on+F maalannut].
this room Jari has painted
Jari has painted THIS ROOM (but not that one).

SpecFP is not a designated topic position, though, because:

a. The subject filling it need not be a topic; the indeterminate subject in (22) is not a possible topic, not being referential, yet can be SpecFP.

(22) Kuka tahansa on voinut kirjoittaa tämän kirjan.
who ever has could write this book
Anyone could have written this book.

b. The expletive *sitä*, obviously also not a possible topic as it is not referential, can also be SpecFP. Holmberg and Nikanne (2002) argued that it occupies SpecFP, on the following grounds:

- it immediately precedes the finite verb/auxiliary, except when;
- it is preceded by the finite verb moved to C (for example in yes/no questions);
- it can be preceded by one and only one XP, which in that case is a whP or has a contrastive interpretation.

The same holds true of the doubling pronoun *se/ne*: In the examples cited so far, for instance in (1), it immediately precedes the finite verb or auxiliary. (23a,b,c) show that it must do so, except when the finite verb or auxiliary is moved to the CP-domain, as typically in yes/no questions:

(23) a. *Se sinäkin olet nyt lopettanut tupakoinnin.
SE you-too have now quit smoking

b. Oletko se sinäkin nyt lopettanut tupakoinnin?
have-Q SE you-too now quit smoking
Have you, too, quit smoking?

c. Saiko ne kaikki lapset samat oireet?
got-Q NE all children same symptoms
Did all the children get the same symptoms.

(24a,b) shows that the doubling pronoun can be preceded by one XP, which in that case is contrastive, as in (24a,b), or is a whP (24c), but cannot be a non-contrastive topic (24d), to be compared with (20b).

(24) a. Sinäkin se olet vihdoinkin lopettanut tupakoinnin.
you-too SE have finally quit smoking
So you, too, have finally quit smoking.

b. Tupakoinnin se on Tarjakin lopettanut (mutta hän
smoking SE has Tarja-too now quit but she
juo vieläkin liikaa).
drinks still too.much
Even Tarja has given up smoking (but she still drinks too much).

c. Milloin se on Jari ehtinyt olohuoneen maalata?
when SE has Jari had-time living.room paint
When has Jari found the time to paint the living room?

d. *Tämän huoneen se on maalannut Jari.
this room SE has painted Jari
This room has been painted by Jari.

(25a,b) show that the doubling pronoun can be preceded by at most one XP; compare (24a,b) and (25a,b).

(25) a. *Vihdoinkin sinäkin se olet lopettanut tupakoinnin.
at last you-too SE has quit smoking

b. *Nyt tupakoinnin se on Tarjakin lopettanut.
now smoking SE has Tarja-too quit

The conclusion is, therefore, that the doubling pronoun is in SpecFP, satisfying the EPP.

In the Finnish transitive expletive construction (16), discussed in Holmberg and Nikanne 2002, the lexical subject occupies a place between F and VP, where the exact placement of the subject in relation to other constituents in that *Mittelfelt* domain is basically free. The same holds true of the doubled subject; consider (26) (ILL = illative):

(26) Nyt se on (Jarikin) ilmeisesti (Jarikin) lopulta (Jarikin)
now he has Jari-too evidently finally
saanut (Jarikin) kuvansa (*Jarikin) lehteen (*Jarikin).
had picture-his paper-ILL
Now even Jari has evidently finally had his picture printed in the paper.

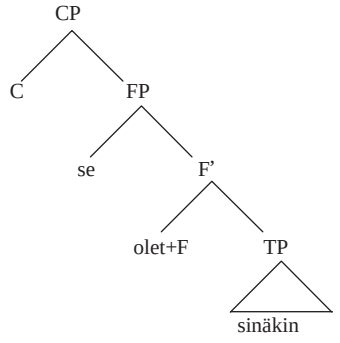
Varying the position of the subject, as long as it remains in the *Mittelfelt*, has no discernible effect on scope or information structure; as in the case of the transitive expletive construction, the lexical subject is part of the information focus (the new information) of the sentence.[11] Again following Holmberg and Nikanne (2002), let us say that the finite sentence consists of three domains: (i) The operator domain, that is SpecCP, (ii) the Presupposition domain, that is SpecFP, and the Information Focus domain, that is NegP in negated sentences, otherwise TP. As mentioned, the subject doubling sentence is typically an all-new sentence. This effect is achieved by having the doubling pronoun check

[11]Thus Finnish provides little evidence of a fixed focus position in the *Mittelfelt*, as argued for Italian by Belletti (2005) and Malayalam by Jayaseelan (2001).

the EPP in SpecFP, leaving the lexical content of the subject inside NegP/TP, and thus part of the information focus of the sentence.[12]

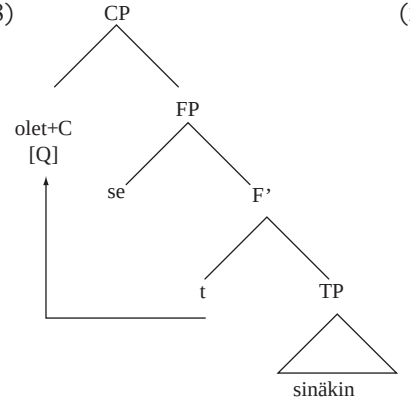
Now consider the structure of the left periphery of the Finnish sentence again, where the finite auxiliary has moved to F and the subject is doubled by *se* in SpecFP.

(27)

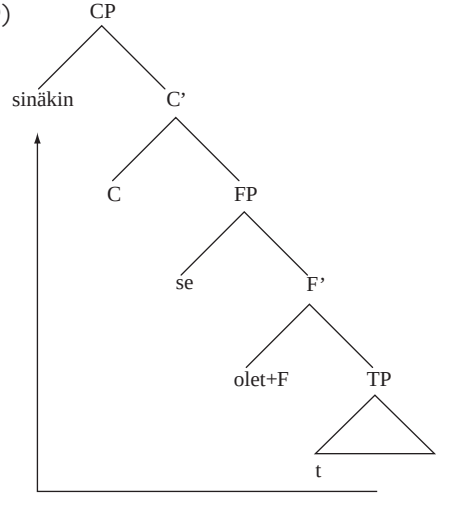


The existing well-formed alternants are now derivable by movement of F to C, deriving for example, the question (23b), with the structure (28), or movement of the subject to SpecCP, deriving (24a), with the structure (29).

(28)



(29)



[12] This is not the only way to express an all-new sentence with a known subject. The construction (i) can have that reading as well.

(i) Jari on lopettanut tupakoinnin.
Jari has quit smoking.

In this case the subject is moved to SpecFP, checking the EPP-feature. Nevertheless it can certainly, in the right context, be uttered out of the blue, conveying all-new information. However, this will take a certain amount of pragmatic, inferential processing on the part of the listener, not required in the case of the information-structurally more transparent subject doubling construction

5. SUBJECT TREBLING

The subject can be doubled twice by the pronouns *se* and *ne*.

(30) a. Se se on Tarjakin lopettanut tupakoinnin.
SE SE has Tarja-too quit smoking
Tarja, too, has quit smoking.

b. Sehän se pärjäsi Olli kokeissa mainiosti.
SE-hAn SE managed Olli exams-INE brilliantly
He did brilliantly in the exam, Olli did.

c. Nehän ne sai kaikki lapset samat oireet.
NE-hAn NE got all children same symptoms
The children all got the same symptoms, didn't they!

d. Ne ne meni Jari ja pojat katsomaan uutta venettä.
NE NE went Jari and boys look new boat
They went to have a look at a new boat, Jari and the boys.

The pragmatic effect of the trebling is not noticeably different from that of doubling. See later for the use and meaning of the clitic *-hAn*.

The proposed analysis is that the first pronoun is in SpecCP, the second in SpecFP.

(31) $[_{CP}$ se C $[_{FP}$ se on+F $[_{TP}$ … Tarjakin…]]]

Trebling makes use of the two spec-positions allowed in the left periphery of the Finnish sentence. Just about all the properties of the construction are explained by this:

- more than two pronouns are impossible, as shown in (32);

(32) *Se se se on Tarjakin lopettanut tupakoinnin.
SE SE SE has Tarja-too quit smoking

- the two pronouns cannot be preceded by a fronted verb;

(33) *Oletko se se sinäkin lopettanut tupakoinnin?
have-Q SE SE you-too quit smoking

- nor can a verb intervene between the two pronouns. This is consistent with the 'anti V2' condition which prohibits V-movement to C when SpecCP is filled, exemplified in (34b), while (34c) is a well formed wh-question (INE = inessive);

(34) a. *Se oletko se sinäkin lopettanut tupakoinnin?
SE have-Q SE you-too quit smoking

b. *Milloin olet sinä Lontoossa käynyt?
when have you London-INE been

c. Milloin sinä olet Lontoossa käynyt?
when you have London-INE been
When did you go to London?

- the two pronouns cannot be preceded by a fronted XP;

(35) *Nyt se se sinäkin olet lopettanut tupakoinnin.
now SE SE you-too have quit smoking

- the first pronoun, but not the second, can host the clitic particles *-hAn* and *-pA(s)*. The particle *-hAn* can be loosely characterised as evidential, while *-pA(s)* can be loosely characterised as 'contradictive' (see Holmberg 2001), but their use for a range of subtle pragmatic effects extends beyond these meanings.

(36) a. Sepäs se on Tarjakin nyt lopettanut tupakoinnin.
SE-pAs SE has Tarja-too now quit smoking
Even Tarja has quit smoking now, would you believe it!

b. *Se sepäs on Tarjakin vihdoinkin lopettanut tupakoinnin.

c. Nehän ne sai kaikki lapset samat oireet.
NE-hAn NE got all children same symptoms
You know, all the children got the same symptoms.

d. *Ne nehän sai kaikki lapset samat oireet.

Like the question particle *-ko*, these particles are always cliticised to a category moved to C or SpecCP: a verb in (37a), an object in (37b) and a whP in (37c).

(37) a. Onpas Tarja löytänyt hienon puvun!
has-pAs Tarja found nice dress
What a nice dress Tarja has found!

b. Samat oireethan ne on kaikki lapset saanut.
same symptoms-hAn NE have all children got
But they have all got the same symptoms, haven't they?

c. Missähän Jari on ollut?
where-hAn Jari has been
Where has Jari been, I wonder?

The one property of the trebling construction which is not directly explained by the analysis in (31) is that the initial pronoun does not have contrastive interpretation, otherwise taken to be a property of non-wh categories fronted to SpecCP (Vilkuna 1989, 1995). We are led to conclude that SpecCP is not a designated contrast-position as indeed is also shown by the fact that it is

the landing site of wh-movement. Instead, Finnish grammar makes available two positions in the left periphery of the finite sentence. The lower is an EPP-position, as discussed earlier. If it is filled by a referring expression, a rule of information-structural interpretation will assign 'topic interpretation' to it. The higher position is optionally filled. If it is filled with a referring expression (not a whP, e.g.), a rule of information-structural interpretation will assign 'contrast interpretation' to it.[13] The doubling pronouns *se* and *ne* are not referring expressions (being deficient pronouns), and therefore are not assigned topic interpretation in SpecFP, or contrast interpretation in SpecCP.

6. THE SYNTAX OF DOUBLING

The question is what the relation is between the two members of the pair (or three members in the case of trebling) in the Finnish doubling constructions. Two competing theories have recently been developed to account for doubling. One is the 'big DP' theory, or as we shall call it, the 'splitting theory', according to which the members of a doubling relation start out as constituents of a complex category, but get separated in the course of the derivation. In the case of argument doubling with a pronoun doubling a lexical NP, the pronoun and the NP start out as a 'big DP', the two parts separated by movement, the pronoun ending up in a higher position. This type of analysis was first developed by Sportiche (1988) for quantifier float, analysed as movement of an NP out of a complex QP, stranding the quantifier. The idea was later applied to clitic doubling by Kayne (1994) and Uriagereka (1995). See Poletto (this volume) for an application of this theory to doubling in Italian dialects.

According to the other theory, developed by Barbiers et al. (2007), doubling is derived by partial copying. Following Chomsky (1993, 2000, 2008), movement consists of making a copy of a category which is already merged in the tree, and merging the copy. Given the bottom-up derivation of syntactic structure and a strictly cyclic application of syntactic operations the copy will always be merged higher up the tree; indeed, given the extension condition of Chomsky (1993) it can only be merged at the root of the tree. Typically the higher copy (or the highest copy, in the case of multiple copying) is the only one spelled out. Doubling would then occur whenever more than one copy is spelled out.

Assume, however, that movement, i.e., copying and merging, can copy a subset of the features of a category already in the tree, and merge this subset higher up in the tree.[14]

The prediction made by this theory, when applied to doubling, is that the doubling category (the higher copy) either is an exact copy of the doubled

[13] Exceptions to this rule exist, though, for example the constructions in (16) and (17).

[14] This can be seen as a version of the feature movement theory, proposed by Chomsky (1995, ch. 4), rejected in Chomsky (2000), but now resurrected by Barbiers et al. (2007).

category, or consists of a proper subset of the features of the doubled category. Predicted never to occur is the situation where the doubling category (the higher copy) has more features than the doubled category (the lower copy).

For the range of cases Barbiers et al. discuss, mainly doubling of pronouns, including wh-pronouns, in Dutch dialects, this prediction is confirmed. For example, in (38a), found in some dialects including the dialect of Drenthe, the higher copy is identical to the lower copy. In the synonymous (38b), found in other dialects, *wie* is more specified than *wat*, since *wie* is specified for non-neuter gender while *wat* is unspecified for gender (and other features are shared). In the synonymous (38b), found in yet other dialects, *die* is more specified than *wie*, because *die*, but not *wie* is specified as definite (and other features are shared).

(38) a. Wie denk je wie ik gezien heb? (Drenthe)
who think you who I seen have
Who do you think I have seen?

b. Wat denk je wie ik gezien heb? (Overijssel)
what think you who I seen have

c. Wie denk je die ik gezien heb? (North Holland)
who think you rel.pron I seen have

The opposite situation, the higher copy being more specified, is not attested. Alternative theories, including the splitting theory, do not make this prediction, at least not as straightforwardly.

Furthermore, Barbiers et al. make the claim that the part that is copied under partial copying, is not any collection of features, but is a proper subconstituent of the original category. In the case of doubling of pronouns, this presupposes that pronouns have phrasal structure, along the lines of Déchaine and Wiltschko (2002). The structure of, for example, the category which spells out as *wie* would be (39):

(39) $[_{\varphi P}$ Operator $[_{\varphi'}$ non-neuter [N]]]

When this category is copied, in for example, the derivation of a wh-question such as (38), the entire structure can be copied and merged in SpecCP. If both copies are spelled out, the result is as in (38a). Alternatively just the Operator feature, which is the specifier of the φ-feature [non-neuter], is copied and merged in SpecCP. The operator feature alone spells out as *wat*, while the lower copy, with the structure (39), spells out as *wie*, as before. The result is (38b). (38c) is derived by copying and spelling out the structure (39), now the complement of D in a structure $[_{DP}$ D $[_{\varphi P}$ Operator $[_{\varphi'}$ non-neuter [N]]]], which is spelled out as *die*.

This avoids a problem which the splitting theory suffers from. Under that theory, at least as construed in the references mentioned, the two copies start

out as distinct constituents of a complex DP, which get separated in the course of the derivation by movement. It is therefore expected that they could be pronounced together (at least in some dialects, perhaps under some special conditions). However, we never find a constituent pronounced as *wat wie* or *die wie*, in any dialect of Dutch. Under the partial copying theory this follows because the constituent spelled out as *wat* is itself a constituent of the larger constituent spelled out as *wie*, and *wie* is a constituent of the larger constituent spelled out as *die*.

We will now demonstrate that the partial copying theory accounts very neatly for the properties of Finnish subject pronoun doubling.

As an initial argument in favour of the splitting theory, though, it is suggestive that *se*/*ne*, the two doubling pronouns, are also colloquially used as determiners (*se poika* 'that boy/the boy', *ne pojat* 'those boys/the boys'); see Laury (1997). *Se* is also commonly used as a determiner with proper names. In (40), for example, *se* unequivocally forms a constituent together with the name *Olli*.

(40) Missä se Olli nyt on?
where SE Olli now is
Where is Olli gone?

This suggests that Finnish subject doubling is derived by a process akin to clitic doubling as analysed in Kayne (1994), Uriagereka (1995), and extended to DP-doubling more generally in Poletto (this volume), detaching the determiners *se* or *ne* from the lexical DP, here the name *Olli*, merging it in SpecFP.

There are several good reasons for rejecting this analysis, though. First, not all of the categories which can be doubled by *se*/*ne* can take *se*/*ne* as determiners. A clear case is the quantifier *joku* 'somebody' and the wh-word *kuka* 'who'. As shown in (41a) (= (13a)) and (41b) (= (14)), *joku* and *kuka* can be doubled. As shown in (41c,d), neither can take *se* as a determiner.

(41) a. Se on joku taas jättänyt oven auki.
SE has somebody again left door open
Somebody has left the door open again.

b. Kuka se on taas jättänyt oven auki?
who SE has again left door open
Who has left the door open again?

c. *Se joku on taas jättänyt oven auki.

d. *Se kuka on taas jättänyt oven auki?

And although a first or second person can be doubled by *se*, the pronouns never occur as a constituent with *se*: **se minä*, **se sinä*.

We contend that *se*, when doubling a subject, does not encode definiteness, but only singular number, while the doubling pronoun *ne* encodes only plural number (some speakers) or [PL, 3] (other speakers).

Subject trebling provides another reason to reject, or at least a reason to look for alternatives to the 'clitic-doubling analysis' of Finnish subject doubling. There is no NP which would accept two *se*'s (or *ne*'s) as determiners.

(42) *Missä se se Olli on.
where SE SE Olli is

We will now demonstrate that partial copying along the lines of Barbiers et al. (2007) will account for the properties of Finnish doubling of subject pronouns. Consider first the case of doubling of the [1SG] pronoun. Assume that the narrow syntax operates with syntactic features only, which are spelled out and assigned a lexical form in the postsyntactic Morphology component, more or less in the fashion of Distributive Morphology (Halle and Marantz 1993). Assume, as a preliminary hypothesis, that the Finnish first person singular pronoun consist of the two features [SG, 1], which is spelled out *minä*. Now assume that in subject doubling, only the SG feature is copied and merged in the higher position, which we have identified as SpecFP. The SG feature on its own is spelled out as *se*. The lower copy, which is still [SG, 1], is spelled out as *minä*.

When doubling the first person pronoun, the order is *se* … *minä*, never *minä* … *se*.

(43) a. Se olen minä-kin lopettanut tupakoinnin.
SE have I-too quit smoking

b. *Minä olen se-kin lopettanut tupakoinnin.

This is predicted as under the derivational copy theory of movement/chain formation the grammar cannot derive a chain where [SG, 1] is a higher chain link than [SG]. However, if the two features [SG] and [1] are simply a set with no internal structure, the grammar can copy [1] and merge it in the higher position, deriving the chain [1] … [SG, 1]. There is little reason to believe that such a chain is actually found. The hypothesis that pronouns have internal structure, in conjunction with Barbiers et al.'s hypothesis that partial copying only affects constituents, can explain this. Assume that the structure of the first singular pronoun is (44), where Pn = Person, and Nr = Number, and N is a nominal feature.

(44) $[_{PnP}$ 1 $[_{NrP}$ SG N]]

Déchaine and Wiltschko's (2002) φP is split into PnP and NrP. As before, the entire structure, here analysed as a PnP, is spelled out as *minä*, while the subconstituent $[_{NrP}$ SG N] is spelled out as *se*. The subconstituent can only be spelled out, then, if it is extracted from the PnP, as happens in the case of pronominal doubling. The feature [1], being (the value of) the head of the pronoun, can never move without pied-piping [SG N].

Consider next the first person plural pronoun.

(45) a. *Se ollaan me-kin …
SE have-1PL we-too

b. %Ne ollaan me-kin ...
NE have-1PL we-too

c. Me ollaan me-kin ...
we have-1PL we-too

If the structure of a 1PL pronoun is (46)[15]

(46) [$_{PnP}$ 1 [$_{NrP}$ PL N]]

then (45a) can obviously not be derived, as *se* spells out [SG N]. (45c) would be derived by copying of the entire feature complex. (45b) is compatible with the partial copy theory under the (reasonable) assumption that *ne* in the variety of Finnish in question can spell out [PL N]. In the variety of Finnish which does not allow (40b), *ne* can only spell out [3 [PL, N]], and cannot then form a chain together with [1 [PL, N]].

The analysis of pronouns allows for the possibility of an even more reduced pronoun, consisting of just the feature N. The quasi-argumental *se* used in extraposition and (less commonly) weather expressions, illustrated in (7), is an obvious candidate. In fact, some speakers allow *se* in constructions with a plural subject, either a lexical NP or a pronoun.

(47) a. %Se on kaikilla lapsilla samat oireet.
SE is all-ADE children-ADE same symptoms
All the children have the same symptoms.

b. %Nyt se on minulla-kin samat oireet.
now SE is I-ADE-too same symptoms
Now I have the same symptoms, too.

This can be analysed as doubling derived by extracting just the subconstituent N of [$_{PnP}$ 1 [$_{NrP}$ PL N]]. Alternatively, though, the construction can be analysed as merging of an expletive *se* directly in SpecFP, as in the construction with the expletive *sitä* (as analysed by Holmberg and Nikanne 2002).

(48) Nyt sitä on minullakin samat oireet.
now EXP is I-too same symptoms
Now I have the same symptoms, too.

[15]We are aware of the argument against analysing 'we' as a plural counterpart of 'I': The pronoun *we* does not generally denote a plurality of speakers. It is noteworthy that the system of pronominal doubling is, nevertheless, consistent with such an analysis of Finnish 'we', in particular, the existence of a variety of Finnish that allows *ne* to double *me*.

Another case, discussed in Section 2, which falls out directly under the partial copying theory is the contrast between (49a,b):

(49) a. Se on hän-kin …
SE has he/she …

b. *Hän on se-kin …

c. ?Hän on hän-kin …

Hän spells out [HUMAN [3 [SG N]]], while *se*, as a deficient pronoun, spells out just [$_{NrP}$ PL N] or, as a fully referential pronoun, [$_{PnP}$ 3 [$_{NrP}$ SG N]]. Partial copying predicts that (49b) is ruled out, whichever *se* is picked. The fact that (49c) is only marginally acceptable is plausibly an effect of an economy condition which prefers copying of fewer features, when the grammar and the Lexicon of the language allow this option.

Cases like (41a,b) are also compatible with this theory, on the assumption that the quantifiers *joku* 'somebody' and *kuka* 'who' have the structure in (50) (which is different from the structure assigned to the corresponding Dutch expressions by Barbiers et al. 2007).

(50) [$_{QP}$ Q [$_{\varphi P}$ SG N]], where Q is SOME in *joku* and WH in *kuka*.[16]

Again the whole complex is spelled out as *joku* or *kuka*, depending on the value of Q, while the substructure [SG N], if extracted, is spelled out as *se*.

How to derive doubling of lexical NPs (or DPs) under the partial copy theory remains to be accounted for.

(51) a. Se on Jari lopettanut tupakoinnin.
SE has Jari quit smoking
Jari has quit smoking.

b. Ne on kaikki lapset saanut samat oireet.
NE have all children got same symptoms
All the children have got the same symptoms.

Analysing these on a par with *se olen minä*, *se on joku*, etc. would entail that, for instance, the NP (or QP) in (51b) is spelled out as *kaikki lapset* as a complete structure, but contains a subconstituent [PL N] (or [3 [PL N]]) which can be extracted, and in that case gets spelled out as *ne*. What the structure is, is obviously a question of high priority, which we will nevertheless leave for future research.

(45b) is significant in that it indicates that the difference between two dialects, one allowing a particular form of doubling disallowed in the other dialect, is a lexical matter: The dialect which disallows (45b) has no item spelling out

[16] *Kuka* is also specified HUMAN. Interestingly, while *joku* can specify inanimate objects (*joku talo* 'some house'), without a specified complement NP, *joku* is also HUMAN.

[PL N]. This may, indeed, be the explanation of much of the variation found across languages as regards doubling. The question is, why does, for example Swedish not allow doubling of pronouns?

(52) a. *Han har också jag slutat röka. (Swedish)
he has also I quit smoking

b. *?Det har också jag slutat röka.
it have also I quit smoking

c. ?Jag har också jag slutat röka.
I have also I quit smoking
I have quit smoking, too.

(52a) would be ruled out because Swedish has no pronoun like Finnish *se* which would spell out the feature complex [SG N]. Swedish *han* has the feature composition of Finnish *hän* (plus specification for masculine gender), and cannot form a chain with first person *jag*. (52b), with the expletive pronoun *det* in the initial subject position, is not well formed either, but is nevertheless clearly better than (50a), as expected if there is no φ-feature clash involved. (52c) is only mildly degraded. While this can be analysed as a case of total copying, as in Barbiers et al.' s (2007) (38a), it is more likely a special case of the construction discussed by Engdahl (2003), which is a form of subject doubling, but not the Dutch or Finnish kind, as (what looks like) the higher copy is the one that is more specified.

(53) a. Jari har också han slutat röka. (Swedish)
Jari has also he quit smoking
Jari, too, has quit smoking.

b. Pojkarna kunde inte dom heller öppna dörren.
the-boys could not they either open the-door
The boys couldn't open the door, either.

This construction is presumably not derivable by partial copying as in Barbiers et al., and, in fact, poses a challenge for that theory. We will leave it for future research.[17]

7. CONCLUSIONS: DEGREES OF DEFICIENCY

What we see in Finnish is a cline of pronominal deficiency: Many varieties of Finnish have a personless, singular pronoun *se*. This *se* can double any singular argument, including first and second person singular pronouns. (54) = (4a).

[17] The construction occurs in Finnish, too.

(i) Jari on hänkin/ sekin lopettanut tupakoinnin.
Jari has he-too/ he-too quit smoking
Jari has quit smoking, too.

(54) Se ole-n minä-kin lopettanut tupakoinnin.
SE have-1SG I-too quit smoking
I, too, have quite smoking.

For some speakers the plural pronoun *ne* is also personless, hence can double any plural argument, including first and second person plural pronouns. (55) = (4f).

(55) %Ne ollaan me-kin …
NE are-1PL we …

For other speakers *ne* cannot double a first or second person pronoun, thus seems to retain a third person feature, yet lacks the HUMAN feature which the alternative 3PL pronoun *he* has. Furthermore, some speakers have a *se* which is entirely φ-featureless, thus can double even a plural argument.

(56) %Se on minulla-kin samat oireet.
SE is I-ADE-too same symptoms
I have the same symptoms, too.

We have focused mainly on doubling of pronouns, and we have shown that the facts in Finnish fall out under the partial copying theory of Barbiers et al. (2007), in conjunction with a structural analysis of pronouns along the lines of Déchaine and Wiltschko (2002), with their φP split into [$_{PnP}$ Person [$_{NrP}$ Number]]. Doubling is derived either by copying-and-merging an entire category α, constructing a chain (α … α) in which both links are spelled out (pronounced), or by copying-and-merging a proper constituent, call it sub-α, of a category α, constructing a chain (sub-α … α) in which both links are spelled out. The structure of, for instance, the first person singular pronoun is [$_{PnP}$ 1 [$_{NrP}$ PL N]]. The structure of *se* as a referential pronoun ('he', 'she', or 'it') is [$_{PnP}$ 3 [$_{NrP}$ PL N]]. The structure of *se* when used as a doubling pronoun in, for example (55), is [$_{NrP}$ PL N], a copy of the complement of Person in the structure of the first person singular pronoun. In (56) *se* is made up of just the feature N, a copy of the complement of Number in the structure of the 1 person singular pronoun.

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12

PATTERNS OF DOUBLING IN ALEMANNIC

Ellen Brandner

ABSTRACT

This chapter discusses various phenomena from Bodensee–Alemannic which can be subsumed under the term 'doubling' in the sense that one (or even more) items seems to bear superfluous or redundant information — at least if compared to the standardized languages. Classical examples are Doubly filled Comp or DO-insertion. The overall question that has to be answered in light of such constructions is whether the concept of economy (of derivation) is contradicted by them or not. This is dependent on whether analyses can be provided that give on the one hand plausible scenarios how the doubling resp. violations of economy came into existence, e.g., via interference — or on the other hand show that there is no economy violation under closer scrutiny. The latter (seemingly) doubling phenomena give us interesting clues about the fine-grained structure of certain constructions. I will discuss examples which illustrate both cases.

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1. INTRODUCTION

In this chapter, I will report about various doubling phenomena that are attested in the Alemannic dialect.[1] I will adhere here to a rather broad conception of doubling, concentrating on constructions where seemingly semantically 'superfluous' or 'redundant' elements occur — in contrast to the standard(ized) languages. Typical examples for this kind of doubling are negative concord or the Doubly filled Comp. By means of illustrating and discussing some of these phenomena in more detail, I will also address the theoretical question whether these doubling phenomena violate the principle of economy.

Economy of derivation, in the sense that the grammar does not tolerate superfluous elements or steps in a derivation, is a central concept in modern generative grammar. Doubling phenomena as they occur in the dialects therefore are a challenge to this general design. The question is whether these phenomena indeed force us to deviate from this concept or whether analyses can be provided such that these constructions — despite the fact that they contain superficially unnecessary elements — nevertheless are compatible with an economical approach to the computational system of the language faculty. In recent developments of Minimalism, Chomsky (2005), there is no a priori preference for external Merge over internal Merge. That means that the insertion of an additional element is economically equivalent to movement of an element that would target the same position. This opens the way to true 'optionality' and we will see instances of this. One obvious case of this kind of optionality is the scope-marking construction, where either the neutral element WHAT or a copy of it appears in the scope position and the 'original' element in Spec-CP of the lower clause. These constructions are equivalent with a 'classical' extraction structure as (1b′). This is exemplified for Alemannic in (1):

(1) a. Wa hesch (du) gseet wo-n-er ani isch?
what have you said where-N-he towards is

b. Wo hesch (du) gseet wo-n-er ani isch?
where have you said where-he towards is

b′. Wo hesch (du) gseet t dass er ani isch?
where have you said that he towards is
Where did you say that he has gone to?

Scope marking is found in many West-Germanic dialects, including Standard German (SG), see McDaniel (1989), Dayal (1994)[2] for Hindi, Brandner

[1]The variant of Alemannic that will be described in this chapter is 'Bodensee–Alemannic' which is spoken around the Lake of Constance. In some cases I will also cite reference grammars which treat other variants of Alemannic. This is indicated in the text.

[2]Note that under Dayal's account, where scope marking *what* is analyzed as a correlate, generated in the higher clause, scope marking would not be an instance of doubling at all. However, the copy variant (1b) shows that at least for German, an analysis in terms of doubling is called for.

(2000), the various contributions in Lutz et al. (2000), Felser (2004), Bruening (2006) for some recent discussion.

On the other hand, it is often the case that — what seems to be doubling — is rather the filling of a syntactic slot that is present in the structure because of the structure building process. What comes immediately to mind is the doubly filled Comp Filter (of the type *I don't know* [[*which book that*] *you read*]) in the dialects of German(ic).

The chapter is organized as follows: In Section 2, I will present two instances of 'morphological doubling'. These will be shown to be instances of doubling (of identical morphological material) in order to compensate a lack in the inflectional paradigm., i.e., where two identical inflectional elements occur twice within one (extended) projection. This is different from familiar subject–verb agreement and — in at least one case — the pattern runs counter the usual inflectional pattern. I will show that the identity of the inflectional morpheme is the result of a repair strategy. Section 3 treats *tun*-insertion, preposition doubling, and doubly filled Comp in some detail. Here we will see that *tun*-insertion is in some cases equivalent with verb-movement under an economy perspective and therefore we find again a case of true optionality. Doubly filled Comp phenomena and preposition doubling (or rather the addition of prepositional adverbs) will be shown to not contain superfluous elements; instead these elements overtly indicate positions which are necessary in the clausal architecture and which can be justified independently.

Section 4 finally will give two examples which I think are true cases of doubling violating economy. This is the insertion of relative pronouns in addition to the relative particle *wo* in certain variants of Bavarian and Alemannic. The other case is the doubling of the infinitival marker in some types of infinitival complements. In both cases, it can be shown that doubling results from the intermingling of two grammars/constructions. So we can distinguish several types or patterns of doubling with their own characteristics. The overall conclusion is that the doubling phenomena under consideration do not violate economy beside those cases which evolved from interference effects.

There are some further doubling phenomena which will not be discussed in this chapter, but which are listed here in order to illustrate the range of doubling phenomena in Alemannic.

The first one is determiner doubling as exemplified in (2):

(2) a. en so en guete Wii.
a such a good wine

b. *er isch wieder de ganz de Alt.
he is again the completely the old (one)
He is again (the way), he used to be.

There is no doubling of the definite determiner, (2b), as it is found in some varieties of Swiss German.

Another topic that will not be discussed here is negative concord. There are instances of it found in Alemannic, however usually only with negative quantifiers and not with the negative particle itself — as opposed to Bavarian, see Weiss (1998) for a detailed analysis:

(3) a. Es het nene nünt gea.
it has nowhere nothing given

b. ?*Es het nene nünt it gea
it has nowhere nothing not given
There was nothing anywhere.

Since negative concord has been treated extensively in the literature, I will add nothing further to this observation, see for a recent detailed discussion in Zeijlstra (2004). Finally, it may also be worth to note that there is no doubling of subject pronouns of the kind reported from many Dutch dialects.

2. DOUBLING OF INFLECTIONAL MORPHEMES

2.1. S-Doubling

The first case to be discussed in more detail is what I will call 'S-doubling'. At first sight, this is a 'normal' plural construction with *–s*-inflection on the noun:

(4) a. Bi'<u>s</u> Nochbar<u>s</u> goht's zue!
at-s neighbour-s goes it to
There is a mess at neighbors!

b. Uff'<u>s</u> Müller<u>s</u> warte mer nümme.
on-s Müller-s wait we no-longer
We won't wait for the Müller family any longer.

c. '<u>s</u> Nochbar<u>s</u> kumm-et/ *kumm-t ooh
-s neighbour-s come-PL come-SG also
The neighbors will come too.

However, even if it were a regular *–s* plural, but see later, the shape of the determiner in (a) and (b) is somehow mysterious: according to the regular inflectional patterns it should come out as *–n*, because the prepositions govern the dative. In (4c), it should be *d'Nochbars* if the construction would follow the regular declension rules. But this is not what we find. So the question is: where does this doubling of the inflectional element come from and is there a plausible scenario how it could have emerged?

The first thing to note is that s-doubling occurs only with family names and certain unique expressions like 'the mayor' etc., referring also to families.

Despite its restricted distribution, the construction is vital and native speakers have clear intuitions about it.

From a diachronic point of view (4) are not plural constructions at all, according to Schirmunski (1962, p. 436). Instead they are 'frozen' genitives with the following underlying construction:

(5) des Nachbars [PLACE, HOUSEHOLD, FAMILY]

There is an elliptical noun referring to the place or the household (including automatically several persons, cf. the plural interpretation) of the genitive marked noun. Under this perspective, –s is genitive and occurs therefore also (in a regular way) at the determiner.

However, as noted earlier, native speakers interpret the construction clearly also as a grammatical plural, as can be witnessed from the example in (4c) where singular agreement is ruled out.[3] But singular agreement would be expected if the head of the construction were a noun like 'family'.

The even more remarkable thing is that a noun like 'neighbor' does not belong to the class of nouns that has –s in its plural forms, neither in SG (cf. *Nachbar-n*) nor in Alemannic. As for Alemannic, this dialect does not use –s for plural formation at all, just like many other Southern German and Swiss German dialects, see Schirmunski (pp. 422ff.). This is briefly illustrated in (6):

(6) Alemannic:

a Auto	*drei Auto-Ø*	*a Firma*	*die Firmene*
Standard German:			
ein Auto	*drei Auto-s*	*eine Firma*	*die Firmen/Firmas*
a car	three cars	a firm	the firms

These are all candidates for s-plural in SG, but as can be seen, Alemannic uses a different strategy: either no marking at all or a *–ne* morpheme.

Under this perspective the double occurrence of *–s* is even more striking, especially if we finally consider the fact that the form in (7a) — with a possibly borrowed *–s* plural from other cases in SG — is completely rejected. Instead, zero-marking is chosen, according to the pattern in (6).

(7) a. *mit de Nochbors
with the-dat.PL neighbour-s

b. mit de Nochbor

[3] There is of course also the possibility that the elided noun is plural, e.g., the neighbor's relatives or members of the family. However, this seems rather implausible, given that native speakers are not aware of the origin of the construction.

The situation is thus as follows: The original genitive has been reanalyzed as a plural but the exponent does not belong to the grammar of the language. Therefore, there is also no appropriate form of the determiner. But the D-position — as part of the extended projection of N — must be filled with overt material, nevertheless. The most plausible thing then is to 'copy' the inflectional element on the noun — which is interpreted as the element bearing the relevant grammatical information, i.e., plural — to the determiner position. And since *–s* is surface-identical with the diachronically 'correct' form, i.e., singular genitive, a reinterpretation of the forms in this way seems plausible. So the doubling of the inflectional morpheme is a kind of repair strategy such that the requirement of a filled D-position can be satisfied — although there is a gap in the paradigm.

The resulting pattern is somehow reminiscent of complementizer agreement in Bavarian, West Flemish, also Frisian, see Bayer (1984) for Bavarian,[4] more recently Weiss (2005), and Haegeman (1990, 1992) for West Flemish:

(8) wenn-st moan-st … (Bavarian)
if-2SG think-2SG

(9) dat-st do soks net leauwe moa-st. (Frisian)
that-2SG you such not believe must-2SG
…that you shouldn't believe such (a thing). (cited after Zwart 2006, p. 67)

The parallelism lies in the fact that an inflectional element is copied to another position within the same (fully extended) functional projection. Of course the difference is that the doubled *–s* in the constructions above fills a position which hosts inflectional material *per se*, i.e., the D-position, whereas the C-position in embedded clauses does not. What I am interested in is the surface identity of the inflectional morphemes that can be observed in both cases.

In a recent paper, Zwart (2006) suggests to abandon the analysis of complementizer agreement in terms of feature checking of a special C-agreement node. Instead complementizer agreement is analyzed as a purely morphological issue that came into existence via an analogical process. Referring to work by Kathol (2001) and Goeman (2000), he suggests that the agreement morpheme that occurs on the complementizer simply copies the inflection that shows up on the finite verb. Some dialects copy the forms completely from the verbal paradigm (West Flemish), whereas others rely on those forms of the

[4]I will leave out Bavarian in the following. The reason is that it has complementizer agreement in the strict sense only in second person singular. Other cases where inflection-like material is attached to the complementizer is probably more adequately analyzed as subject pronoun doubling. So I will rely on Frisian where it is clear that it is the verbal person/number inflection which occurs on the complementizer. Bavarian behaves also differently with respect to the adjacency effect to be discussed below, as an anonymous reviewer points out. It is not at all clear to me whether the complementizer agreement system in Bavarian is of the same type as the one found in Frisian, as described in Zwart (2006).

finite verb that occurs if the verb is in inverted position (followed by a subject clitic, see later) as it is the case, e.g., in Hellendoorn Dutch. The process for the latter dialects can thus be described as an analogical extension of the following kind:

(10) kunt :: dat
kunne :: datte

Kunt is the inflection type in the base position of the verb and *kunne* the one in the derived (i.e., inverted) position. Since the complementizer occurs exactly in this position, the variation in the form of the verb is mimicked by the complementizer and thus we get the four-part analogy pattern shown in (10). And this kind of mechanism I would like to suggest is at work in s-doubling too.

There is another parallel between complementizer agreement and s-doubling in that there is an adjacency effect in both cases: complementizer agreement is only possible if the (clitic) subject pronoun follows the complementizer immediately.[5] This is observed by Ackema and Neeleman (2004) for Hellendoorn Dutch, as discussed in Zwart (2006, p. 67).

(11) a. Volgens miej lop-e wiej noar 't park.
according-to me walk.PL.INV we to the park
b. ar-re weij noar 't park loop-t.
that-PL.INV we to the park walk
According to me, we should walk to the park.

(12) a. Volgens miej lop-t op den wärmsten dag
according-to me walk-PL on the hottest day
van 't joar ook wiej noar 't park.
of the year also we to the park

[5]Concerning the so-called inverted agreement pattern, this is also true at least in the Southern German dialects, as discussed in Brandner (1995). The 'normal' form of all plurals is *–et*:

(i) dass mer/ihr/die it kumm-et
that we/you-pl/they not come-PL

If the verb has moved to C^0 and the (clitic) pronoun is following it, we get a reduced version:

(ii) denn kumm-(e)- mer
then come we ….

However, if they are not adjacent, e.g. the pronoun is preceded by a focussing particle, then only the full version is possible:

(iii) denn kumm-et/*e nuu mir.
then come-PL red. only us

So the different versions of the agreement morpheme cannot be attributed to the different positions, but is reducible to a phonological reduction process which is dependent on the adjacency of the pronoun — exactly as it is the case with complementizer agreement — at least in Frisian.

b. dat-Ø op den wärmsten dag van ‘t joar ook
that on the hottest day of the year also
wiej noar ‘t park loop-t.
we to the park walk
… that also we walk to the park on the hottest day of the year.

Whether the effect is best described in purely syntactic terms or whether the ultimate reason has to be sought in the fact that the subject does not belong anymore to the prosodic domain of the complementizer has to remain open. What is important for the discussion here is that adjacency with the agreement triggering element is also required in *–s*-doubling construction, i.e., s-doubling is not possible if there is an adjective preceding the noun:

(13) a. *Bi’s neue Nochbars het’s brennt.
at new neighbours has-it burnt

b. Bi de neue Nochbar(e) het’s brennt.
at the new neigbours-(dat) has-it burnt

In this case, the ‘normal’ plural has to show up, as in (13b).[6] In sum, we can see that *–s*-doubling shares some characteristics that we can find in complementizer agreement constructions. If Zwart (2006) is on the right track, we have another instance of doubling of an inflectional morpheme via analogical extension within one functional domain.

Whatever the reason may be for the dialects in question to insist on agreement surfacing on the complementizer (or other material in C^0, e.g., wh-phrases), the mechanism how this slot is filled seems to be regulated by ‘surface identity’ and this is a typical property of an analogical process.[7]

2.2. Doubled Past Participle

Another type of morphological doubling is the doubling of the past participle as exemplified in (14):

(14) Er isch grad kumme gsi, no hond se ‘n
he is just come-PART be-PART then have they him
scho grfoget…
already asked-PART…
He had just arrived and he was already asked…

[6]Which is basically never used if the *–s* doubling construction is possible, i.e., if only a simple noun occurs. So it seems as if the Elsewhere Principle applied. That could be taken as further indication that the process is morphological in nature.

[7]Such an approach to morphological doubling probably presupposes a Distributed Morphology type of the architecture of the grammar. I will not take a stand here whether this is a welcome result; however it seems as if data of this kind could provide an interesting testing ground for the various theories about lexical insertion.

This is obviously an effect of the loss of the synthetic preterit in Upper German. There is no other way to express pre-preterit than to build a periphrastic preterit form of the auxiliary which therefore occurs as a participle together with the participle of the main verb. The difference to the cases discussed earlier (s-doubling and complementizer agreement) is that here, both participles build their own interpretational domain (which yields in combination a pre-preterit) and thus, there is no real doubling in the sense that one element would be superfluous. Under this view, doubling of the participle is just a consequence of the drift to analytic forms — a phenomenon that is well attested in the history of Germanic dialects. Since there is clearly no violation of economy, I will add nothing further to this.

3. SYNTACTIC DOUBLING

3.1. *Tun*-Insertion

3.1.1. 'Optional' Tun-Insertion

One of the most prominent doubling constructions in the German(ic) varieties is do-insertion (*tun*-insertion). Although it is often considered to be a dialectal phenomenon, it seems to be more adequate in this case to divide between spoken and written language. As is shown in Langer (2000), the ban on *tun*-insertion is due to stylistic, prescriptive rules rather than to differences in the grammar. For a recent overview of the occurrences of DO-insertion in a South Alemannic dialect, see Schwarz (2004), on more general and historical aspects, see Langer (2000), Erb (2001) for a detailed discussion of German *tun*-insertion and Schütze (2004) for English.

I will confine myself to those aspects which seem relevant for the general question concerning economy, as discussed in the introduction earlier. In addition, I will illustrate some usages of *tun*-insertion where it contributes to the (aspectual) interpretation and is thus obviously not a candidate for violating economy.

In (15a), we see a typical example of *tun*-insertion in the Alemannic dialect.

(15) a. Die tond etz no SCHAFFE!
they do now still work-inf
They are still at work!

b. Die SCHAFFET etz no!
they work now still
They are still at work!

As indicated, it has the effect that the main verb in its base position is focussed.[8] The focus position in German is a rather low position, i.e., as far to the right as

[8]It should be noted that *tun*-insertion does not necessarily have this effect.

possible. So one possible effect of *tun*-insertion is that it enables the verb to stay in its base position — a focus position per se. However, another — equally accepted — possibility is to move the lexical verb to C^0 and endow it with a contrastive accent, as indicated in (15b). So it seems that this is an instance of true optionality.

If we consider the (generally accepted) derivation of a V2 clause in German, it becomes obvious that optionality is even expected in this case: if there is indeed no preference for move over merge, cf. the introduction, then moving the verb from its base position to C^0 (internal merge) or inserting a dummy (external merge) is in fact equally costly.

The case is different for embedded clauses. If we have a focus construction, *tun*-insertion is indeed superfluous since the verb is already in the natural focus position. This explains why *tun* basically never occurs in embedded clauses, see Schwarz (2004) and the references cited therein. The analysis of the neutral construction is directly relevant for the question whether there is V-I movement in the Germanic OV-languages — a question that is still open as an empirical issue. The fact that *tun*-insertion basically never occurs in embedded clauses would favor the view that there is no movement, cf. Haider (1993). If the verb does not move from its base position in embedded clauses (i.e., no internal merge) then the external merge of *tun* would indeed violate economy because it would comprise an extra step in the derivation. However, be it sufficient here to merely state that a closer examination of *tun*-insertion might eventually give some new arguments to settle this issue.

3.1.2. Habitual/Progressive Aspect Marking

As has been noted in the literature, see e.g., Abraham and Fischer (1998), there are cases of *tun*-insertion in the dialects where the construction leads to a specific aspectual interpretation:

(16) dass sie etz nümme radfahre tuet.
that she now not-anymore cycling does
…that she doesn't cycle anymore (because she is too old now).

(17) Well er it gern lese tuet.
because he not PRT read does
He doesn't like to read.

(18) Die tond grad esse.
they do just eat-INF
They are eating (at the moment).

(16) and (17) have a habitual reading, (18) a progressive one. Because semantic content is added due to the insertion of *tun*, it is expected that *tun* can occur in embedded clauses without violating economy. And this is indeed the case, as is shown in the examples earlier. However, there is a small difference between the two cases. Whereas the constructions with the habitual reading can occur in embedded

clauses, this seems to be at least very marked in the case of the progressive one:

(19) ??dass se grad esse tond.
that they just eat do

The degradedness (19) can be explained rather easily since there is another possibility to express the progressive, namely with a verbal noun introduced by a preposition:

(20) Die sind grad am/ bim Esse.
they are just at-the.DAT by-the.DAT eating

This construction is only possible with pure verbs. If there are (referring) arguments within the VP,[9] *tun*-insertion is chosen:

(21) a. *Sie sind grad am/ bim die gross
they are just at-the.DAT by-the.DAT the great
Weis maie.
meadow mow

b. Sie tond grad die gross Wies maie.
they do just the great meadow mow
They are mowing the great meadow.

And in this case, the embedded version with *tun* is fine:

(22) Ich ha gsehne dass se grad die gross Wies
I have seen that they just the great meadow
maie tond.
mow do
I have seen that they are mowing the great meadow.

So it seems as if the nominalized version is preferred — if it is possible — but there is no general problem with embedded progressives. We can thus conclude that the markedness of (19) is obviously not due to an inherent syntactic property but rather to the existence of a concurring construction in case of a simple verb.[10]

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[9]Alemannic does not productively make use of the so-called extended 'rheinische Verlaufsform' where the object of the verb can appear even as a strongly referring element, see for a recent overview van Pottelberge (2004, pp. 219ff.):

(i) er ist das Fahrad am reparieren.
he is the bicycle at-the.DAT fix(ing)
He is fixing the bicycle.

For that reason, *tun*-insertion is the only possibility to express progressive aspect in such cases.

[10]A reviewer informs me that (19) is fine in Swiss German, provided that verb inversion has taken place:

(i) dass se grad tönd esse.
that they just do eat

I did not test this variant with my informants so I cannot say whether the same effect holds.

3.1.3. Tun As An Auxiliary

The last occurrence of *tun*-insertion that I want to discuss here is where *tun* acts as an auxiliary in subjunctive clauses. It has been claimed in the literature, see the overview given by Schwarz (2004), that *tun* is inserted in order to avoid subjunctive inflection, be it because the forms are unfamiliar (low frequency) or because — especially with Konjunktiv I — they coincide in some cases with the present indicative. First it has to be noted that subjunctive forms are used more frequently in Alemannic than in SG. Especially Konjunktiv I is very common. It is used mainly in indirect speech. In this case we see that the version where the lexical verb is inflected is even preferred over the version with *tun*:

(23) Sie hond gseet …
a. ??[dass se oh no kumme teiet].
that they also PRT come do-subj
b. [dass se oh no kämptet].
that they also PRT come-subj

(23) would be an instance of superfluous *tun*-insertion in an embedded clause. Consider furthermore that the version in (24) is equally accepted.

(24) Sie hond gseet sie teiet oh no kumme.
they have said they do-SUBJ also PRT come

In Alemannic, embedded V2 clauses are much more frequent than in SG, as seems to be generally the case in spoken language, see Auer (1998), especially in the context of propositional verbs. In this case then, we can attribute the insertion of the subjunctive marked *tun* to the information structural reasons discussed above and not to subjunctive marking itself. Thus, the pattern shown in (23) and (24) is conform with the earlier discussion of optional *tun*-insertion.

The case is different with Konjunktiv II which is used in irrealis contexts:

(25) Mir tätet der Kueche scho esse [wenn mir in
we do-IRR the cake PRT eat if we him
möge tätet].
like do-IRR
We would eat the cake if we would like it.

The periphrastic form is also preferred in SG — with the sole difference that the auxiliary there is the subjunctive form of *werden*, i.e., *würde*. So *tun*-insertion in this case reduces to a different choice of the auxiliary and we have a garden variety of the well-known process in the history of German that analytic forms tend to replace synthetic ones.

3.2. Doubling in Prepositional Phrases

In this section, I will discuss two instances of doubling phenomena in PPs. These will include so-called R-pronouns and preposition doubling in the context of (mainly) directional PPs.

3.2.1. R-Pronoun Doubling

(26) shows how an R-pronoun is realized in Alemannic in its most typical way:

(26) Do ha-n-i it dra denkt.
there have-N- I not there-upon thought
I didn't think about that.

This variant of R-pronouns is called 'split doubling' by Fleischer (2002), which seems to be typical for Upper German dialects. As shown in (27), the form where both pronouns are adjacent is ruled out; instead a simple form has to be used:

(27) a. ?*Mir hond etz it dodemit g'rechnet
we have now not there-there-with reckoned
[dass du kunnsch].
that you come

b. ?Mir hond it demit g'rechnet [dass du kunnsch]
we have not there-with reckoned that you come
We didn't reckon upon that that you will come.

However, the form that was judged by our informants as the most natural one in their dialect and that was given regularly as an alternative in translation tasks is shown in (28). Here the R-pronoun is replaced by a simple [P NP] construction:

(28) [Mit dem] hommer etz it g'rechnet.
with that have-we now not reckoned
We didn't reckon upon that.

This fits very well with the observation that in Alemannic, and for that matter also in Bavarian, see Bayer (1996), the wh-counterpart of an R-pronoun is always much less preferred. Instead again, the simple PP form is used:

(29)

	SG	ALM (BAV)	
a.	womit	mit wa	(with what)
b.	worauf	uff wa	(upon what)
c.	woran	a wa	(at what)

So it seems as if the syntax of R-pronouns is quite different in Alemannic than in SG. Further evidence for this comes from the following data. Consider first (30).

(30a) illustrates again that the non-split version is basically not available, irrespective of the position. What is interesting is (30b). Here we can see that the simple form cannot occur in Spec-CP, whereas the doubled element can do so, cf. (30c):

(30) a. ??Dodemit ho-mer it g'rechnet.
there-there-with have-we not reckoned

b. *Demit ho-mer it g'rechnet
there-with have-we not reckoned

c. ?Do ho-mer it demit g'rechnet.
there have-we not there-with reckoned
We didn't reckon upon that.

Some further instances of this are given below:

(31) a. *Draa ho-mer it denkt.
there-on have-we not thought
We did not think about that.

b. *Devu ho-mer nünt gwisst.
there-of have-we nothing known
We didn't know anything about that.

These data suggest that the 'inner' *d(r)-* is added to the lexical core in the morphology and is thus not analyzed as a separate word. The structure of *demit* is [$_{P}$ de-mit], i.e., an X^0-category, see Oppenrieder (1991), Bayer (1996), also Brandner (1995). If this is true then the ungrammaticality of these examples finds a natural explanation: Spec-CP is not occupied by a maximal phrase and thus structure preservation is violated.[11]

This implies that *do* as in (30c) is base-generated in Spec-CP and thus acts like an expletive rather than a genuine part of an R-pronoun on the syntactic

[11]The question then arises why the short form is licit in the 'middle field', cf. (27b). I would tentatively suggest that it is analyzed as a particle in this case. Some plausibility is given to this by the following data:

(i) Demit g'rechnet ho-mer it.
there-with reckoned have-we not
We didn't reckon upon that.

If the particle is accompanied by the non-finite verb, it can occur in Spec-CP. This is parallel to other separable particles:

(ii) a. *Vor schlug er es ihm. cf. er *schlug* es ihm *vor*
PRT hit he it him

b. Vorgeschlagen hat er es ihm.
PRT-hit-INF has he it him
He suggested it to him.

level. Evidence for this view comes from the following example:

(32)	#dass	er	do	etz	ooh	nünt	demit	afange	ka.
	that	he	there	now	also	nothing	there-with	begin	can
	He can't do anything with it.								

The sentence is grammatical, but *do* has in this case a rather strong local reading, i.e., it is a locative/temporal adverb which occurs independently from the R-pronoun. This reading is not present if *do* is in SpecCP. Instead it can refer to an abstract entity (i.e., the content of the embedded clause) — just like SG 'simple' R-pronouns. So it seems as if the combination of base-generated expletive *do* and particle like *d(r)*+P comes closest to the SG R-pronoun construction in syntactic terms. Recall that the genuine corresponding construction is the one with a simple PP, cf. (28).

The unavailability of the wh-forms and the reluctance in using R-pronouns together with the restrictions under which they can occur at all, suggests that R-pronoun formation is not really part of the grammar of these varieties. Instead, it seems as if forms like *damit* are imported from SG. But — for whatever reason — *d(r)* cannot 'replace' the argument of the preposition, as it is the case in SG. Instead *d(r)* is analyzed as belonging to the preposition at the word level. The argument itself is represented by *do* which is base-generated in Spec-CP. However, as described earlier, the preferred version is the simple one without any R-pronoun formation.

'Doubling' in this case then should again be considered as a kind of 'repair strategy', solving a problem that has its origin in the import of a construction that has phrasal status in the original language but word status in the importing language. If such an analysis can be upheld, then this is again a case where apparent doubling can be explained in different terms.

3.2.2. Preposition Doubling

In this section, I will discuss a doubling construction which is also found in SG (and of course in many other dialects). These are the complex (or circum-) positions of the type seen in (33) for SG:

(33)	auf	den	Berg	hinauf.
	on	the	mountain	dir-on

Preposition doubling of this kind seems to be much more widespread in Alemannic than in SG and — as native speakers inform us — nearly obligatory. Similar statements can be found in traditional descriptions of various dialects, e.g., the 'Westallgäuer Mundart' by Gruber (1989, p. 148),[12] who writes that

[12]This dialect belongs also to the Alemannic group.

'the pleonastic doubling of local adverb and verb respectively preposition with local adverb are very popular, *in order to make the description clearer.*' This gives us already a hint that doubling in these cases should fall rather under the heading 'explicitness'. Some examples are given below:

Directional:

(34) Ich fahr uff Koostanz uffi.[13]
I drive on K. on-dir
I'll drive to Konstanz.

(35) Stell's a d'Wand ani.
put it at the wall at-dir
Put it against the wall.

(36) Er isch vu de Loater abi kait.
he is from the ladder off fallen
He's fallen down from the ladder.

Locational:

(37) Es hanget a de Wand (d)anne.[14]
it hangs on the wall on
It is attached to the wall.

(38) Es isch uff de Dilli (d)obe.
it is on the attic above (upstairs)
It is on the attic.

(39) Es isch im Kelle (d)unne.
it is in-the cellar down (downstairs)

The important thing to note is that the directional 'doubled' Ps end with –i-, originating from the post-positioned deictic particle *hin* (i.e., *uff-hin* > *uffi*), cf. Hinderling (1980). In the locational versions, (37–39), the –e-ending is obviously only a formative.

The construction has received much attention beginning with the work by van Riemsdijk (1978), van Riemsdijk (1990, 1998), and van Riemsdijk and Huybregts

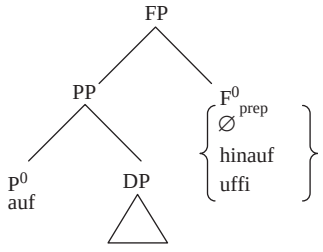
[13]According to Hinderling (1980), the –e/i-alternation can be traced back to a stage where the directional particles (hin-/her-) were attached as a suffix to the respective preposition. This yields forms like *ab-hin* or *ab-her* which surface in contemporary Alemannic (via regular phonological developments) as *ab-i* resp. *ab-e*.

[14]We got different judgements from our informants with respect to the form of the 'second preposition'. Older informants insisted on the bare form, i.e., without d-, whereas for others the complex form was judged as the most natural form. At the moment, I cannot offer any explanation why there is this variation.

(2002). Subsequent work includes Koopman (2000), den Dikken (2003, 2006), see also Helmantel (2002) for an overview. Recently, Svenonius (to appear) has suggested a rather fine-grained structure for PPs that takes into account the semantic and conceptual aspects of LOCATION and DIRECTION in some detail. This is not the place to discuss these suggestions in any detail; however, as far as I can see, the constructions exemplified above cannot be integrated into these structures without problems. Turning first to the work by Koopman and den Dikken, the crucial point in their analyses is that the PP consists of several functional shells, encoding DIR, LOC, or DEIXIS. The problem is that there is only one position for the lexical preposition to be inserted and although it may move in order to get the different surface outcomes, e.g., in Dutch, I do not see how constructions like those in (37–38) could be derived in a straightforward way. Especially if we take into account that there is not real doubling of the preposition, rather that the corresponding adverb is used, see later.

Van Riemsdijk's work of course explicitly tries to capture the doubling of the preposition. He suggests the following structure:

(40)



As can be seen, the complex forms *hinauf* resp. *uffi* are taken to be the functional close-up of the whole projection, whereas the simple preposition is analyzed as a semi-lexical head. It is this division which I would like to consider in some detail, especially the point whether the 'post-position' should indeed be taken as the 'real' functional head of the PP. In traditional grammars there is a division between simple prepositions and 'prepositional adverbs'. An example would be German *oben* which corresponds to the preposition *auf*. Similarly, the prepositions combined with a directional particle (*hin-auf*, resp. *uff-i*) are traditionally categorized as adverbs. So the idea that we have real preposition doubling is obviously not correct. Rather, we have a preposition combined with the corresponding adverb. Already this fact casts doubt on the analysis given by van Riemsdijk. If it is an adverb, then we would expect its position to be an adjoined one, rather than the functional closing of the PP. To analyze the 'post-position' as an adverb, adjoined to the PP gains further plausibility by the fact that it is not always the same lexical base that we find, see example (39). Here, the locational relation is 'in', however the adverb specifies the location of the cellar and not the entity itself.

In order to decide whether this idea has some plausibility, it is useful to have a look at the diachronic development.

There is indeed some evidence that these adverbial elements were the predecessors of 'real' prepositions, cf. Baldi (1979). According to him, these adverbs (originally case endings, nouns, or particles) were attached originally to the verb. These complex verbs were able to enlarge the lexicon by using the same verbal base but lexicalizing various concepts of it (e.g., come: come around, come to, come through etc.). In a later stage, when the case endings themselves lost their range of meanings (including, for example, locative and instrumental), these elements were used to enforce the now weakened case meanings. This lead to a situation where they were also used in combination with nouns and this configuration was the basis for the development of prepositions — as they occur now in the modern languages. Baldi cites examples from Latin where we find basically the same situation as in Modern German, respectively in Alemannic:

(41)	Caesar	milites	*trans*	Rhenum	*trans*duxit.	(Caes. BG. 1, 35)
	C.	soldiers	across	R.	across-led	

(42)	legiones	*ad*	urbem	*ad*ducere	(Cic, Fam. 12,23,2)
	legions	to	town	to-lead	

Baldi (1979, p. 58) claims that such a 'over-specified, redundantly marked construction was doomed'; however, Alemannic seems to have preserved this 'archaic' state to a certain extent, especially if we consider the cases under (37) and (38) where no DIR is involved but rather only a locational (over-)specification. Admittedly, these cases are rare, and we do not find the near obligatoriness as with the DIR-PPs. But the important point is that under this analysis, these elements are of the category 'adverb' and then the 'doubling' is not a real doubling in the sense that there are two identical elements occurring within the same domain.

3.3. Doubly Filled Comp

One of the most discussed doubling phenomena occurring in South German dialects is the general violation of the Doubly filled Comp Filter. This means that wh-words in embedded interrogatives can co-occur with a complementizer, contrary to SG. This holds for Bavarian, Swiss German, Alemannic, and surely for many other dialects. It is widely believed and also sometimes explicitly stated, (e.g., Penner 1995, also Koopman 2000 for Dutch dialects) that the insertion of the complementizer is basically free and thus not subject to narrow syntax but rather to the PF component. This assumption was also the basis of the earliest treatments of this phenomenon, as its categorization as a 'filter' suggests.

In Bayer and Brandner (2008) we have shown that this view is not correct. The insertion of the complementizer in embedded interrogatives underlies severe restrictions.

The basic distinction should be made between word-size wh-elements (*who, what, how* etc.) and wh-phrases of the type *which* X, or internally complex wh-expressions like *how many* etc. Whereas the former virtually never occur with a complementizer, the latter almost require it. This has been noted already in traditional grammars of various dialects. Our own investigation in Alemannic and Bavarian confirmed these observations.

Some examples are given below:

(43) I woass it wo (?*dass) se sind.
I know not where that they are
I don't know where they are.

(44) I woass it wa (*dass) se em gea hond.
I know not what that they him given have
I don't know what they have given to him.

(45) Es tät mi interessiere mit wellere Gschicht ?*(dass)
it would me interest with which story that
se etzt kummet.
they now arrive (tell)
I am interested in the story they will tell us.

(46) I woass it wieviel ?*(dass) se em gea hond.
I know not how-much that they him given have
I don't know how much they have given him.

In order to account for this pattern, Bayer and Brandner suggest that word-size wh-words can have a 'latent' C-feature in their lexical entry which enables them to act as a wh-phrase (responsible for the typing of a clause) and as a complementizer simultaneously. They are directly merged in the C^0 position and therefore doubly filled Comp is excluded.

The question then is why can SG and also e.g., Standard English[15] do without overt complementizers in embedded questions? I cannot offer a completely satisfying answer to this question. However it seems indisputable that the DFCF is — under a diachronic perspective — a relatively late development, even in the standardized languages. So it may very well be the case that the non-insertion of a complementizer with complex wh-phrases is a kind of 'overgeneralization', i.e., the pattern found with simple wh-expressions is transferred to all cases. And since the specifier is always filled in these constructions (due to obligatory wh-movement) the syntactic environment gives enough information for the identification of the clausal head such that we may speak of 'PF-dropping'

[15]Recall that DFCF violations occur also in dialects of English, see Henry (1995) as well as in many Romance non-standardized varieties.

in these varieties. This may also be the case with 'preposition doubling', as discussed in the previous section.

4. DOUBLING VIA INTERFACE

In this last section, I will discuss two cases of doubling in Alemannic which should I think in fact be analyzed as 'redundant doubling', i.e., one element is superfluous in the sense that it does not contribute to the syntactic well-formedness of the construction in question nor that it makes it less ambiguous, as it was the case for example with the doubled prepositions. The first case to be discussed are relative pronouns which occur in addition to the relative particle *wo*. The second case is the doubling of the infinitival marker.

4.1. Relative Pronouns

Alemannic – like many other dialects — uses an invariable particle to introduce relative clauses. The form of this particle is *wo* and it corresponds to the wh-counterpart of 'there', i.e., it has a locative/deictic meaning at its base. This is illustrated for accusative/nominative arguments in (47), for a dative argument in (48), and for a prepositional phrase, i.e., an oblique marking, in (49).

(47) Der Ma/ die Frau/ des Kind [wo kummen isch]/
the man the woman the child RP come is
[wo-n-I gsehne ha].
RP-N-I seen have
The man/the woman/the child who has come/who I have seen.

(48) Dem Ma [wo-n- Igholfe ha] kaasch ebbes gea.
the-DAT man RP I helped have can-you something give
You can give something to the man who I helped.

(49) Die Kind [wo se d'Schue von-ene gfunde hond]…
the children RP they the-shoes from-them found have
The children whose shoes they have found…

Note that the resumptive phrase (*von-ene*) in (50) is obligatory whereas in the other cases, a gap is licit, see Salzmann (2006) for a recent discussion of resumptive pronouns in Swiss German. Full Pronouns as relative pronouns are only used in so-called V2 relatives:

(50) I kenn ebber [der kunnt us Afrika] und…
I know somebody who comes from Africa and …

Note that the two types of relative markers are in complementary distribution, i.e., a V2 relative can never be introduced by *wo* whereas in genuine relative clauses there is no pronoun in the 'pure' dialect, according to Noth (1983).

However, already Weise (1917) noted that relative pronouns can co-occur with the particle *wo* in the Southern German dialects:

(51) Der Ma [der wo …….]
the man Rel.-pronoun Rel.-particle

According to our informants, there is no difference in interpretation (especially concerning the restrictive/appositive interpretation — as one might expect). It is also not the case that the pronoun is used e.g., if there is a contrastive focus etc.; rather the two variants seem to be in free variation. If we consider the structure of a relative clause (where I stick here to a rather conservative analysis), it is easy to see how the additional pronoun can be integrated. Assuming that the relative particle is situated in C^0, the specifier is free to host an additional element. Since therefore the two elements introducing relative clause do not collide in terms of competition for a distinguished position, integrating this additional element into the clausal structure does not lead to a revision of the grammar. As such, it can be borrowed easily as it does not provoke the altering of the (sub-)system that derives relative clauses in Alemannic. If this is correct, then we have a case of doubling in the sense of redundancy.

4.2. Doubling of the Infinitival Marker

The second case I would like to discuss in the context of interference is a bit more complex. As has been noted by Müller (2000), in Swabian (which belongs to Alemannic), we encounter infinitivals of the following shape:

(52) Mir bruuchet der Bese [zum d'Garage zum[16]/z/Ø' fürbe].
we need this broom for-to the garage to wipe
We need this broom to wipe the garage.

In this purpose clause, there can be two infinitival markers: *zum* (which is a contracted form, consisting of *zu* + *dem*) in clause initial position and a doubled form immediately preceding the infinitive. The lower marker can also occur in a reduced form (z') or be zero. Since this is a purpose clause, one analysis that comes to mind is that this mimics the SG form of purpose infinitives where the infinitival marker consists of two parts (at least on a surface oriented analysis):

(53) Wir brauchen den Besen [um die Garage zu kehren].
we need this broom in order the garage to wipe

[16]Müller (2000) gives examples of this form, i.e., where the introducing infinitival marker *zum* is in fact doubled, also in its phonological shape. As indicated, Swabian speakers accept in addition the reduced or even the zero form. Our informants could only have the reduced form in the second occurrence. I will assume that this is a surface variation and will ignore this difference.

If that were the case the solution would be easy; for whatever reason SG uses this complex type of infinitive, its Alemannic realization differs only in that it chooses different lexical items. It would thus involve doubling only on a morpho-phonological level in the sense that the two parts of the marker may be realized in an identical morpho-phonological shape but both are serving different demands. But this cannot be the whole story, as will become clear immediately.

This kind of doubling is found in other constructions in which SG uses a 'simple' *zu*-infinitive, e.g., the complements of propositional verbs:

(54) a. ?I han ehna grote zum sich in
I have them advised to-the eachother in
Radolfzell z'/Ø treffe.
R. to-the/to meet
I advised them to meet in R.

b. ?I han ihm verschproche zum de Rasemäher z'ruck
I have him promised to-the the lawn mower back
z'/Ø bringe.
to bring
I promised him to bring back the lawn mower.

It first should be noted that Alemannic in general prefers finite clauses under propositional verbs, see Brandner (2006). Younger speakers however accept infinitives under propositional verbs but then the result looks often as in (54). As indicated, (54) is not fully accepted by the informants, but it was offered by various speakers as a translation of a SG infinitive (under a propositional verb).

In order to understand this, it is necessary to take a closer look at the Alemannic infinitival syntax. As described in Brandner (2006), Alemannic is much more explicit in encoding of different infinitival constructions than SG. As is well known, infinitival constructions can either be bi-clausal (with a fully expanded CP-structure of the embedded clause) or mono-clausal (under so-called restructuring verbs). Alemannic uses a bare infinitive in mono-clausal structures, and preferably finite clauses under propositional verbs whereas in SG, both constructions have the same surface form, compare:

(55) a. Woasch no wo se agfange hon [die
know-you still where they started have the
Schtross uffrisse]? (ALM)
street up-tear

b. Weisst du noch als sie angefangen haben [die Strasse aufzureissen] SG
Do you remember when they started to tear up the street?

(56) a. I ha-n-em verschproche dass I kumm/ ?? zum
I have-him promised that I come to-the
kumme/ *kumme. (ALM)
come come

b. Ich habe ihm versprochen [zu kommen]. (SG)
I promised him to come.

Both varieties allow so-called long scrambling out of the infinitival complement:

(57) Weisst du noch als sie [die Strasse]$_i$ angefangen haben
know-you still where they the street started have
[t$_i$ aufzureissen].
up-to-tear

I will assume without further discussion that this possibility is an indication for the mono-clausal status of the construction, see Wurmbrand (2001). This goes together with the fact that Alemannic uses a bare infinitive, i.e., the infinitival complement consists of a functionally unmarked vP with no (clause) boundary whatsoever. Since SG behaves syntactically alike, the infinitival marker in SG does obviously not head a functional (clausal) projection. From this we can conclude that the infinitival marker is not visible to the computational system and is thus most adequately analyzed as an affix in the sense of a morphological 'inflection', see Brandner (2006) for a detailed discussion, see also Abraham (2001).

Younger speakers tend to tolerate and use the SG infinitival marker in this construction, i.e., *uffz'risse* is a possible realization for these speakers. If it is true that this marker does not have any impact on the syntactic structure then what is at stake is the simple borrowing of a 'word form'.

However, this still does not explain why we find doubling of the sort illustrated in (54). In order to understand this, it is necessary to look at further infinitival constructions. Alemannic differs from SG in that it has a left peripheral infinitival complementizer whose form is *zum*. It occurs preferably under nouns that can take infinitival complements:

(58) I ha koa Ziit [zum mit dir schpile]. (ALM)
I have no time to-the with you play

(59) Ich habe keine Zeit [mit dir zu spielen]. (SG)
I have no time with you to play
I have no time to play with you.

Assuming that *zum* heads the infinitival CP, we can see that Alemannic distinguishes again overtly between the various types of infinitival complements whereas SG has in all cases invariable surface forms.

The scenario is the following: The SG construction which uses an infinitive under propositional verbs is imported into the grammar of Alemannic. However, Alemannic uses its own version of a CP-infinitival, namely that with left peripheral *zum*; if this falls together with the borrowed infinitival word form

zu+infinitive, then we get the doubled form. If an infinitival clause of the type in (58) is chosen, then we get the zero-form of the infinitive. This gives us the optionality of the infinitival marker in (60):

(60) ?I han ehna grote zum/*Ø sich in
I have them advised to-the eachother in
Radolfzell z'/Ø treffe.
R. to-the/to meet
I have advised them to meet in R.

In sum, these two cases where doubling leads to redundancy can be explained in terms of interference.

5. CONCLUSION

The overall conclusion of the examination of doubling phenomena as seemingly 'redundant' external merge of lexical items as they are observed in many dialects provides no evidence against the economy of derivation approach. Rather it seems as if dialects (which are always spoken languages in the sense that there is no standardized written norm) make much more use of strategies that either facilitate parsing (DO-insertion) or explicitly mark constructions e.g., via spell-out of a functional head which can in principle be predicted by the syntactic environment (preposition doubling, doubly filled comp). The two cases where there are indeed semantically vacuous elements were shown to be presumably instances of interference in the sense that lexical items are borrowed from the standard variety which are integrated into the grammar. But this is done in such a way that these items do not alter the system as a whole.

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13

THE POSSESSOR THAT APPEARS TWICE. VARIATION, STRUCTURE AND FUNCTION OF POSSESSIVE DOUBLING IN GERMAN

Helmut Weiß

ABSTRACT

In colloquial and dialectal German (as well as in other languages), there exists a possessive construction which shows a kind of double marking on the morphological level: the combination of a DP-internal possessor(-DP) with a possessive pronoun, cf. (i). Thus it seems that the possessor is referred to twice: by the possessor-DP and the possessive pronoun. However, it will be argued that only the possessor-DP refers to the possessor, while the possessive pronoun marks the possessive relation (i.e., bears a POSS feature).

(i) am Sepp sei Haus.
the-DAT Joe his house

The chapter consists of four sections: in Section 1 I will present data mostly from various German dialects, showing a certain range of variation in several respects; in Section 2 I am trying to show that (most of) these possessive constructions have in common an identical underlying structure; in Section 3 I am going to argue that double marking is by no means redundant, as commonly assumed; and in Section 4 I will draw some conclusions concerning lessons we can learn from the study of syntactic doubling phenomena.

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1. INTRODUCTION

Like modern Greenbergian typology, traditional dialectology has assumed a functional perspective in its morphosyntactic research. In this view, syntactic doubling phenomena in dialects have been mostly understood as means of extending either clarity (Deutlichkeit) and/or emphasis (Nachdruck). At the beginning of the 20th century, Oskar Weise — a distinct expert in dialect syntax — connected the occurrence of doubling phenomena such as DP-internal possessor constructions, the topic of my chapter, with the intention of dialect speakers to increase clearness and emphasis.[1] As long as we are concerned with a descriptive level, this functional perspective has its merits and is justified: in the field of dialect syntax, there are many older studies which have revealed plenty of very interesting data.

Yet, functional explanations of this kind cannot be the whole story, because they take into consideration surface manifestations alone. If we really want to understand why doubling occurs in dialects (and in languages in general), we should try to detect the underlying structures and we should attempt to identify the function of doubling within them. Only an investigation of this kind could result in an explanation in a deeper sense. Sometimes, though not always, it will reveal that doubling is not doubling at all, at least at certain levels of the syntactic system, or that the function of doubling is different from what is commonly assumed. As I will argue in this chapter, possessor doubling constructions are such a case: whereas doubling seems to be superfluous or redundant at first sight, the doubling expression has a function at deeper levels of the grammatical system.

2. DPIPPC: THE DATA

In colloquial and dialectal German, there exists a possessive construction which shows a kind of double marking: the combination of a prenominal, DP-internal possessor(-DP) with a possessive pronoun, as illustrated in (1)

[1]Cf. Weise (1902, pp. 75f.): 'but all his ambition is focused on clarity. […] The negation is repeated emphatically in order to carry authority. In Angely's celebration of the craftsman a journeyman did not receive any reply to the question *Hat keener Schwamm*? "Has nobody sponge?"; but when he says: *Hat denn keener keenen Schwamm nich?* "Has nobody no sponge not?" he gains a hearing. […] Conjunctions are often strengthened emphatically, too. For the mere *indem* "by" they say *indem daβ* "by that" and the same additional remark is used for *ehe* "before", *seitdem* "since", *jemehr* "the more?", *damit* "so that" amongst others. […] Instead of the possessive whose-case (genitive) occurs the whom-case (dative) which is strengthened by the pronoun *sein* "his" or *ihr* "her": *dem Vater sein Garten* "the father his garden" = *des Vaters Garten* "the father's garden". Schiller uses the same trick in Wallenstein's camp in order to give the speech a traditional colouring; for he let the constable say: *Auf der Fortuna ihrem Schiff* "On Fortuna her ship" (7,42) and *des Teufels sein Angesicht* "the devil's his countenance" (11,79f.)'. (Translated by K. Caspari.)

from Bavarian. I call this construction DP-internal prenominal possessor construction (DPIPPC).[2]

(1) am Sepp sei Haus.
the-DAT Joe his house
Joe's house.

DPIPPCs seem to occur (or, at least, to have occurred) in all Germanic languages, as well as in many non-Germanic and non-European languages, as we can learn from the extensive survey given by Koptjevskaja-Tamm (2003).[3] According to her, DPIPPCs are cross-linguistically very frequent. In the following, I restrict myself to data mainly from German dialects (these are much less studied than in other Germanic languages, especially the Scandinavian ones), and I will concentrate on the question of variation and/or uniformity.

First, with respect to case marking of the DP-internal possessor, we can observe variation to a considerable extent. In (1), the prenominal possessor is case-marked with dative. This type is called possessive dative in German linguistics (Duden 2005, p. 835, § 1275), and it is the most common one in German, occurring not only in many dialects, but in colloquial, non-dialectal German as well (cf. Zifonun 2003). However, besides dative, the possessor can be marked with genitive, as in (2a), with combinations of dative and genitive, as in (2b), with accusative, as in (2c), or it can appear without any morphological case-marking, as in (2d).

(2) a. mein's Vodas sa(n) lustigha Bou.
my-GEN father- GEN his funny boy
(North Bavarian; Schiepek 1899/1908, p. 338)

b. s fader sim blåts. (Alsatian; Schirmunski
the-GEN father-DAT[4] his place 1962, p. 435)

c. unen bfara saena hüne. (Thuringian; Sperschneider
our priest-ACC his hens 1959, p. 23)

d. rik Lüd ehr Döchter und arm Lüd ehr Kalwer.
rich people their daughters and poor people their calves
(Low German; Johnson 1971, p. 508)

[2]There is no uniform terminolgy with respect to this construction, cf. the terms 'possessive noun phrases with linking pronouns' (Koptjevskaja-Tamm 2003), 'prenominal possessor doubling' (Julien 2005a) and others.

[3]See also Syea (1994) for additional data from creoles (French-based creoles: Mauritian Creole, Louisiana, Karipuna; English-based creoles: Papiamentu; Dutch-based creoles: Negerhollands, Berbice (*Sami fi jerma* 'Sammy his wife')) and African languages: Twi (*Ata ne na* 'Ata his mother'), Ewe (*ale fe afo* 'sheep its foot').

[4]In analysing the form *fader* 'father' as DAT I am following Schirmunski, though there is no overt case morphology and it would be probably more appropriate to analyse the form as unmarked for case, as one reviewer rightly observed.

So we have a lot of variation with respect to case marking. Yet, it is important to note that this variation has nothing to do with DPIPPC as such, but reflects the morphological case systems of the respective varieties. Simplifying somewhat, we can say: In those few dialects which still possess a morphological genitive (however, see later), this case is used to mark the DP-internal possessor; if there is no genitive, dative is used, and so on. So we get the hierarchy of cases given in (A):

(A) GEN > DAT > ACC > ZERO

Though we can observe a lot of divergence between the dialects with respect to case marking, it is reasonable to assume that this variation is a surface phenomenon, not reflecting any deeper differences (e.g., structural ones). It is common to distinguish between morphological and abstract or deep case (cf. Vergnaud 1985; Sigurðsson 2004).[5] Morphological case is an exponent of the phonetic form (PF) and as such language specific, whereas abstract or deep case is or can be conceived of as a formal feature in the sense of the Minimalist Program (MP), and it is thus universal, not open to variation. The relation between abstract and morphological case is uniform across languages and language specific at the same time. It is uniform because morphological case is the PF-exponent of abstract case (Sigurðsson 2004) — and it is language specific because the spell-out form of abstract case depends on the morphological case system of the respective language. A particular deep case may be expressed in quite different ways not only in closely related languages, but even in dialects of the same language, as the various possibilities of case marking the prenominal possessor in (1)–(2) demonstrate.[6] With respect to DPIPPCs, we can assume an abstract case POSSESSOR that can be spelled out morphologically as genitive, dative, accusative or zero.[7]

Seen in this perspective, variation is restricted to PF, but does not occur in narrow syntax, that is at the level of structures, as I will show later in more detail.

[5]Cf. Sigurðsson (2004, p. 226): 'Case is a relation between a DP (or an argument) and its syntactic surrounding, and this relation may be semantically associated or not. Semantically associated case is inherent case, whereas case that is not so associated is structural case. Both inherent and structural cases may but need not be reflected by morphological case (m-case). Case that is not morphologically reflected is merely abstract case or deep case. In most European case-languages, abstract cases and m-cases are linked such that the abstract inherent cases are expressed by the dative or the genitive (and, less commonly, the instrumental, locative or ablative), whereas the abstract structural cases are expressed by the nominative or the accusative (and the genitive DP-internally)'.

[6]This is not a peculiarity of case marking, but typical of the relation between features and morphology, cf. Sigurðsson (2004, p. 229): 'In this respect, deep cases are no different from e.g. tense and aspect features that are plausibly present in LF or narrow syntax in all languages but are overtly expressed (or not) in a widely varying fashion across languages'.

[7]The reverse case is that a single m-case expresses different deep cases, cf. Sigurðsson (2004) discussing morphological dative in Icelandic.

Yet, that does of course not mean that morphological variation is irrelevant or uninteresting for linguistic research. An interesting point here is, for example, a kind of recycling of morphological material, as can be seen in those constructions which use genitive morphology as in (2a). Examples like this, a line of a folk song from Bohemia, have mostly an archaic flair, often occur in special kinds of texts and seldom represent the living language.[8] Where an apparent genitive on the DP-internal possessor is in productive use, as is, for example, the case in Alemannic dialects, it has been reanalyzed as a plural marker occurring only with family names and the like. So (3) can only mean 'the cat of the neighbours' (thanks to one reviewer for pointing this out to me).

(3)	s	Nochbors	ihre	Katz.
	the-GEN	neighbours-GEN	their	cat

This is one possibility of how former genitive morphology was reanalyzed, but there is a second one. (2b) combines a genitive article with a noun case-marked for dative (or probably zero-marked, see n. 4). As (4a) shows, the reverse combination, i.e., the combination of a dative article with a noun with genitive morphology, is also found in Alemannic varieties, though in another type of DPIPPC. This second type, known as prenominal genitive, is very frequent in many colloquial forms of Standard German (cf. 4b), and it differs from the first type of DPIPPC in that it lacks the 'doubling' (or 'doubled') possessive pronoun. In some varieties of Alemannic there seem to have evolved mixed constructions exhibiting features of both types: the prenominal genitive *-s* (which is a very special genitive morpheme, if at all, cf. Demske 2001) and the possessive pronoun. Since both types of DPIPPCs have the same underlying structure, as I will argue in the next section, such combinations are not very surprising.

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[8]There are a few exceptions in Alemannic varieties where genitive seems to have occurred in everyday usage, too, see (i), (ii) — or (2b) in the main text:

(i)	(aus)	nochbers	sim	fenšter.	(Basel German; Schirmunski 1962, p. 435)	
	(out of)	neighbour-GEN	his	window		

(ii) dessi (Walser German; Behaghel 1923, p. 639)
this-GEN+his

Note that such 'hybrid' forms also occurred in the written language until the 19th century (see Behaghel 1923), cf. (iii), and that many of the Middle High German data show an ambiguity in that the morphology the DP-internal possessor is marked with could either be dative or genitive (cf. iv):

(iii)	des	Teufels	sein	Gepäck.	(J.W. von Goethe: Götz von Berlichingen, Act V)	
	the-GEN	devils	his	luggage		
(iv)	[noch	scherpfer	dan]	der	bîn	ir	zagel.	(Parzival 297,12)
	even	sharper	than	the	bee-DAT/GEN	her	sting	

The data in (i), (ii), and (iv) may be evidence that DP-internal possessors in DPIPPCs were initially marked for genitive (as Grimm 1837, pp. 421ff. already assumed).

What is interesting here is that the genitive morphology is presumably no longer genitive, but — in the case of (4a) — a possessive marker and a phrasal clitic which attaches onto the possessor-DP case-marked for dative. So it seems that the original genitive morpheme *-s* has been reanalyzed as possessive marker, because it only occurs in possessive constructions, and in the case of (4a), it has developed from an inflectional to a clitic element — a development which should not be possible under the standard assumptions regarding grammaticalization which involves development from clitics to affixes and not vice versa.[9]

(4)	a.	dụm	tokxters	wägeli.	(Fribourg German; Schirmunski
		the-DAT	doctor-POSS	coach	1962, p. 435)
	b.	Vaters	Auto		
		father's	car		

The development of the s-genitive into a phrasal clitic is known to have happened in English and the Scandinavian languages (see Norde 2001). As we have seen, it did so as well in some Alemannic dialects. Interestingly, the DPIPPC in (4a) is still in use, whereas other mixed constructions such as exemplified in (2b) or others seem to have become extinct by now, as research within the project 'Dialect syntax of Swiss German' has revealed (G. Seiler p.c.).

In (some variants of) Bavarian, there is a third type of DPIPPC which converges with the first one in the dative-marking of the possessor-DP, but differs from it in two respects. First, D^0 can be occupied with an indefinite article (5a). Second, the POSS-relation is marked with a possessive adjective (cf. 5a,b). This construction is very interesting, mainly for two reasons. First, the use of a possessive adjective instead of a possessive pronoun is relevant for the question of case assignment, i.e., which element assigns dative to the possessor-DP under which structural conditions. The second interesting point is the apparent indefiniteness of (5a) which puts it in contrast to the definiteness restriction holding for most phrasal possessive constructions (cf. Alexiadou 2005; Julien 2005b).

(5)	a.	am	Schloßbauern	a	seinige	Tochta.
		the	S.- DAT	a	his	daughter
	b.	der	Matheisin	den	ihrigen.	
		the	M.	the	her	

The fact that the prenominal possessor is marked with dative in (5), though a possessive pronoun is absent, clearly shows that the so-called possessive dative is structural and not lexical. So we may conclude that in DPIPPC

[9]The question of whether grammaticalization is a unidirectional development is by now far from being answered, cf. Norde (2001), Lehmann (2002), Lightfoot (2002), Traugott (2004), or Van Gelderen (2004, pp. 264–270) for different positions.

with a possessive pronoun like (1), dative is not assigned lexically by the possessive pronoun, but is structural, as well. The definiteness restriction which holds for many prenominal possessor constructions does not follow from any semantic requirements (M. Schwager p.c.), so it must be syntactically triggered. Alexiadou (2005, p. 48) assumes that in order for a possessive DP to be definite either SpecDP or D^0 must be filled. The contrast between (5a) and the other DPIPPCs with respect to (in)definiteness shows that it is neither the DP-internal possessor DP as such (as Alexiadou also assumes) nor its raising to SpecDP that makes the DPIPPC definite (nor is it a consequence of the agreement relation between the possessor and some DP-internal functional projection, as Julien 2005b assumes). It is the filling of the D head: if it is filled with an indefinite article, the whole DP is indefinite, otherwise it seems to depend on whether SpecDP is filled with an indefinite or an definite possessor-DP (cf. *noone*/*someone*'*s car* which is indefinite).[10]

To summarize so far: we have found the three types of DPIPPC listed under (B) which show surface variation in some respect. A further difference concerns case-marking of the possessor-DP.

(B) (i) $DP_{Possessor}$+sein+$DP_{Possessum}$
(ii) $DP_{Possessor}$+–s+$DP_{Possessum}$
(iii) $DP_{Possessor}$+Det+seinig+$DP_{Possessum}$

Koptjevskaja-Tamm (2003, p. 621) assumes that possessive noun phrases or PNPs, as she calls them, may consist of three constituents. They will necessarily include nominals referring to a possessor (D, 'dependent') and a possessee (H, 'head'). In addition, a PNP may involve construction markers, CMs — overt elements which show explicitly that D and H are related in a specific way (some languages additionally use a possessive affix on the possessee). CMs are lexemes like '*s* and *of* in English, or the genitive (e.g., in German). In contrast to that, I assume that lexemes like *s* and *of* in English, or *s* and *von* in German

[10] Thanks to one reviewer for pointing out these data to me. The examples in (5) are taken from novels of Ludwig Thoma. Future research (cf. Schwager and Weiß in progress) has to show in which sense (5a) is indefinite or whether it is indefinite at all.

Another issue which I cannot discuss at length here is the comparison of the Bavarian indefinite possessive construction with the 'spurious' indefinite article occurring in Dutch examples like (i) *wat voor een jongens* 'what for a boys' (cf. Bennis et al. 1998) or (ii) *Piet-en boek* 'Piet-a book' (cf. Corver 2003) (thanks to one reviewer for pointing out this issue to me). The indefinite article functions here as a 'linker' in DP-internal small clause configurations, as the combination of a singular indefinite article and a plural noun in (i) shows (likewise, the indefinite article in (ii) serves to link the possessor with the possessum). As for Bavarian, the data available at the moment do not allow an analysis of the indefinite article in (5a) as spurious because it does not combine with plural possessees, but would be omitted according to my informant (*am Schloßbauern seinige Töchta* 'the S. his daughters'). Additionally in Bavarian 'what-for' constructions, the indefinite article seems not to show any sign of spuriousness either (that is (i) would be ungrammatical in Bavarian).

are no CMs, but bear the POSS-feature (see the next section for a structural explanation of this assumption), whereas the genitive is a CM, insofar as it bears a relational feature (in the sense of Eisenbeiss 2002), indicating the dependence of one DP from another one.

3. DPIPC: THE STRUCTURE

As we have seen earlier, there is some microvariation at PF, that is at the morphological level. However, w.r.t. underlying syntactic structure, there is, I think, no such variation. Neglecting the third kind of DPIPPC (which would afford a separate treatment, yielding presumably a different structure), I assume that the possessive syntax of German dialects comprises the three major surface manifestations given under (6), that is in addition to what we have considered so far, a further construction with a postnominal possessor introduced by the preposition *von* 'of' (cf. 6a).[11]

(6) a. der Film von Lola.
the film of Lola

b. Lolas Film
Lola's film

c. der Lola ihr Film.
the Lola-DAT her film

The structures (i)–(iii) later show that these three constructions can be reduced to a single uniform syntactic structure. I adopt the structure developed by Uriagereka (2002) based on previous work by Szabolsci (1983), Freeze (1992), and Kayne (1993).[12] Possession is conceived of semantically as a thematic relationship between two linguistic expressions. This possessive relation is syntactically encoded by a small clause phrase structure where the two linguistic expressions get the thematic roles POSSESSOR and POSSESSUM, respectively. The SC is embedded under an AgrP which is also responsible for reference ('as the lexicalization of an event variable', Uriagereka 2002, p. 201): Whatever moves to (or through) its Spec position is assigned a referential feature. In the case of the DPIPPCs it is always the POSSESSUM-DP that raises to SpecAgr and

[11] Since the morphological genitive only exists in the written standard in German (cf. Weiß 2004a), I am completely neglecting constructions like (i) in what follows. I assume that the morphological genitive is of a completely different kind (compared to the prenominal genitive) whose analysis would afford another structure.

(i) das Haus des Vaters
the house the father-GEN

[12] For other proposals see, among many others, Larson and Cho (2003), Corver (2003), Haegeman (2003a, b, 2004a, b), Alexiadou (2004), Julien (2005a).

determines reference, because DPIPPCs as a whole refer to what is possessed (and never to the possessor).[13] Note that in the SC structure adopted here (and in contrast to the one assumed by Bennis et al. 1998; Corver 2003; Den Dikken 1995), both terms of the SC are equidistant from SpecAgr (since they belong to the same minimal domain), so there arises no violation of the minimal link condition, when the possessum-DP 'crosses' the possessor-DP.

The SC structure involves a special kind of semantics: the SC instantiates a predication relationship between two terms of which the possessor is the subject and the possessum the predicate (Uriagereka 2002). Larson and Cho (2003), for instance, propose the standard locative interpretation[14] of possessive constructions. In their approach, the possessor is the complement of an abstract locative preposition TO, hence the object, and the possessum the specifier of the PP, hence the subject. Subject and object are related to each other through the locative preposition TO, which relates a theme to a location. Den Dikken (1995) and Corver (2003), though adopting a (kind of) SC structure, assume the same predication relationship where the possessor (plus a dative preposition) is the predicate and the possessum the subject.[15]

The SC structure adopted here differs from both the prepositional approach à la Larson and Cho and the SC analysis of Den Dikken and Corver, in that it assumes the reverse predication relationship between possessor (subject) and possessum (predicate) which underlies an integral interpretation of the possessive relation in the sense of Uriagereka (2002). The integral interpretation means that the possessor 'is (partly) constituted of' (Uriagereka 2002, p. 179) the possessum in a broad sense, and though it is thought to capture inalienable possession, part whole relations and the like in the first place, it comprises standard possessive relations like that of *John* and *house* in *John's house*, as well (see Uriagereka 2002, pp. 193, 210f.).

Returning to syntactic issues, Agr^0 can be lexicalized as a function word which is in the case of German dialects always a form of the preposition *von* 'of' (see the tree in (i) in p. 388).

But if there is no lexical materialization of the abstract preposition, Agr^0 raises and incorporates to the D head, resulting in the respective spell-out forms *-s* or *sein*, as can be seen in (ii) and (iii) (p. 388f.). In this case, the possessor-DP raises to SpecDP, presumably in order to get case marked. As mentioned in the Section 2, there is empirical evidence to assume that SpecDP is the position where the possessor-DP gets structurally case-marked.

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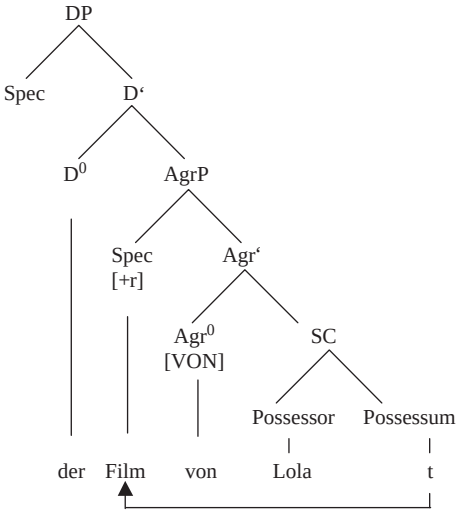
[13]However, it could be the possessor-DP as well which gets assigned the referential feature (as is the case, for instance, in the sentence *John has a sister*, cf. Uriagereka 2002).

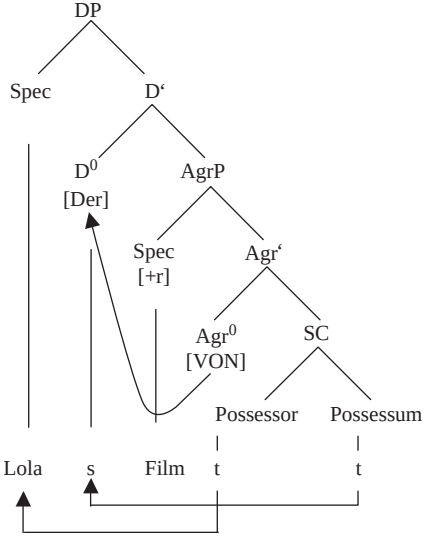
[14]The locative analysis of possessive constructions was originally proposed by scholars like Benveniste or Lyons, and extensively worked out on a broad comparative basis by Freeze (1992).

[15]Another question is, however, whether one assumes a dative preposition like TO or OF as representing (or spelling out) the basic locative relationship or an accusative one like WITH (cf. Levinson 2004 for arguments that languages may differ in this respect).

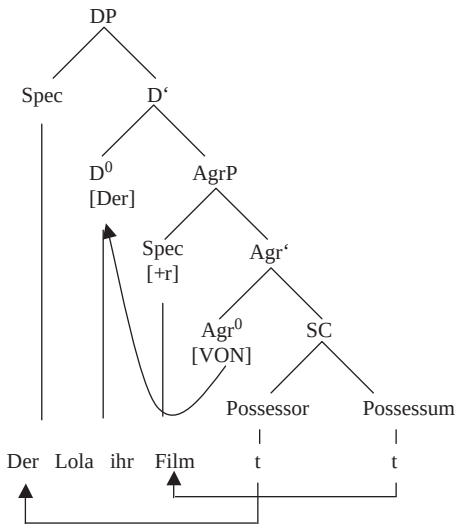
(i)


DP
Spec
D‘
D0
AgrP
Spec
[+r]
Agr‘
Agr0
[VON]
SC
Possessor
Possessum
der
Film
von
Lola
t

(ii) [DER] + [VON] = s


DP
Spec
D‘
D0
[Der]
AgrP
Spec
[+r]
Agr‘
Agr0
[VON]
SC
Possessor
Possessum
Lola
s
Film
t
t

(iii) [DER] + [VON] = sein/ihr



Haegeman (2004a) developed a somewhat similar DP-structure containing an IP (instead of an SC) with a clitic possessive pronoun spelling out the I head and subsequently raising to D^0. The possessor DP originates in SpecIP and then moves to SpecDP.[16] Haegeman's structure coincides with mine in that it also involves the serialisation possessor DP before possessum DP — in contrast to the PP analysis developed in Larson and Cho (2003). One major difference is, among others, that in the structure proposed here, the possessum DP always moves (to SpecAgrP), whereas in Haegeman's (2004a) structure it never does. As a consequence, there is no possibility to analyse (6a) — the construction with a postnominal possessor introduced by a preposition — with Haegeman's structure in contrast to the SC structure proposed here.

Since my primary goal here is to explore the 'function' of syntactic doubling in dialects (see Section 4), I cannot go into all details and remaining problems of the structure and derivations assumed in (i)–(iii), but it should have become clear that the SC structure analysis can account for all three types of DPIPCs in (6a–c) in a uniform way.[17] If this is on the right track, then we may conclude

[16]This is the structure proposed in Haegeman (2004a, p. 236). A slightly different structure is assumed in Haegeman (2004b, p. 707) with a possessive *pro* in SpecIP licensed by the phi-features of the prenominal possessor in SpecDP.

[17]Further interesting issues concern DP-internal ellipsis, where either the possessor as in (i) or the possessum as in (ii) and (iii) are absent. Cf. Haegeman (2004a, p. 236) who argues for a (kind of) *pro*-drop analysis of cases like (i) and Weiß (1998, pp. 83f.) giving evidence from Bavarian that the possessive pronoun in (ii) is adjectival (cf. also Ihsane 2003 for possessive adjectives).

(i) sein Haus
his house

[See page 392 for footnote 17 cont.]

that there is no variation with respect to the underlying syntactic structure. The observable variation is restricted to PF or morphology, but does not reflect any deeper syntactic differences.

4. THE FUNCTION OF DOUBLE MARKING

I will now turn to the crucial question of the function of possessive double marking. As mentioned at the beginning of the chapter, doubling phenomena like the one occurring in DPIPPCs have been understood as intentionally motivated. Doubling has been taken as reflecting the intention of speakers to increase clearness and/or emphasis, that is, it has been assigned a communicative function. Seen in this way, doubling is or should be a superfluous and redundant operation, which is not grammatically or syntactically forced. Yet surprisingly, it seems that many doubling phenomena are obligatory — which can be taken as evidence for a grammatical or syntactic motivation.

When we look at the DPIPPCs, in (7a), for example, it seems as if the possessor is referred to twice: by the posssessor-DP and by the possessive pronoun. The common assumption (cf. Zifonun 2003) is that this double reference taking is redundant, and furthermore, it even appears not to be necessary, as evidenced by the ungrammaticality of DPIPPCs in the first and second person (cf. 7b,c).[18] So it seems that (7a) shows the typical features attributed to dialect syntax: redundancy, idiosyncrasy, non-systematicity, and so on.

(7)	a.	EAM	sei	Haus.
		him	his	house
	b.	*mir	mei	Haus.
		me	my	house
	c.	*dir	dei	Haus.
		you	your	house

Yet my explanation will reveal a perfectly syntactic functionality of DPIPPCs: the double marking exists only on the superficial level, but there is no semantic redundancy (or more precisely, no redundancy with respect to referentiality), because the possessive pronoun does not refer to the possessor, but only marks the possessive relation. This conclusion follows from the structural analysis of

(ii)	dem	Hans	das	seine
	the	John	the	his
(iii)	dem	Hans	seines	
	the	John	his	

[18]Zifonun (2003, p. 107): 'Der Zugriff auf den Possessor erfolgt also ohne semantische Not doppelt'.

DPIPCs developed in Section 3, where we saw that the possessive pronoun results from the incorporation of the agreement head into the D head, whereas the possessor is merged within the SC. Besides this theory-internal reasoning, however, there is also independent empirical evidence for this conclusion.

A first piece of evidence comes from the earlier mentioned mysterious restriction to the third person, shown by the data contrast in (7).[19] As the data in (8) reveal, it is the person feature of the possessive pronoun which is relevant for grammaticality: (8a) shows that first and second person pronouns do appear as prenominal possessors, e.g., in Berlin German, as long as they combine with a third person possessive pronoun.[20] The same holds for the honorific pronoun *Ihnen* which is a deictic item referring to the addressee, see (8b). It is also possible that a third person pronoun occurs as a prenominal possessor, but then it must be stressed as in (8c), that is only if it is used deictically.

(8)	a.	meiner/ mine mine/yours	deiner yours	seiner his	(Berlin German; Schiepek, 1899/1908, p. 221)
	b.	Ihnen your	ihr their	Haus house	
	c.	EAM him	sei his	Haus house	

The data in (7) and (8) demonstrate two things: (i) the prenominal possessor must be a referring expression whose person feature is irrelevant[21] and (ii) the possessive pronoun must be in the third person. Thus, the restriction to the third person only holds for the possessive pronoun, but not for the prenominal possessor.

The fact that third person pronouns systematically combine with antecedent expressions is also shown by the expressions in (9) which do not involve possessive constructions. The compound adverb *seinetwegen* 'for his sake' is formed by the preposition *wegen* and the (fossilized) genitive of the personal pronoun *seinet*. This adverb also combines with demonstrative or honorific pronouns, cf. (9a,b):

(9)	a.	dem this For his sake.	seinetwegen. for-his-sake	(Thuringian; Schiepek 1899/1908, p. 221)

[19]Zifonun (2003, p. 101): 'Die Frage, warum es kein Dat+Poss der ersten beiden Personen gibt, bleibt rätselhaft'.

[20]Norwegian also allows for first/second personal pronouns as prenominal possessors, though in combination with possessive reflexive pronouns, cf. Julien (2005a, pp. 216f.).

[21]As far as German DPIPPCs are concerned, there is clearly no agreement in the person feature between possessor and possessive pronoun (cf. 8a) — agreement is restricted to number and (nowadays) gender. According to Haegeman (2004b, p. 705), in West Flemish pronoun and possessor agree in person, gender, and number.

b. Ihnen ihretwegen. (Vogtlandish; Schiepek 1899/1908, p. 221)
you for-your-sake
For your sake.

As I have argued previously (Weiß 1998), this state of affairs can be explained in a very simple and elegant way, if we assume that third person pronouns differ in syntactic category from first and second person pronouns.[22] Third person pronouns — be they personal or possessive pronouns — are anaphora in the original sense: they do not refer on their own force, but need to enter in an anaphoric relation with an antecedent to receive a referential interpretation. This even holds for pronouns of laziness and E-type pronouns which are taken to be referential (Ehrich 1992, p. 32; von Heusinger 1996, p. 26): In (10a) the pronoun of laziness *he* enters in an anaphoric relation with its antecedent *Smith*, and in (10b) the E-type pronoun *it* with the indefinite NP *a cat*. In both cases, the reference of the pronoun is established via co-reference with the antecedent. In other words, both pronouns do not refer on their own. Though they are not c-commanded by their antecedents, they are bound by them in an intuitive way.[23] Interestingly, the possessive pronoun in DPIPPCs could even be said to behave like an anaphor in the sense of the Binding Theory, since the DP-internal possessor, an R-expression, c-commands and binds it, cf. (10c).

(10) a. *Smith* broke the bank at Monte Carlo, and *he* has recently died a pauper.

b. Mary has a *cat* and Peter feeds *it*

c. am Hans_i sei_i Haus.
the John his house

It is obvious that in (10c) the DP-internal possessor and not the possessive pronoun determines reference. With respect to referentiality, we can thus conclude that there is no redundancy in DPIPPCs at all.

First and second person pronouns, in contrast, are referential on their own: as deictic elements they refer to speaker or hearer, respectively in any utterance they occur in. Semanticists treat them as indexicals, that is as items which are referentially variable, but 'the individual they refer to plays a constant role in the speech situation' (Larson and Segal 1995, p. 215). This is the

[22]That is not to say that they cannot be used in similar ways. As mentioned in the main text, third person pronouns can be used referentially, if stressed. Cf. Rullmann (2004) for data showing first and second person pronouns used as bound variables.

[23]How this anaphoric relation between antecedent and pronoun is established, does not matter in our context (see Larson and Segal 1995, ch. 10 on anaphora in general). The crucial point is that there is an antecedent expression and whoever the antecedent refers to, the pronoun does as well, or, in the case of quantificational antecedents, that the reference of the pronoun is determined by the set of individuals the quantifier quantifies over.

main difference to third person pronouns: there is no need for another expression to establish reference via co-reference. They are thus comparable with R-expressions. This explains why, on the one side, first and second person possessive pronouns are allowed to occur as prenominal possessors (cf. 8a), but, on the other side, do not permit an additional DP-internal possessor, when occurring in D^0 (cf. 7b,c), since this would cause a violation of principle C of the Binding Theory (if they count as R-expressions).[24] The restriction of DPIPPCs to third person possessive pronouns in Germanic languages is obviously based on this categorical difference between third and first/second person pronouns, and it is by no means mysterious.[25]

Since third person possessive pronouns are used like anaphors according to the binding theory, it should come as no surprise that there are varieties where a reflexive pronoun can be used alternatively to or even instead of a possessive pronoun. The first possibility can be observed in Western Jutish, a Danish dialect, cf. (11a), the second in Norwegian (where this construction is known as garpe-genitive, cf. Koptjevskaja-Tamm 2003, p. 669), cf. (11b).

(11) a. æ mand sin/ hans hat. (Western Jutish)
the man REFL POSS hat

b. Maria sit hus. (Norwegian)
Maria REFL house

The conclusion we can draw is thus that DPIPPCs do not really show double marking of the possessor, as is commonly assumed, because the DP-internal possessor and the possessive pronoun have different functions. The possessive pronoun marks the possessive relation, but does not refer to the possessor — it is the prenominal DP which refers to the possessor.

In the analysis proposed here, possessive pronouns occurring in DPIPPCs are (like) reflexive pronouns, hence [+anaphoric]. This seems to be in an interesting contrast with Haegeman's (2004b) analysis of data from West Flemish (WF), Norwegian, and Afrikaans. In WF possessive pronouns, in contrast to the bound morpheme *se*(*n*) (which is diachronically related to the possessive pronoun, cf. Haegeman 2003a, p. 221), are incompatible with a prenominal reciprocal possessor, cf. (12a vs. b). Prenominal reciprocal possessors are also

[24]As for possessive pronouns of the first and second person, I assume that they are a spell-out of D+Agr, as well. In this respect, they do not differ from third person possessive pronouns. The main reason why I think they are occupying D° rather than Spec DP is their complementary distribution with determiners (see also Haegeman 2004b, p. 707).

[25]This restriction does not seem to hold for all languages. There are languages like Hittite (cf. Lühr 2002) with DPIPPCs where the prenominal possessor and a (enclitic) possessive adjective can appear in the first or second person. G. Kaiser (p.c.) has brought to my attention that French possesses a similar possessive construction without said restriction, cf. *ma*/*ta voiture à moi*/*toi*. In these cases it seems that first/second person pronouns are used anaphorically.

possible in the Norwegian garpe-genitive (12c) and in Afrikaans (12d) (Haegeman 2004b; her examples 6b,c, 13b, 15b):

(12) a. *Z'een mekoar under/ zen/ eur gasten gezien.
they-have each-other their his her guests seen

b. Z'een mekoar-se gasten gezien.
they-have each-other-*se* guests seen

c. kvarandre sin bil
each-other his car

d. ons moet nie mekaar se werk doen nie
we should not each-other's work do not

Since, as mentioned earlier, the possessive in the Norwegian garpe-genitive is reflexive, it looks as if the syntactic category of the possessive pronoun is crucial. An anaphoric possessive pronoun allows for prenominal reciprocal possessors, whereas a pronominal one does not. If third person possessive pronouns are indeed reflexive, as argued for earlier, they should be compatible with prenominal reciprocal possessors. However, as evidenced in (12a), they are not compatible with reciprocals.[26]

At first sight, these findings contradict the analysis proposed above. Yet, this is only apparently so, because there is an additional issue coming into play (Haegeman 2004b, p. 708). As the grammaticality of (12d) shows, a non-reflexive possessive marker — in (12d) Afrikaans *se* — allows for a prenominal reciprocal possessor, if there is no agreement between the possessive pronoun and the possessor. This is the case with Afrikaans *se*, since it is compatible with singular and plural possessors (Haegeman 2004b, pp. 708f.).[27]

If we now consider the Norwegian garpe-genitive (cf. 12c) once again, we can see that the possessive reflexive pronoun does not agree with the prenominal possessor, neither in gender (13a) nor in number (cf. 13b) nor in person

[26]Haegeman (2004b), assuming the anaphor agreement effect as developed by Rizzi (1990) and Woolford (1999), explains this incompatibility with a clash of binding requirements. The prenominal possessor in SpecDP forms a possessor chain with the possessive *pro* in SpecIP, and, in case of a reciprocal, a [+anaphoric] element as prenominal possessor, this leads to the said clash, since the reciprocal and *pro*, a [+pronominal] element, are subject to different binding principles, namely principle A and B, respectively.

[27]In contrast with Afrikaans *se*, WF *se(n)* imposes a number restriction on prenominal possessors in that the DP-internal possessor must be [+singular]. In order to account for its compatibility with reciprocal possessors, Haegeman (2004b, p. 709) is forced to assume that the agreement relation between *se(n)* and the pronominal possessor is anaphoric. However, it is not clear to me what prevents the agreement relation between the possessive pronoun and the prenominal possessor in (12a) to be anaphoric as well, since it also could be 'stated in terms of a matching requirement' (Haegeman 2004b, p. 709), and, hence, (12a) to be grammatical.

(cf. 13c) (13a–c are taken from Julien 2005a, pp. 214ff.; her examples 6.33, 6.36c, 6.38a):

(13) a. jent-a si-n katt.
girl-DEF.F.SG REFL.POSS-M.SG cat-M

b. Jan si-ne barn.
Jan REFL.POSS-PL children

c. mi-n si-n katt.
my-M.SG REFL.POSS-M.SG cat-M

So it could well be the case that the grammaticality of (12c) is due to the lack of agreement and has nothing to do with the reflexive pronoun as such. Therefore, the incompatibility of possessive pronouns with prenominal reciprocals results from the fact that there is an agreement relation between possessive pronoun and DP-internal possessor, whereas the [+/−anaphoric] nature of the possessive pronoun is irrelevant.[28]

5. SOME PRELIMINARY CONCLUSIONS

DPIPPCs exhibit a kind of double marking which is restricted to the surface, whereas there is no doubling in narrow syntax proper. The traditional analysis of DPIPPCs as possessor doubling is based on the assumption that possessive pronouns are all of the same syntactic category 'pronoun'. This, however, is not the case, as we have seen. Furthermore, the traditional analysis seems to involve a sort of categorial confusion in that it appears to rest on a rather naive understanding of the relation between surface structure and meaning. Only a 'translation' of DPIPPCs into meaning lexeme by lexeme, without taking into account the structure the lexemes occur in, and their function within it, yields a 'superfluous' or 'pleonastic' element. In this respect the traditional view of DPIPPCs resembles the assumption that certain adjectives like the ones in (14a,b) should not be used with a superlative form. But they do occur in this way, as (14c) demonstrates, because gradation as a grammatical process is only concerned with syntactic category and not meaning.

[28]According to Rizzi's (1990, p. 26) version of the anaphor agreement effect, it is not possible that anaphors occur in syntactic positions which are construed with agreement. Theoretically, it should thus be possible that [+anaphoric] possessive pronouns in combination with a [+anaphoric] possessor can trigger an anaphora agreement effect, as long as pronoun and possessor agree with each other. If this is on the right track, the data given by Haegeman (2004b) and her analysis of them as another instantiation of Rizzi's (1990) anaphor agreement effect do not conflict with the analysis of third person possessive pronouns as [+anaphoric] expressions.

As far as I can see, my interpretation of Haegeman's analysis can account for all data with the only exception of the WF *se*(*n*)-construction, if it really agrees with the possessor (cf. n. 27).

(14) a. kein-st
no-SUPERLATIVE

b. einzig-st
single-SUPERLATIVE

c. in keinster Weise (Jogi Löw)
in no-SUPERLATIVE way

In a more serious respect, DPIPPCs resemble negative concord constructions like (15) where we, too, have two items morphologically marked for the same feature (in this case, the NEG-feature). Both constructions are ascribed the same property and the same purpose: they are redundant, because they contain semantically superfluous material which only serves to add emphasis to the utterance.

(15) I han koa Geid ned. (Bavarian)
I have no money not

However, as syntactic research has revealed (among which my own, cf. Weiß 1998, 1999, 2002), the doubling of the NEG-feature has no 'emphatic' purpose, but is purely driven by requirements of narrow syntax, that is for checking reasons. Furthermore, it is reasonable to assume that the doubling NEG-feature is that on the negative indefinite and not the one introduced by the negative particle — contrary to what is traditionally assumed.

DPIPPCs and NC-constructions are thus two examples showing that syntactic research within a formalist framework could reveal that the function of apparent or real doubling constructions is completely different from what is commonly assumed in a traditional functionalist perspective.

Furthermore, the explanation given here for DPIPPCs can contribute to our understanding of the structural and functional architecture of human language, since it shows, if correct, that there is much less redundancy on these levels than commonly assumed.[29] That is a first conclusion we can draw.

But there is another important lesson we can learn from formalist syntactic research: there are (at least three) different kinds of doubling. Unlike the phenomena discussed by Poletto (this volume), DPIPPCs and NC constructions do not involve two elements sharing a single syntactic function with one of the elements being a head and the other an XP. And differently to the wh-movement constructions with wh-doubling, investigated by Alber (this volume), DPIPPCs and NC constructions do not involve the repetition of a semantically superfluous element either. So what appear to be instances of the same type at the surface can be shown to be completely different, if investigated more deeply.

[29]This does not mean that languages exhibit no redundancy at all, or that they do not allow for optionality (cf. Weiß 2004b for a discussion of optionality with respect to scrambling).

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14

PREPOSITION REDUPLICATION IN ICELANDIC

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ABSTRACT

This chapter discusses the basic properties of preposition reduplication (P-reduplication) in Icelandic with some comparative data from the other Germanic languages. Under Nunes' (2001, 2004) theory of the linearization of chain links, it can be argued that P-reduplication involves three steps: (i) movement of a preposition to a functional head position within an extended PP, (ii) reanalysis of the moved preposition, and (iii) the creation of a higher copy of the preposition, either through fronting of the remnant PP (wh-movement or topicalization in Modern Icelandic) or leftward movement of the preposition (Old Icelandic). Whichever option is involved in step (iii), the highest copy of the preposition and the reanalyzed copy are overtly realized. The proposed analysis also accounts for the fact that a grammar allowing P-reduplication (with wh-movement or topicalization) also allows preposition stranding but not vice versa.

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1. INTRODUCTION

Like all the other Scandinavian languages, Icelandic allows preposition stranding (P-stranding) under A-bar-movement, e.g., wh-movement and topicalization (Maling and Zaenen 1985). P-stranding in Icelandic is more or less restricted to examples where the PP is a complement of a verb, adjective, or a noun, much as in other languages where P-stranding is possible.

In most cases where P-stranding is possible in Icelandic (1a), Pied Piping of the whole PP is also perfectly acceptable (1b).[1]

(1) a. Hvað eruð þið að tala um?
what are you to talk about

b. Um hvað eruð þið að tala?
about what are you to talk
What are you (pl.) talking about?

In this respect, Icelandic contrasts sharply with English where Pied Piping is rarely a good alternative to P-stranding. Thus, (2a) below with Pied Piping is highly marginal but (2b) with P-stranding is fine:

(2) a. ??About what are you talking?

b. What are you talking about?

Another, and probably related, difference between Icelandic and English is that P-stranding under A-bar-movement is less constrained in English than in Icelandic but this need not concern us here.[2]

Icelandic allows Pied Piping and P-stranding to occur simultaneously so to speak, a phenomenon that I will refer to as preposition reduplication (P-reduplication). An example of P-reduplication is given in (3).

(3) Um hvað eruð þið að tala um?
about what are you to talk about
What are you (pl.) talking about?

There is no semantic or pragmatic import associated with P-reduplication. It is simply a formal variant that is possible alongside Pied Piping and P-stranding. Hence, P-reduplication looks like a good example of a purely syntactic phenomenon.

To the best of my knowledge, P-reduplication in Icelandic has never been discussed in the linguistic literature before although Icelandic linguists have known

[1]As discussed in Section 2, there are cases where P-stranding is strongly preferred to Pied Piping in Icelandic.

[2]This contrast can be seen in examples like (12) in Section 2.

about it for some time. P-reduplication is not restricted to Icelandic, however. It is also found in other languages that have P-stranding, e.g., Norwegian, Swedish, and English.[3] The following example of P-reduplication is from Swedish (Delsing 2003):

(4) Med honom vill jag inte ha någonting att göra med.
with him want I not have anything to do with
I don't want to have anything to do with him.

As discussed by Riley and Parker (1986), P-reduplication is found in relative clauses in English containing the relative pronoun *which*. This is exemplified in (5) and (6) below.[4]

(5) a. These are special rates for which the working American is paying.
b. These are special rates which the working American is paying for.
c. These are special rates for which the working American is paying for.

(6) a. The world in which we live can be a frightening place.
b. The world which we live in can be a frightening place.
c. The world in which we live in can be a frightening place.

These examples contrast with the English examples in (2) in that P-stranding and Pied Piping have a roughly equal status here; the main difference is that Pied Piping is slightly more formal than P-stranding.

In this chapter, I will discuss the basic properties of P-reduplication in Modern Icelandic (Section 2) and show how they can be accounted for under Nunes' (2001, 2004) theory of the linearization of chain links (Section 3), assuming that prepositions can be reanalyzed after movement to a functional head position within the extended PP. Further data from Old Icelandic supporting the proposed analysis are presented in Section 4. The chapter ends with a brief summary.

2. THE BASIC FACTS

First of all, note that P-reduplication is not accepted by all speakers of Icelandic and the same is true for Swedish and Norwegian. Still, it is quite clear that P-reduplication is part of the grammatical competence of many speakers, not a mere performance error. Thus, 54.2% of the participants in a recent

[3]As is well known, P-stranding is largely confined to the Germanic languages. Hence, it is unlikely that P-reduplication is found in a number of languages.

[4]The examples in (5) are from Riley and Parker (1986) but the examples in (6) are based on examples that I have found on the Internet.

survey of syntactic variation in Icelandic accepted the following example of P-reduplication:[5]

(7) Ég man ekki lengur með hvaða félagi hann spilar með.
I remember not anymore with which club he plays with
I can't remember anymore which club he plays for.

This written survey included 703 native speakers across the country and in four different age groups. The results show a very clear pattern in that younger speakers are more likely to accept P-reduplication than older speakers. However, further studies are needed to determine if this reflects a real change in progress or a difference between age groups in that older speakers are more likely to reject substandard variants.

Second, P-reduplication is not restricted to examples with wh-movement in matrix clauses or embedded questions as in (3) or (7) earlier. It is also found with topicalization (8).

(8) a. Á þessu hefur Jón lítinn skilning.
of this has John little understanding

b. Þessu hefur Jón lítinn skilning á.
this has John little understanding of

c. Á þessu hefur Jón lítinn skilning á.
of this has John little understanding of
John has little understanding of this.

However, Pied Piping is excluded in relative clauses in Icelandic (Thráinsson 1980) and so is P-reduplication, as shown in (9b) and (9c). The reason is simply that the relative marker *sem* in Icelandic is a complementizer and therefore cannot be the object of a preposition. Thus, the offending preposition in (9c) is the first one.

(9) a. Þetta er maður sem ég þarf að tala við.
this is man that I must to talk to

b. *Þetta er maður við sem ég þarf að tala.
this is man to that I must to talk

c. *Þetta er maður við sem ég þarf að tala við.
this is man to that I must to talk to
This is a man that I must talk to.

[5]This survey was conducted in the spring of 2007 and it is part of a larger project on syntactic variation in Icelandic.

Third, it is only prepositions that can be reduplicated. As illustrated in (10) below, movement of a PP in Icelandic licenses neither reduplication of the PP nor the DP complement.

(10) a. *Um hvað eruð þið að tala um hvað?
about what are you to talk about what

b. *Um hvað eruð þið að tala hvað?
about what are you to talk what
What are you (pl.) talking about?

Fourth, P-reduplication is only possible when P-stranding is also possible. In other words, P-reduplication is ruled out when Pied Piping is obligatory in Icelandic, e.g., when the PP is not a complement:

(11) a. Með hvaða rökum var þessu hafnað?
with what arguments was this rejected

b. *Hvaða rökum var þessu hafnað með?
what arguments was this rejected with

c. *Með hvaða rökum var þessu hafnað með?
with what arguments was this rejected with
On what grounds was this rejected?

(12) a. Handa hverjum er þessi bók?
for whom is this book

b. *Hverjum er þessi bók handa?
who is this book for

c. *Handa hverjum er þessi bók handa?
for whom is this book for
Who is this book for?

There are cases where P-stranding is possible in Icelandic but Pied Piping is excluded or at least highly marginal, e.g., when the preposition is part of a bigger idiomatic phrase such as *komast upp með* 'get away with'.[6] In examples of this kind, P-reduplication is marginal but still better than Pied Piping:

(13) a. Hvað hefur hann komist upp með?
what has he gotten away with

b. *Með hvað hefur hann komist upp?
with what has he gotten away

[6]Other phrases of this kind are e.g. *hafa þörf fyrir* 'have a need for', *líta niður á* 'despise', *taka við af* 'replace' and *eiga auðvelt með* 'find easy'.

c. ??Með hvað hefur hann komist upp með?
with what has he gotten away with
What has he gotten away with?

Presumably, the problem with (13b) is that an idiomatic phrase has been broken up by movement of the PP. Thus, it is not surprising that P-reduplication is somewhat better than Pied Piping in these cases.

Something similar can also be seen in Faroese. This is shown by the results of a recent survey of syntactic variation that included 243 participants in six localities in the Faroes and four age groups. In this survey, the participants were asked to evaluate a number of written examples, including the following sentences with Pied Piping, P-stranding, and P-reduplication (the percentages in brackets show how many speakers accepted each example):[7]

(14) a. Um tað orki eg slett ikki at hugsa. (22.7%)
about that bother I quite not to think
I have no energy to think about it.

b. Tað dugi eg slett ikki at meta um. (88.4%)
that can I quite not to evaluate about
I cannot possibly be the judge of that.

c. Um tað dugi eg slett ikki at spáa um. (41.1%)
about that can I quite not to predict about
I cannot possibly make predictions about it.

There is a very striking contrast here in that P-stranding (14b) is accepted by four times as many speakers as Pied Piping (14a) is. Moreover, the contrast in the acceptability rate for (14a) vs. (14c) shows that P-reduplication in Faroese is possible for many speakers in cases where Pied Piping is excluded.

As we have already discussed, P-reduplication is dependent on the availability of P-stranding. This is also reflected in the historical development of P-reduplication. Thus, examples of P-reduplication started to appear at about the same time as P-stranding became possible in interrogatives in Middle English (Bergh 1998; Bergh and Seppänen 2000). Interestingly, P-reduplication in Middle or Early Modern English is not restricted to informal texts. It is even found in Shakespeare as shown by the following examples (from Radford 2004, p. 192):

(15) a. In what enormity is Marcus poor in? (Menenius, Coriolanus, II.i)

b. … that fair for which love groan'd for. (Prol. to Act II, Romeo and Juliet)

[7]The survey was carried out by Victoria Absalonsen and Helena á Løgmansbø. I am grateful to them as well as the other Faroese linguists at Fróðskaparsetur Føroyja for assistance. This survey is part of a research project on Faroese that I have worked on in collaboration with Höskuldur Thráinsson and Þórhallur Eyþórsson.

The historical relation between P-reduplication and P-stranding can also be seen in Swedish. According to Delsing (2003), the earliest examples of P-stranding in constructions involving fronting of a nominal complement in Swedish date from the middle of the 15th century. Examples of P-reduplication in Swedish start to appear at about the same time:

(16) a. til thæn førsta skæl swarom wi swa til
to the first argument answer we so to

b. j hwilkom helghe domane liggia j
in which sacred things.the lie in

Old Icelandic was like Old Swedish in not having P-stranding in examples with overt A-bar-movement. Hence, P-reduplication of the kind we have been discussing is not attested in Old Icelandic.[8] The oldest example of P-reduplication in Icelandic that I am aware of comes from the first translation of the New Testament in 1540 (see Helgason 1929, p. 160):

(17) … á hverja grein allar mannlegar skynsemdir...
on which branch all human reasons
hafa sig á rekið.
have self on stumbled
… which branch all human intelligence has been hit by.
(Nýja testamenti, p. 348)

The oldest example of P-stranding that I know of is also from that work and this example involves the complex preposition *í mót* 'against':

(18) … hverjum þér örugglega í mót standið í trúnni.
whom you surely against stand in religion
… whom you surely oppose in your religion. (Nýja testamenti, p. 509)

Icelandic seems to be like English and Swedish in that the first examples of P-reduplication and P-stranding with A-bar-movement appear at the same time. Nevertheless, it is clear that the historical development of these phenomena in Icelandic requires further study.

[8]However, as discussed in Section 4, Old Icelandic did have P-reduplication with leftward movement of prepositions.

3. P-REDUPLICATION AND THE COPY THEORY OF MOVEMENT

The most obvious analysis of P-reduplication is to invoke the copy theory of movement and assume that the lower preposition is simply a phonetic realization of a copy created by movement of the whole PP. This is shown in (19).

(19) $[_{PP_i}\ P_i\ [DP]]\ \ldots\ [\ _{PP_i}\ P_i\ [DP]]$

The problem with this proposal is that it lacks any independent motivation since there is no principled reason why the lower copy of the preposition can be phonetically realized in this structural configuration but not, e.g., the lower copy of the DP. As I will argue in Section 3.2, the copy theory of movement can indeed explain the basic properties of P-reduplication, provided we assume that the lower preposition is in a derived position as a result of an intermediate movement to a functional head position within the extended PP.

3.1. Nunes (2001, 2004)

In this section, I will propose an analysis of P-reduplication based on the theory of Nunes (2001, 2004). The main points of this theory are briefly summarized below:

(I) The phonetic realization of chains is subject to Kayne's (1994) Linear Correspondence Axiom (LCA).

(II) In most cases, multiple chain links cannot be phonetically realized due to linearization requirements. Thus, syntactic items intervening between two phonetically realized chain links must both precede and follow the same element (i.e., the two links), resulting in a contradiction. Structures with two phonetically realized chain links also violate the irreflexivity condition on linear order (i.e., if A precedes B, then $A \neq B$).

(III) Lower copies of chains are usually deleted because they have checked fewer features than the highest copy. Hence, it is more economical to delete them. Economy principles also rule out deletion of all copies because that involves too many applications of the operation Chain Reduction (which deletes chain links).

The basic intuition in (III) is that Economy principles ensure that it is generally the highest copy of a chain that is overtly expressed. However, under Nunes' theory, multiple realization of chain links is possible if a member of the chain is morphologically reanalyzed, thereby becoming invisible to the LCA. As a result, the chain link cannot be deleted as such a deletion would violate Economy principles. As an example of this, Nunes (2004) cites cases of

wh-doubling in various languages:

(20) a. Wen glaubt Hans wen Jacob gesehen hat?
whom thinks Hans whom Jacob seen has
Who does Hans think Jacob saw? (German, McDaniel 1986)

b. Kas misline kas o Demìri dikhlâ?
whom you-think whom Demir saw
Who do you think Demir saw? (Romani, McDaniel 1986)

c. Wêr tinke jo wêr't Jan wennet?
where think you where-that Jan lives
Where do you think that Jan lives? (Frisian, Hiemstra 1986)

In all these examples, an intermediate wh-trace is realized. Phonetic realization of the lowest trace is excluded because only moved elements can be reanalyzed. This is shown by the following example from German:

(21) *Wen glaubt Hans wen Jacob wen gesehen hat?
whom thinks Hans whom Jacob whom seen has
Who does Hans think Jacob saw?

A further restriction on wh-doubling is that the intermediate trace must be only one wh-word. A full wh-phrase cannot survive Chain Reduction as shown by the ungrammaticality of (22).

(22) *Wessen Buch glaubst du wessen Buch Hans liest?
whose book think you whose book Hans reads
Whose book do you think Hans is reading?

The intermediate traces in (20) can be phonetically realized because the wh-word moves to the embedded C where it is morphologically reanalyzed as part of one terminal element. Hence, the wh-word becomes invisible to the LCA, which operates only on words. By contrast, reanalysis is ruled out in (22) since full wh-phrases must move to [Spec,CP] and therefore cannot be reanalyzed as parts of C.

3.2. Analyzing P-reduplication

In my view, it is highly desirable to analyze P-reduplication along similar lines as the wh-doubling cases discussed earlier, especially since a single word is reduplicated in both cases.

To bring P-reduplication in line with the wh-doubling examples in (20), the 'extra' preposition must undergo reanalysis as a result of movement to some head

position.[9] I will assume that this is a functional head position within an extended PP, which I will simply refer to as F. Possibly, this is an abstract Place head (but see Koopman 2000 and den Dikken 2006 among others for discussion about the functional architecture within PPs). Thus, the derivation of P-reduplication proceeds as follows (where phonetically realized elements are boldfaced):

(23) a. $[_{FP}$ F $[_{PP}$ P [DP]]]
b. $[_{FP}$ [F $[P_i$+F]] $[_{PP}$ P_i [DP]]] (P is reanalyzed with F)
c. $[_{PPj}$ P_i [DP]] ... $[_{FP}$ [F $[P_i$+F]] $[_{PPj}$ P_i [DP]]] (the PP is fronted)
d. $[_{PPj}$ P_i [DP]] ... $[_{FP}$ [F $[P_i$+F]] $[_{\sout{PPj}}$ $\sout{P_i}$ $\sout{[DP}$]]] (the lower PP is deleted)

Two chains are formed in this derivation. The first one is created by movement of the preposition to F and the second one by subsequent fronting of the remnant PP. The first chain is unaffected by Chain Reduction because the preposition in F is reanalyzed and therefore becomes invisible to the LCA. As a result, there is no visible chain to be reduced and the lower copy of the preposition is spared in this round. In the second chain, the lower copy of the PP is deleted, i.e., the lowest copy of the preposition and the lower copy of the DP object. The net result is that the two highest copies of the preposition are phonetically realized.[10]

Recall that P-reduplication is not accepted by all speakers in those languages where it is found, e.g., in Icelandic. On the analysis advanced here, this means that reanalysis of the moved preposition is only possible for some speakers. In other words, the locus of variation is in the application of reanalysis.

The main advantage of the proposed analysis is that it immediately explains why reduplication cannot apply to the whole PP or the DP object (as shown in (10)): PPs and DPs are full phrases and thus cannot be reanalyzed as parts of words. Therefore, they cannot be made invisible to the LCA, even if they move to some specifier position within the extended PP.

The fact that the exact landing site of the PP is irrelevant is also accounted for under this analysis because P-reduplication relies on a reanalysis of a copy of the preposition within the extended PP. As a result, P-reduplication can apply in matrix questions as well as embedded questions and examples with topicalization.

Moreover, the observed correlation between P-stranding and P-reduplication follows from the analysis if we assume that P-stranding necessarily involves two

[9]Note that the reanalysis proposed by Hornstein and Weinberg (1981) to account for P-stranding does not involve any movement of the preposition. However, it seems fairly clear by now that P-stranding is not licensed by reanalysis of the preposition and the lexical head selecting it (see e.g., Takami 1992, Baltin and Postal 1996, and Abels 2003).

[10]It makes no difference for the proposed analysis of P-reduplication if there are intermediate steps in the remnant movement of the PP, e.g., as in the case of movement out of embedded clauses. The phonetic realization of the chain links will be unaffected since the intermediate PPs will necessarily be deleted.

steps: (i) movement of P to F without reanalysis, and (ii) subsequent fronting of the remnant PP. This derivation is shown in (24).

(24) a. $[_{FP}$ F $[_{PP}$ P [DP]]]
b. $[_{FP}$ [F $[P_i$+F]] $[_{PP}$ P1 [DP]]] (P moves to F without reanalysis)
c. $[_{PP_j}$ P_i [DP]] ... $[_{FP}$ [F $[P_i$+F]] $[_{PP_j}$ P_i [DP]]] (the PP is fronted)
d. $[_{PP_j}$ ~~P_i~~ [DP]] ... $[_{FP}$ [F $[P_i$+F]] $[_{PP_j}$ ~~P_i~~ [DP]]] (P_i and P_i are deleted)
e. $[_{PP_j}$ ~~P_i~~ [DP]] ... $[_{FP}$ [F $[P_i$+F]] $[_{~~PP_j~~}$ ~~P_i~~ [~~DP~~]]] (the lower PP is deleted)

The crucial difference between this derivation and the one in (23) is that the highest copy of the preposition is deleted here. Hence, it is only the intermediate copy of the preposition in F that is phonetically realized in (24). This difference stems from the absence of reanalysis in (24). Since there is no reanalysis in (24), the chain created by preposition movement to F is subject to Chain Reduction. When Chain Reduction applies to this chain, it deletes not only of the lowest copy of the preposition but also the highest copy (see (24d)). The highest copy is deleted along with the lower copy because both copies are non-distinct as they are part of the same numeration and take the same DP complement (see Nunes 2004, p. 55 for discussion of a very similar case of remnant movement with reanalysis). As a final step in this derivation, the lowest copy of the PP is deleted. Thus, we derive a representation where the highest copy of the DP object and the intermediate copy of the preposition are overtly realized.[11]

If P-reduplication and P-stranding are derived as shown in (23) and (24), any grammar with P-reduplication will necessarily have P-stranding because the former involves the same two crucial steps as the latter plus reanalysis of the preposition. Thus, P-stranding illustrates that reanalysis of the preposition in F is optional. However, since some speakers of P-stranding languages like Icelandic do not allow reanalysis of the preposition, the availability of P-stranding does not entail that P-reduplication is possible.

In the derivation in (23), reanalysis of the preposition is followed by movement of the remnant PP. However, if the PP does not move, a potential problem arises: The analysis advocated here seems to predict phonetic realization of the two copies of prepositions as the higher copy is invisible to the LCA, thereby saving the lower copy from deletion (since there is no visible chain that the lower copy belongs to):

(25) a. $[_{FP}$ F $[_{PP}$ P [DP]]]
b. $[_{FP}$ [F $[P_i$+F]] $[_{PP}$ P_i [DP]]] (P is reanalyzed with F)

[11] Since the intermediate copy of the preposition is phonetically realized in both (23) and (24), it should be clear that the effect of reanalysis in (23) is not to protect this copy from deletion. Rather, the reanalysis ensures that the highest copy is overtly expressed as in (23).

It is quite conceivable that reanalysis is ruled out unless further movement of the reanalyzed head or a phrase containing that head takes place. To put it slightly differently, a head cannot hide from the LCA unless it is shielded by a higher copy of that head. However, there is a more straightforward solution at hand, namely that phonetic realization of two adjacent prepositions is ruled out by a principle prohibiting adjacent identical heads, a principle reminiscent of the Obligatory Contour Principle (OCP) in phonology. There are well-documented cases of this principle operating in syntax (see e.g., Golston 1995, Grimshaw 1997, and Ackema 2001 for discussion). To take one example, Bošković (2002) argues that sequences of homophonous wh-words are excluded in Serbo-Croatian and this affects the phonetic realization of wh-chains in that language.

4. P-REDUPLICATION WITH PREPOSITION MOVEMENT IN OLD ICELANDIC

As argued in Section 3, P-reduplication is conditioned by movement of the preposition to a head position within the functional layer of the PP where the preposition is reanalyzed as part of a word. Further movement of the remnant PP creates a higher copy of the preposition and this makes it possible to phonetically realize two prepositions (the highest one and the reanalyzed preposition). Note that the crucial part in P-reduplication is the creation of a higher copy of the reanalyzed preposition. Thus, movement of the remnant PP is only one way of creating P-reduplication. The other way is further movement of the reanalyzed preposition and this is indeed what we find in Old Icelandic as we will discuss in more detail below.

Prepositions in Old Icelandic immediately preceded their DP objects in most cases, as in (26a) and (27a), but prepositions could also undergo a very short leftward movement (see (26b) and (27b)). Moreover, leftward movement of a preposition could give rise to P-reduplication (see Nygaard 1906, pp. 22, 384), as shown in (26c) and (27c).

(26) a. Álfur þóttist og kenna kulda af Óspaki.
Álfur thought also sense animosity from Óspakur
Álfur also felt that he sensed animosity from Óspakur.
(Eyrbyggja saga, p. 611)

b. óvinir hans þóttust heldur kulda af kenna
enemies his thought rather animosity from sense
ráðum hans.
advice his
His enemies felt some animosity from his advice.
(Eyrbyggja saga, p. 547)

c. hann þykist kulda af kenna af
he thinks animosity from sense from
skiptum yðrum.
exchanges your
He feels animosity from his dealings with you.
(Laxdæla saga, p. 1591)

(27) a. Öllum mönnum þótti mikils vert um Hallstein.
all men felt greatly worthy about Hallsteinn
All men thought that Hallsteinn was a great man.
(Flóamanna saga, p. 731)

b. Ólafi þótti mikils um vert drauminn.
Ólafur felt greatly about worthy dream.the
Ólafur thought that the dream was quite important.
(Laxdæla saga, p. 1578)

c. Öllum þótti mikils um vert um þetta verk.
everyone felt greatly about worthy about this deed
Everyone thought that this was a big deed. (Grettis saga, p. 1011)

According to Rögnvaldsson (1995), leftward movement of prepositions away from their DP objects was rather rare in Old Icelandic. This is perhaps not surprising since this movement was limited to cases where the PP was a complement of some lexical head as in (26) and (27). Movement out of adjunct PPs was excluded since adjuncts are islands.

P-reduplication with preposition movement is expected if P-reduplication involves three steps as I have argued here: (i) movement of a preposition to F, (ii) reanalysis of the preposition, and (iii) the creation of a higher copy of the preposition. Old Icelandic and Modern Icelandic differ in how the highest copy is created as P-reduplication in Old Icelandic involves further movement of the preposition, whereas P-reduplication in Modern Icelandic involves further movement of the remnant PP. Unfortunately, we cannot know whether P-reduplication was accepted by all speakers of Old Icelandic, but we do know that reanalysis was optional in Old Icelandic, just as in Modern Icelandic. This is shown by examples such as (26b) and (27b) where the preposition moves without reduplication.

As we have already mentioned, Old Icelandic did not have P-stranding. Thus, we find various examples like (28) below where a PP complement has been fronted, but no examples where the preposition is left behind by fronting of the DP object.

(28) a. Við þessu bjóst þrællinn eigi.
for this prepared slave.the not
The slave didn't expect that. (Grettis saga, p. 1010)

b. Til hvers mælir þú?
to what speak you
What do you suggest? (Víga-Glúms saga, p. 1927)

c. Um slíkt er illt að ræða.
about such is bad to talk
It is bad to discuss such things. (Króka-Refs saga, p. 1521)

This means that Old Icelandic did not have the movement of the remnant PP that is necessary for P-stranding (cf. the discussion on the derivation in (24)), but I will not speculate as to why this movement was ruled out in Old Icelandic. Similarly, I do not know why Modern Icelandic does not have leftward preposition movement as Old Icelandic, and this is something that clearly merits further study.

5. CONCLUSION

In this chapter, the phenomenon of P-reduplication in Icelandic has been discussed with some comparative data from the other Germanic languages. Using Nunes' (2001, 2004) theory of the linearization of chain links, I have argued that P-reduplication involves three steps: (i) movement of a preposition to a functional head position within the extended PP, (ii) reanalysis of the moved preposition, and (iii) the creation of a higher copy of the preposition, either through fronting of the remnant PP (Modern Icelandic) or leftward movement of the preposition (Old Icelandic). In both cases, the highest copy of the preposition and the reanalyzed copy are phonetically realized. The proposed analysis has also been argued to explain why any grammar allowing P-reduplication must also allow P-stranding but not vice versa.

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15

ON PERIPHERAL DOUBLING IN SCANDINAVIAN

Øystein Alexander Vangsnes

ABSTRACT

This chapter investigates correlative elements in Scandinavian that appear in the peripheries of the clausal structure. The chapter introduces the notion of 'right peripheral doubling' which refers to a phenomenon characteristic of colloquial varieties of Mainland Scandinavian whereby a proform doubles a constituent within the core clause, either another pronoun or an XP. It is shown that such doubling by a proform can be distinguished from right dislocation. Yet it is argued that both right peripheral phenomena relate to the *left* periphery of clausal structure but that there is a trigger for movement of the core clause that shifts it around them, reversing the order and rendering the peripheral constituents to the right of the core clause. Much of the analysis is based on taking into consideration various combinations of left dislocation, right dislocation, right peripheral doubling, and clausal (peripheral) particles, pairing possible orders with prosodic characteristics.

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1. INTRODUCTION

In colloquial Norwegian and Swedish, various constituents of the middle or pre-field (i.e., IP and CP) can appear with a correlate in the sentential right periphery. This rightward correlate can be either a proform or a fuller XP. In the latter case the fuller XP is always coreferential with a proform inside the clause proper, whereas proforms in the right periphery can be coreferential with both proforms and full XPs. Consider the Norwegian examples in (1).

(1) a. Jon har mye penger, han!
Jon has a-lot-of money he

b. Han har mye penger, han!
he has a-lot-of money he

c. Han har mye penger, han Jon!
he has a-lot-of money that Jon

d. *Han Jon har mye penger, han Jon!
he Jon has a-lot-of money that Jon

In the first two examples a pronoun in the right periphery doubles the subject, which is a full noun phrase in the first case and another pronoun in the second case. In the third example the situation is reversed in the sense that a full noun phrase appears in the right periphery whereas a pronoun occupies the sentence internal subject position. In the fourth example, which is ungrammatical, the (intended) coreferential phrase for the sentence final noun phrase is itself a full noun phrase.[1]

Askedal (1987) uses the term 'correlative right dislocation' to cover both the case where a proform appears in the right periphery and the one where an XP does. In this chapter I will argue that one should make a distinction between the two, and I will henceforth refer to the former as *right peripheral doubling* (RPD) and the latter as *right dislocation* (RD). In short, the main arguments for distinguishing RD from RPD are the following: (i) RPD can involve doubling of both a proform and a full phrase whereas RD can only double a proform (cf. above), (ii) RPD and RD can appear in one and the same sentence, but then in a fixed order (the right peripheral proform preceding the right dislocated phrase) and with clause typing particles intervening (if present), and (iii) RPD is also compatible with *left dislocation* (LD), but RD is not.

Whereas both RD and LD appear to be quite widespread across languages and language areas, the RPD construction appears to be a somewhat more exotic phenomenon. I will therefore next present some further details concerning

[1]Notice that the instance of *han* right before the proper name in (1c) and (1d) is a proprial demonstrative, and thus part of the full noun phrase, rather than a pronominal copy. To my ear the presence of this proprial demonstrative on the right peripheral full noun phrase makes them sound more natural (but crucially does not save the example in (1d)).

the RPD construction. In the subsequent sections I will then return to the differences between the constructions mentioned earlier in more detail. Eventually, I will end up suggesting that all three constructions are, despite appearance, related to the left periphery of the clausal structure, but that shifting processes render some constituents to the right.

All examples will be taken from colloquial Norwegian unless otherwise indicated.

2. RIGHT PERIPHERAL DOUBLING (RPD)

2.1. The Nature of the Proform

RPD is not restricted to subjects and in fact not to nominal expressions either. The following examples from Faarlund et al. (1997, pp. 908f.) show that various kinds of constituents may enter into an RPD relation.

(2) a. Dem er det synd på, dem! (oblique argument)
them is it pity on them
They can be pitied (indeed)!

b. Nå skal det bli koselig, nå! (temporal adverb)
now shall it become cosy now
Now we're going to have pleasant time!

c. Du har jo gløm meg, jo! (epistemic particle)
you have yes forgotten me yes
Hey, you forgot about me!

d. Det var så kjedelig, så! (measure adverb)
it was so boring so
It was so boring!

The present study will focus on the doubling of arguments and leave studies of non-argument doubling to future research.

As shown by the very first pair of examples the antecedent for a pronominal doublee can be either a pronoun or a full noun phrase. A further refinement concerning pronominal antecedents is that they may appear in either a full (strong) form (e.g., *han* 'he') or, provided that the syntactic environment allows cliticization, a maximally reduced (weak) form (e.g., *'n* 'he'). The doublee must however always have the non-reduced form. These facts are illustrated in (3).

(3) a. Har han vært i Tromsø, han?
has he been in Tromsø he
Has he been to Tromsø?

b. Har'n vært i Tromsø, han/ *'n?
has'he.w been in Tromsø he.s/ he.w
Has he been to Tromsø?

c. Han/ *n har vært i Tromsø, han, ikke sant?
he/ he.w has been in Tromsø he not true
He has been to Tromsø, right?

d. Var det i Tromsø'n hadde vært?
was it in Tromsø he.w had been
Was it in Tromsø that he had been?

A crucial piece of information here is that the illegitimate cliticization in (3b), i.e., of the reduced pronoun to *Tromsø*, is not impossible *per se*, as witnessed by (3d). In line with a suggestion made by a reviewer I believe that this restriction is intimately tied to prosodic factors. Let us therefore continue with some notes on prosody.

2.2. Stressed Right Peripheral Pronouns and Notes on Prosody

Although a clause initial maximally destressed pronoun is not possible in (3c), it would be if it only were preceded by some phonological material of the right sort: the example would indeed be fine if the reduced pronoun were preceded by for instance the conjunction *og* 'and', pronounced /o/ (i.e., without the final consonant in the spelling), as in (3c′).

(3) c′. ... og 'n har vært i Tromsø, han, ikke sant?
and he.w has been in Tromsø he not true
... and he has been to Tromsø, right?

This tells us is that a maximally reduced pronoun cannot occur on the left edge of an intonation phrase, and it *may* tell us that the restriction on maximally reduced pronouns in RPD, witnessed in (3b), is due to the fact that the RPD pronoun occurs on the left edge of a separate intonation phrase. In this respect, it should be pointed out that the RPD pronoun does not have to carry any contrastive or emphatic stress.

However, prosodically the RPD pronoun seems to interact with the clausal intonation in interesting ways. It will lead too far here to go into this in detail, but the following discussion will seek to lay out some of the basic facts. The discussion is to a large extent inspired by a series of comments made by one of the reviewers, a native speaker of Norwegian.

In Eastern Norwegian questions are prosodically marked with a rising tone on the last prosodic phrase of the clause. Thus, for the examples in (3a) and (3b) to be naturally interpreted as questions, the doublee will be stressed and realized with a rising tone, as indicated in (4a). If not stressed the sentence has a marked pragmatic reading where the speaker is conveying that she could not care less (or something along those lines), as indicated by the translation in (4b), and this would correspond to the prosodic pattern of a declarative sentence. However, if the doublee is followed by the clausal particle *da* 'then' as

in (4c), the doublee and the particle will form a prosodic unit, assigned the so-called 'tone/accent 1' pattern (LH in Eastern Norwegian): the rising tone will then be realized on the particle rather than on the pronoun, and the sentence as such will have to be interpreted as a question.

(4) a. Har han (noensinne) vært i Tromsø, HAN?
has he ever been in Tromsø he
Has *he* been to Tromsø?

b. Har han (*noensinne) vært i Tromsø, han.
has he ever been in Tromsø he
Oh yeah, he's been to Tromsø, has he now?

c. Har han (noensinne) vært i Tromsø, HAN DA/?*da?
has he ever been in Tromsø he then/ then
Has *he* been to Tromsø?

These considerations are furthermore confirmed by the observation that a polarity item like *noensinne* 'ever' is only licensed in the examples that have interrogative illocutionary force but not in example (4b) with the 'carelessness' reading.

The same facts can be observed in *wh*-questions with the clear difference that it is not even possible to have a declarative prosodic pattern (compare (4b) and (5b)), i.e., there has to be stress and a rising tone at the end of the clause. These facts are illustrated in (5) and square with the observation made by the reviewer that *wh*-questions are only compatible with what he terms 'stressed right peripheral pronouns'.

(5) a. Hvor bor du hen, DU?
where live you LOC you
Where do you live?

b. *Hvor bor du hen, du.
where live you LOC you

c. Hvor bor du hen, du DA?
where live you LOC you then

Given that the proform constitutes the first part of this prosodic unit, and given that maximally reduced pronouns need a host to its left — in other words, are enclitic — we now have a prosodic account of why maximally reduced pronouns cannot appear as doublees in RPD constructions (cf. Section 2.1).

In the review that inspired these comments on prosody the reviewer suggests that the instances of stressed right peripheral pronouns represent a special type of RPD pronouns (stressed RPD, abbreviated as SRPP) that should be treated separately from the non-stressed instances. The reviewer gives a series of arguments for this, one being the fact that in *wh*-questions clause final RPD must carry stress. I believe that the above discussion of prosody serves to show that

this requirement can be seen as an effect of the interaction between interrogative intonation and the material present at the right edge of the clause. Nevertheless, the reviewer points out several other structural differences between stressed and non-stressed RPD pronouns that need to be addressed, and we will return to these issues in Sections 3.3 and 4.3 when more background information has been provided.

In the following capital letters will, in line with the discussion earlier, indicate that there is stress on pronouns and particles in the right periphery.

2.3. Clause Types and Illocutionary Force

The examples provided so far show that RPD can be found in both declaratives and interrogatives. It can also appear in imperatives and exclamatives as illustrated in (6)–(7).

(6) Bare dra til Tromsø, du!
only go to Tromsø you
Just you go to Tromsø!

(7) a. Så snill du er, DU ?*(DA)!
so kind you are you then
How kind you are!

b. For noen unger han har, HAN ?*(DA)!
for some kids he has he then
What kids he has!

c. Som dere skriker, DERE ?*(DA)!
as you.PL screem you.PL then
You are really screaming!

We may thus conclude that RPD is not a clause typing process.[2]

[2]RPD in exclamatives appears to be subject to some interesting restrictions. On the one hand, there is the obligatoriness of the clausal particle *da* 'then' after the RPD pronoun as indicated in (i). On the other hand, the antecedent for the doublee has to be a pronoun itself.

(i) a. *Så snill Jens er, HAN DA!
so kind Jens are he then
How kind you are!'

b. *For noen unger Petter har, HAN DA!
for some kids Petter has he then
What nice kids he has!

c. *Som ungene skriker, DE DA!
as kids-DEF screem they then

Crucially, the clausal particle *da* is not obligatory in exclamatives *per se*. I will leave it to future research to unravel the basis for the interplay between RPD and the clausal particle in exclamatives.

At the same time, as pointed out by Øystein Nilsen (p.c.), it seems that RPD proforms are always associated with the periphery of matrix clauses. RPD may have an antecedent in an embedded clause, but the doublee will nevertheless not be part of the embedded clause as such. This becomes evident when we take into consideration for instance the interaction between an RPD pronoun and a matrix focus particle. Consider first the example in (8a) which shows a well-formed case of RPD of an embedded subject pronoun. Consider next (8b) which shows that the matrix particle *engang* 'even' can appear either before or after the embedded clause and (8c) which shows that *engang* is not licensed in the embedded clause in question. The example in (8d) then finally shows that *engang* must precede rather than follow the RPD pronoun.

(8) a. Jeg veit ikke hvor han bor hen, HAN.
I know not where he lives LOC he
I don't know where he lives.

b. Jeg veit ikke (engang) hvor han bor hen (engang).
I know not even where he lives LOC even
I don't even know where he lives.

c. Hvor bor han hen (*engang)?
where lives he LOC even
Where does he (*even) live?

d. Jeg veit ikke hvor han bor hen (engang),
I know not where he lives LOC even
HAN (*engang)!
he even
I don't even know where he lives.

The most natural conclusion to draw on the basis of these facts is that the RPD pronoun appears at the right periphery of the matrix clause rather than at the periphery of the embedded clause. In turn that means that the relationship between the doublee and the antecedent is long distance. On the conjecture entertained later that the RPD pronouns occupy a position in the (matrix) left periphery, and furthermore the idea that illocutionary force is a property of root clauses, what we have just seen indicates that the RPD proforms are markers of illocutionary force.

This squares with findings in Askedal (*op. cit.*, pp. 102f.). In a corpus study of a particular children's book series, written in quite a colloquial style and with abundant examples of RPD, Askedal found only four examples where the RPD relation pertained to an embedded antecedent. The four examples are the following.

(9) a. Plutselig så han at marken den var jo et
suddenly saw he that worm.DEF it was PRT a
stykke nede den, jo!
part down it PRT
All of a sudden I saw that the worm had reached a little bit in.

b. ‘og så skal du se at jeg blir nok
and then shall you see that I become PRT
tykk jeg også,’ sa mor og smilte.
thick I too said mum and smiled
‘And then you’ll see that I’ll be thick as well,’ said Mum and smiled.

c. ‘Ja, du vet jeg går på skolen nå, jeg,’
yes you know I go on school-DEF now I
sa Ole Aleksander, [...]
said Ole Aleksander
‘Yes, you know: I go to school now,’ said Ole Aleksander.

d. ‘Jeg tror nok vi skal få det hyggelig her
I think PRT we shall get it nice here
også, vi.’
also we
‘I think we will make it nice for us here too.’

All of the examples involve *that*-clauses, and the two first ones moreover have embedded Verb Second as witnessed by the placement of the modal particles *jo* and *nok*. This is in line with the general observation (see e.g., Wechsler 1991 and references cited there) that embedded V2 in Mainland Scandinavian is licit when the embedded clause can be argued to carry illocutionary force of its own. Notice incidentally that the first example also has an embedded left dislocated subject (*marken, den*): left dislocation is arguably also a root phenomenon.

In other words, the contention is that whereas some embedded clauses can be argued to have root properties (cf., e.g., Hooper and Thompson 1973; Haegeman 2006) and therefore should readily allow RPD at their own right edge, an RPD relation can also be established across a clause boundary. In both cases the RPD proform serves to mark and perhaps emphasize the illocutionary force of the clause: according to Askedal (*op. cit.*, p. 105) RPD (and on his view correlative right dislocation more generally) does not alter the truth conditions of the sentence. Rather, adding a double in the right periphery seems merely to have a pragmatic effect, and Askedal concludes that the construction is used either (i) ‘to rhematize non-rhematic material by placing it at the end of the sentence; or (ii) [...] as a means of repetition of non-rhematic material, without any rhematization being involved.’

2.4. Dialect Geography

In terms of dialect geography Askedal (*op. cit.*, p. 107) notes that within Scandinavian RPD appears to be a Norwegian and Swedish phenomenon, and one that is not found in Danish, Faroese, and Icelandic. Icelandic and Danish speakers that I have consulted have confirmed the ungrammaticality of (10a) and (10b), respectively.

(10) a. *Jón er ríkur, hann. (Icelandic)
Jón is rich he

b. *Jesper er rig, han/ham. (Danish)
Jesper is rich he/him

However, although RPD appears not to be a part of standard colloquial Danish, Jørgensen (2000, pp. 163f.) points out that RPD data can be found at least in the traditional dialects of Zealand. He gives among others the following two examples collected from the dialect archives of the Institute for Danish dialectology at the University of Copenhagen. The orthography has been standardized.

(11) a. Sådan én, hun skulle jo ikke have så meget at
such one she should PRT not have so much to
æde, hun.
eat she
Such a one, she didn't need so much to eat.

b. Det var nogle slemme marker de.
it was some difficult fields they
Those were difficult fields.

In a wider Germanic context RPD appears to be absent in the German and Dutch language areas, again according to Askedal (*op. cit.*). This then suggests a dialect boundary within Germanic that sets Norwegian, Swedish, and presumably some Danish dialects apart from the rest of the Scandinavian area as well as Germanic more generally.

It should furthermore be pointed out that also within Norwegian and Swedish there may be variation as to what kind of constituents allow RPD. Finland Swedish, and possibly other Swedish dialects, does for instance allow RPD of negation as well as the modal particle *nog* (literally speaking 'enough'), whereas this sounds quite exotic to a Norwegian ear. Consider the examples in (12) and (13) provided by Jan-Ola Östman (p.c.).

(12) a. Har du en penna? (Finland Swedish)
have you a pen
Do you have a pen?

b. Inte har du en penna, inte?
not have you a pen not
You haven't got a pen, have you?

c. Inte har du en penna?
not have you a pen
Do you have a pen?

d. *Har du en penna int?
have you a pen not

(13) No är det så, no. (Finland Swedish)
well is it so well
That's probably the way it is.

Doubling of adverbs and modal particles is not out *per se* in Norwegian, cf. the examples in (2). But there are some indications that these Finland Swedish cases of RPD are dependent on fronting of the antecedent (Østbø 2007; Lisa Södergård p.c.), and the crucial dividing line with respect to dialects that allow and disallow such cases may in fact be to what extent negation and modal particles may be fronted. Negation and the particle *nok* are indeed not felicitous in initial position in Norwegian in the corresponding cases.

(14) a. *Ikke har du en penn, VEL? (Norwegian)
not have you a pen PRT

b. Du har ikke en penn, VEL?
you have not a pen PRT
You don't have a pen, do you?

(15) a. *Nok er det sånn.
well is it so

b. Det er nok sånn.
it is well so

Further investigations of the range of possible RPDs within different dialects of Norwegian and Swedish (and Danish too) are warranted — additional details are not available (to me) at the present stage.

At this point we may return to comparisons between right peripheral doubling and right dislocation as well as left dislocation.

3. RIGHT PERIPHERAL DOUBLING VERSUS DISLOCATION

3.1. Distinguishing Peripheral Doubling from Dislocation

The pragmatic difference between RPD and RD appears rather subtle, but there is a sense in which RPD is more emphatic than RD. From a communicative point of view that seems reasonable, in that the RD constituent provides more information about the referent in question than the pronominal double. This subtle difference concerning emphaticness is not necessarily an argument for treating them as distinct syntactic phenomena, but there are additional structural reasons to believe so.

The first argument for treating RPD as a different phenomenon than RD is that a right periheral pronoun can double both a pronoun and a full noun phrase, whereas a full noun phrase in the right periphery can be correlative

only with a pronoun. This was shown already by the first set of examples in the introduction, repeated here.

(1) a. Jon har mye penger, han!
Jon has a-lot-of money he

b. Han har mye penger, han!
he has a-lot-of money he

c. Han har mye penger, han Jon!
he has a-lot-of money that Jon

d. *Han Jon har mye penger, han Jon!
he Jon has a-lot-of money that Jon

It is not immediately clear what to make of this difference in structural terms. The puzzling fact, if anything, is that the doubling pronoun can be correlative with another pronoun: as already said, from the point of view of information structure the RPD pronoun does not add any referential content.

A second structural argument for keeping RPD and RD apart is that the two types of correlative elements in question may cooccur, and when they do, the order is fixed with the RPD pronoun preceding the right dislocated DP. Clause typing particles like *da* 'then' will furthermore intervene between the two. These facts are illustrated by the examples in (16): (16a) shows that a right dislocated DP can follow an RPD pronoun and that the clause typing particle *da* may intervene between the two, (16b) shows that the reverse order of RPD and RD is not possible, and(16c)–(16f) complete the picture and show that the two cannot both occur either before or after the particle *da* no matter what the relative order is.

(16) a. Hvor mye penger har han egentlig HAN (DA), han Jon?
how much money has he actually he then that Jon
How much money does he actually have, then, that Jon

b. *Hvor mye penger har han egentlig han Jon (da), HAN?

c. *Hvor mye penger har han egentlig, HAN han Jon DA?

d. *Hvor mye penger har han egentlig da han Jon HAN?

e. *Hvor mye penger har han egentlig da HAN han Jon?

f. *Hvor mye penger har han egentlig han Jon HAN DA?

At first sight these facts suggest that RPD and RD relate to distinct syntactic positions, but the facts are more complicated. First of all, when a right dislocated DP appears on its own, it may precede the clause final particle. This is shown by the example in (17a) which should be compared to (16c). Second, it is also possible to have a pronoun in the position after the clause final particle as in (17b) — in a *wh*-question like this stress (and rising tone) is required, a fact which we will address later.

(17) a. Hvor mye penger har han egentlig, han Jon DA?
how much money has he actually that Jon then
How much money does he actually have then, this Jon?

b. Hvor mye penger har han egentlig, da HAN/*han?
how much money has he actually then he / he

In other words, if we want to capture this merely in terms of linear positions we must assume two positions — one before and one after clause final particles — which both can be filled by either a pronoun or a DP: when both a pronoun and a DP occur in the right periphery, however, the pronoun must precede the DP. This obviously precludes the argumentation for keeping RPD and RD apart, but we will return to a solution shortly.

The third argument for distinguishing between RPD and RD is the fact that whereas LD is clearly compatible with RPD it seems to be incompatible with RD. This is shown by the examples in (18), this time using, for the sake of variation, a declarative clause and the clause final declarative particle *ass* (derived from *altså* 'also').

(18) a. Han Per, han har mye penger, han (ass)!
that Jon he has a-lot-of money he PRT
That Per sure has a lot of money!

b. *Han Per, han har mye penger (ass), han Per!
that Per he has a-lot-of money PRT that Per

One may argue that the LD/RD incompatibility is a reflex of the same restriction that makes (the non-LD structure) (1d) ungrammatical, namely that a dislocated DP cannot be coreferential with another referring expression. This is corroborated by the fact, pointed out by Kirsti Koch Christensen (p.c.), that a left dislocated pronoun is compatible with a right dislocated DP as in the example in (19).

(19) Han, han har mye penger (ass), han Per!
he he has a-lot-of money PRT that Per
Now he, he sure has a lot money, has John!

In other words, the restriction in question seems to be a Principle C effect: a referring expression cannot be bound.

3.2. Intermediate Summary

Summing up so far, in purely linear terms it seems that we are dealing with three peripheral positions for correlative constituents, one preceding the clause proper and two following it, the latter two being separated by clause final particles. In other words, we have the following scheme.

(20) 1 [CORE CLAUSE] 2 PARTICLE 3

All positions can be filled by either a DP or a pronoun, it seems, but there can be only one coreferential DP present in a single sentence. Furthermore, a right peripheral pronoun must precede a right peripheral DP, in effect meaning that the DP must follow the particle if the pre-particle position is filled (by a pronoun).

The example in (21), which is an expansion of (19), shows that a (RPD) pronoun is possible in position 2 even if the left dislocate is also a pronoun.

(21) Han, han har mye penger, han (ass), han Per!
he he has a-lot-of money han PRT that Per
Now he, he sure has a lot money, has John!

Hence, all three positions can be filled simultaneously. However, this is only possible if position 3 is filled by a DP: the examples in (22) show that position 3 cannot be filled by a pronoun regardless of whether position 1 is filled by a DP or a pronoun.

(22) a. Han Per, han har mye penger, han ass (*han)!
that Jon he has much money he PRT he
That Per has a lof of money!

b. Han, han har mye penger, han ass, (*han)!
he he has a-lot-of money han PRT he
He has a lot of money, has he!

But if we remove the pre-particle RPD pronoun in (22) we get a grammatical sentence: the sentence in (23) replicates the observation made earlier that a pronoun can follow a clause final particle, only in this declarative case the pronoun cannot be stressed.

(23) Han Per har mye penger, ass han/* HAN!
he Per has much money PRT he he
That Per sure has a lot of money!

Hence, position 2 and 3 cannot be filled by a pronoun at the same time.

At this point it seems appropriate to return to the issue of SRPP pointed out by one of the reviewers and briefly discussed in Section 2.2.

3.3. Further Notes on Stressed Right Peripheral Pronouns (SRPP)

The native Norwegian reviewer reports that SRPP are incompatible with RD for him, and gives the following example: **Har'n vært i Tromsø HAN, han Jens?*, literally 'Has he been in Tromsø HE, he Jens?' Notice that this judgment is in disagreement with my claim that (16a) is grammatical. In fact, I also find the example provided by the reviewer grammatical, but only on the following condition: there must be a rising tone, i.e., interrogative prosody, on both the

pronoun/particle *and* on the right dislocated DP. A corresponding rising tone is crucially not present on the RD noun phrase in (17a) which precedes the clause final particle: in this case there is only one rising tone, realized on the particle. The examples are repeated here for the sake of convenience.

(16) a. Hvor mye penger har han egentlig HAN (DA), han Jon?
how much money has he actually he then that Jon
How much money does he actually have, then, that Jon?

(17) a. Hvor mye penger har han egentlig, han Jon DA?
how much money has he actually that Jon then
How much money does he actually have then, this Jon?

b. Hvor mye penger har han egentlig, da HAN/* han?
how much money has he actually then he he

Notice furthermore the opposite stress patterns on the post-particle pronoun in (23) and in (17b), the former a declarative, the latter an interrogative clause: again there is a requirement that the post-particle pronoun be stressed in the interrogative case, but unstressed in the declarative case.

The obligatory stress on the clause final pronoun in (17b) can in my opinion be seen as an effect of the interrogative stress pattern which requires stress and rising tone on the clause final intonation phrase. In this case the particle *da* and the following pronoun do not form a prosodic unit: it is quite clear that the string *da han* cannot be assigned a common tone unlike what we remarked in Section 2.2. when the order was reversed. In (17b) stress must fall on the pronoun which in turn carries the rising tone required by the interrogative prosody, i.e., /da 'han/ is allowed but not */'da han/.

Conversely, in the declarative sentence in (23) there is no requirement for a rising tone at the end of the clause since this is not a part of the declarative prosodic pattern. Accordingly, the pronoun can be left unstressed. A right dislocated DP in the same position would on the other hand receive stress since its internal structure requires the realization of a tone.

So far, then, we have established that in interrogatives there is a requirement for a rising tone on the constituent in position 3. If position 2 is filled (by an RPD pronoun), position 3 can only be filled by a DP and in such cases the post-particle DP will double the rising tone otherwise found on the pronoun in position 2 (or on the particle with which it forms a tonal unit). If position 3 is filled by a pronoun, position 2 must be left unfilled and there will be a single rising tone, realized on the pronoun.

3.4. Left Dislocation Replicates the Right Periphery

Earlier we also established the insight that the only way that all three positions can be filled simultaneously is when position 1 and 2 are filled by a pronoun and position 3 by a DP. The examples that show this are repeated here for convenience.

(21) Han, han har mye penger, han (ass), han Per!
he he has a-lot-of money he PRT that Per
Now he, he sure has a lot money, has Per!

(22) a. Han Jon, han har mye penger, han ass (* han)!
that Jon he has much money he PRT he
That Jon has a lof of money!

b. Han, han har mye penger, han ass, (* han)!
he he has a-lot-of money he PRT he
He has a lot of money, has he!

The clause final particle was used above to distinguish between position 2 and 3. Interestingly, such particles can also appear on the left edge of the clause, in fact even if they cooccur with instances of the same particle on the right edge. Consider the examples in (24).

(24) a. Han Per ass, han har mye penger, han (ass) (*han/
that Per PRT he has much money he PRT he
*han Per).
that Per

b. Han Per da, har'n mye penger, HAN (da) (*han/
that Per then has-he much money he then he
*han Per)?
that Per

Recall that pronouns cannot fill positions 2 and 3 simultaneously and that there can be only one correlative DP inside one sentence. However, if the left dislocate is a pronoun, a DP can occur on the right edge.

(25) a. Han ass, han har mye penger, han (ass) (han
he PRT he has much money he PRT that
Per/ *han).
Per he

b. HAN da, har'n mye penger, HAN (da) (han Per/ *han)?
he then has-he much money he then that Per he

One way of interpreting the facts in (24) is that left dislocated DPs replicate the right peripheral structure, but in the reverse order, i.e., that 'position 1 + particle' is the mirror image of 'particle + position 3.' But at the same time there is a sense in which LD doubles part of the right peripheral structure: interrogative left dislocates will be realized with the same rising, interrogative intonation as we have described for the right periphery earlier, i.e., either on the LD constituent or, if present, on the particle that immediately follows.

In the analysis to be developed next I will exploit this observation in a particular way.

4. RIGHT IS LEFT AND LEFT IS TOO

4.1. Getting the Orders Right

What should now be evident from the discussion earlier is that there is a multitude of ways to combine what I have described as RPD and right and left dislocation. There are a few combinations which are not possible, however, making it a bit of a challenge to develop an appropriate analysis: it must be powerful enough to allow many different surface orders, yet impose some specific restrictions. In addition to this, we should ideally be able to relate prosody to syntactic structure.

In the following two subsections I will first present a way of analyzing the word order facts and then briefly discuss how the account can be related to prosody. For the sake of clarity, I will mostly use versions of declarative main clauses based on a single core sentence. It is nevertheless my firm belief that the main facts pertaining to peripheral correlative elements will be more or less the same also for interrogative clauses.

Given that previous studies of correlative dislocation in Scandinavian, as far as I know, have not focused on exhausting the combination possibilties, the analysis that I will present in the following does not purport to give a conclusive account of the matter(s), but should rather be viewed as a first attempt to approach the field from a contemporary generative point of view.

In addition to standard assumptions about phrase structure and movement the approach will be based on the following set of assumptions:

(26) (i) In the left periphery of matrix clauses there are altogether three hierarchically ordered positions for peripheral correlative elements, intermitted by positions for clausal particles, the latter in effect functional heads related to illocutionary force.

(ii) The peripheral constituents are first merged in the three positions, not moved there from the core clause, and the (single) peripheral DP is always (first) merged in the lowest of the three left peripheral positions, and

(iii) The lower particle head is an operator which needs to bind a clausal variable.

(iv) The higher particle head needs to c-command the core clause.

The three positions will not correspond directly to the three surface positions that we discussed earlier, so in order to avoid confusion I will label the new set of positions with capital letters. The base structure that I am assuming can then be sketched as in (27), where I take the 'core clause' to correspond to TopP.[3]

[3]It will lead to far here to assess the assumption that the so-called core clause corresponds to TopP, but the most important entailment of the assumption is that regular topicalization will be to the left edge of the constituent in question. That entailment is necessary given that the antecedent for RPD, and dislocation too, very often is a fronted constituent.

(27)

X	PRT1	Y	PRT2	Z	[TopP
pronoun		pronoun		DP/pronoun	core clause

The effect of assumption (iii) is that the head hosting the lower clausal particle triggers obligatory movement of a constituent containing the core clause, either Z or TopP itself, to a position not c-commanded by the PRT2 head: the trace thus created will be an appropriate variable for the head to bind. The effect of (iv) is that a constituent containing the core clause cannot move past the PART1 head. In other words, the two particle heads will in effect embrace the core clause.

It should furthermore be noted that assumption (iii) entails that many sentences must involve vacuous movement: the movement will be visible only if there is either a right peripheral particle or a right dislocated DP, or both, present.

In other words, the leading idea for the analysis is that LD, RD, and RPD alike all pertain to the left periphery of the clausal structure and that various shifting processes make some left peripheral material end up to the right. Let us now go through a series of cases to see how the system will work.

Consider first an example with RD where the dislocate follows a clause final particle.

(28) a. Han har mye penger, ass, han Per.

b. [$_{PRT2}$ ass [$_{Z}$ han Per [$_{TopP}$ han har mye penger]]]

c. [$_{PRT2}$ [$_{TopP}$ han har mye penger] ass [$_{Z}$ han Per [t]]]

Given the base structure in (28b) the correct surface order will be derived by moving TopP into PRT2.

In a case of an RPD pronoun and RD combined, with a clausal particle intervening, we can assume that TopP will move into Y rather than PRT2: that will give the correct surface order.

(29) a.

Han	har	mye	penger,	han	ass,	han	Per.
he	has	much	money	he	PRT	that	Per

b. [$_{Y}$ han [$_{PRT2}$ ass [$_{Z}$ han Per [$_{TopP}$ han har mye penger]]]]

c. [$_{Y}$ [$_{TopP}$ han har mye penger] han [$_{PRT2}$ ass [$_{Z}$ han Per] [t]]]]

If in this latter case, the TopP were to move into PRT2 rather than Y we would also get a licit surface order, namely the following.

(30) a.

Han,	han	har	mye	penger,	ass,	han	Per.
he	he	has	much	money	PRT	that	Per

b. [$_{Y}$ han [$_{PRT2}$ ass [$_{Z}$ han Per [$_{TopP}$ han har mye penger]]]]

c. [$_{Y}$ han [$_{PRT2}$ [$_{TopP}$ han har mye penger] ass [$_{Z}$han Per] [t]]]]

A problem here is that if we assume this, we should, on the basis of the core assumptions made earlier, expect an additional pronoun in X and a PRT1 to be able to precede the string in (30), i.e., as in (31), which is ungrammatical.

(31) *Han, ass, han, han har mye penger, ass, han Per.
he PRT he he has much money PRT that Per

What we could argue for instead is that the left dislocated pronoun in (30) is merged in X whereas (PRT1 and) Y are empty, and that TopP moves into PRT2 which hosts the particle, i.e., giving the structure in (32).

(32) [$_X$ han [$_{PRT1}$ __ [$_Y$ __ [$_{PRT2}$ [$_{TopP}$ han har mye penger] ass [$_Z$ han Per] [t]]]]

Notice, that on this account we can also derive a surface structure containing a RPD pronoun in addition to the constituents we have in (30): a higher particle is in fact licit as shown in (33).

(33) a. Han (ass), han har mye penger, han ass, han Per.
he PRT he has much money he PRT that Per

b. [$_X$ han [$_{PRT1}$ (ass) [$_Y$ han [$_{PRT2}$ ass [$_Z$ han Per
[$_{TopP}$ han har mye penger]]]]]]

c. [$_X$ han [$_{PRT1}$ (ass) [$_Y$ han [$_{PRT2}$ [$_{TopP}$ han har mye penger]
han ass [$_Z$ han Per][t]]]]]]

What then about cases where we have a left dislocated DP? We have seen earlier that such an LD noun phrase can be immediately followed by a clausal particle, as in (24a), repeated here.

(24) a. Han Per ass, han har mye penger, han (ass)
that Per PRT he has much money he PRT
(*han/*han Per).
he that Per

Given assumption (26ii) this means that we must allow for the DP to move from Z to X. To otherwise derive (24a), we can assume as before that TopP has moved to Y. The derivation is shown in (34).

(34) a. Han Per ass, han har mye penger, han ass.
that Per PRT he has much money he PRT

b. [$_X$ [$_{PRT1}$ ass [$_Y$ han [$_{PRT2}$ ass [$_Z$ han Per
[$_{TopP}$ han har mye penger]]]]]]

c. [$_X$ [$_{PRT1}$ ass [$_Y$[$_{TopP}$han har mye penger]$_i$ han [$_{PRT2}$ass
[$_Z$ han Per [$_{TopP}$ t$_i$]]]]]]

d. [$_X$ [han Per]$_j$ [$_{PRT1}$ ass [$_Y$ [$_{TopP}$ han har mye penger]$_i$ han
[$_{PRT2}$ ass [$_Z$ t$_j$ [$_{TopP}$ t$_i$]]]]]]

Notice that the restriction against a post-particle RPD pronoun with a left dislocated DP will follow straightforwardly on this analysis: such a

constituent cannot occcupy Z since that is the base position for the left dislocated DP. It is less clear whether a correlative pronoun can be merged in X before the DP moves into this position. The following sentences are, according to my intuitions, at best very awkward: in the a–e examples, it is as if the second LD pronoun introduces a hesitation or a long pause, whereas in the b–e examples, one gets the feeling that the second LD DP is introduced for clarification.

(35) a. ??Han Per, han ass, han har mye penger, han ass.
that Per he PRT he has much money he PRT

b. ??Han, han Per ass, han har mye penger, han ass.
he that Per PRT he has much money he PRT

Notice furthermore that adding a particle to the first LD constituent supports the view that we are here dealing with true appositions: the same repair strategy can be applied in the right periphery.

(36) a. Han Per ass – han ass – han har mye penger,
that Per PRT he PRT he has much money
han ass.
he PRT

b. Han ass – han Per ass – han har mye penger,
he PRT that Per PRT he has much money
han ass.
he PRT

c. Han, ass, han har mye penger, han ass – han
he PRT he has much money he PRT that
Per, ass.
Per PRT

Assumption (iv) has so far not been addressed explicitely, but we are now in a position to see its relevance more clearly. The ungrammaticality of the following two surface orders can be directly related to this stipulation in addition to the others, which have been demonstrated earlier.

(37) a. *Han Per, han har mye penger, han ass, han ass.
that Per he has much money he PRT he PRT

b. *(Han Per), han, han har mye penger, ass, han ass.
that Per he he has much money PRT he PRT

Given that the base order must be as prescribed by (ii), (37) could have been derived by moving Z (*han Per, han har mye penger*) into X (i.e., the pronoun immediately preceding the first *ass*). (37), which is bad both with and without the LD noun phrase, could have been derived by moving TopP into PRT1. Assumption (iv) bars both solutions.

4.2. Post-Particle Pronouns and Pre-Particle DPs

Consider now the pair of examples in (17) which show that a DP may precede a particle in the right periphery whereas a pronoun can follow. These may at first sight seem difficult to derive along the lines drawn up so far.

(17) a. Hvor mye penger har han egentlig, han Jon DA?
how much money has he actually that Jon then
How much money does he actually have then, this Jon?

b. Hvor mye penger har han egentlig, da HAN/* han?
how much money has he actually then he he

Let us take the last example first, and let us start by noting that this example becomes very awkward if the core clause contains a DP antecedent rather than a pronoun.

(38) ??Hvor mye penger har han Jon egentlig, da HAN?
how much money has that Jon actually then he

One way of accounting for this is to say that such post-particle pronouns project full DPs and are merged in Z. Z would then be a position reserved for DPs and this position can only be filled if the core clause antecedent is itself a pronoun. In other words, we would treat the post-particle pronoun as a 'true' RD, not an RPD. How this can be aligned with an account in terms of a Principle C violation requires some further theorizing which will not be undertaken here.

The case in (17a) must be approached differently. Let us exchange it with the following declarative clause to make the connection with the other analyses clearer.

(39) (Han ass,) Han har mye penger, (*han) han Per (*han)
he PRT he has much money he that Per he
ass (*han).
PRT he

Such a pre-particle RD noun phrase is compatible with an LD pronoun plus LD particle, but not with a pronoun in the right periphery, no matter where we try to place such a pronoun. Given the assumptions made, the analysis then comes quite straightforwardly: the DP is merged in Z as required but raises to PRT2. TopP on the other hand moves into Y. The derivation of this nested structure is shown in (40).

(40) a. $[_{Y}\ [_{PRT2}$ ass $[_{Z}$ han Per $[_{TopP}$ han har mye penger]]]]

b. $[_{Y}\ [_{PRT2}\ [\text{han Per}]_{i}$ ass $[_{Z}\ t_{i}\ [_{TopP}$ han har mye penger]]]]

c. $[_{Y}\ [_{TopP}$ han har mye penger$]_{i}\ [_{PRT2}\ [\text{han Per}]_{i}$ ass $[_{Z}\ t_{i}\ [_{TopP}\ t_{i}]]]$

If this analysis is on the right track it means that in cases of RD without either RPD or a right peripheral particle, there are two possible derivations, one where the DP moves one notch up and one were it stays in its base position. (In both cases TopP of course shifts across the DP.)

I will not claim that this discussion of the proposed analytical machinery and various word orders has exhausted all conceivable combinations and permutations of LD, RD, and RPD. Nevertheless, the general approach appears to possess a considerable degree of consistency and thus seems to provide a meaningful basis for further investigations. One further challenge, which I will only briefly address next, is how the various derivations can be related to prosody.

4.3. Getting at Prosody

There is one striking observation about the prosody of examples like (39) with a pre-particle RD noun phrase: unlike in many of the other cases of both RD and LD there is no intonation break — the pronunciation of the sentence is, in intuitive terms, quite 'smooth,' as it were.

This contrasts with cases the particle precedes the RD noun phrase, and I would like to propose a relatively non-complicated explanation for this, namely that Y+PRT2 and Z correspond to different intonation phrases. In turn, X+PRT1 is also a separate intonation phrase, and so is TopP.

It seems that a lot would fall in place on this simple approach. LD seems always to be accompanied with an intonation break, and that should fall out no matter whether LD is a product of raising of Z (pied-piping) or movement of a DP to X. RPD pronouns are normally not preceded by any intonation break, but as we saw in Section 2.2. there are other clear indications that they introduce a separate intonation phrase: (i) cliticization to the preceding constituent is not allowed and (ii) they will carry the rising interrogative tone of the clause, either alone or in combination with, if present, a particle. Furthermore, as just mentioned earlier, RD involves an intonation break when it follows a right peripheral particle, but not when it precedes it, which it may in the absence of an RPD pronoun.

All in all, I believe that, in the advent of more sophisticated studies of intonation patterns in this domain, the current approach to the syntax of correlative elements in Scandinavian tackles the basic facts quite successfully.

5. CONCLUSION

This chapter has studied peripheral doubling in Scandinavian introducing the new concept of RPD in addition to the better known phenomena of Left and Right Dislocation: varieties of colloquial Mainland Scandinavian possess a construction whereby a correlative proform appears in the right periphery of sentences, doubling either another proform or an XP inside

the core clause. The phenomenon has been investigated from a mainly Norwegian perspective, focusing on argumental doubling, and the central claim of the chapter has been that both right peripheral proforms and RD in fact pertain to the *left* periphery of the clausal structure but that movement processes shift the core clause around them and render them on the right in overt syntax.

I believe to have shown that such an approach to peripheral Scandinavian syntax proves successful in accounting for a number of the many combinations of RPD, RD, and LD that we find. Furthermore, prosodic facts seem to fall out quite nicely from the syntactic proposal.

Further and more detailed studies of the interaction between syntax and prosody are nevertheless warranted. Another issue which should be addressed in follow-up studies, is how the proposed peripheral clause structure can be more explicitely related to pragmatic and semantic notions such as illocutionary force and emphasis. A third obvious question is why other languages do not have the RPD construction and whether the general approach is tenable when confronted with data from other languages.

The present study has hopefully paved some ground which can be exploited in future investigations of peripheral syntax in Scandinavian as well as other languages.

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16

VARIATION IN CLITIC-DOUBLING IN SOUTH SLAVIC

Olga Mišeska Tomić

ABSTRACT

The chapter discusses clitic-doubling in (the dialects of) two South Slavic languages, Macedonian and Bulgarian, and the South-Eastern Serbian dialects. It is argued that in the South Slavic dialectal continuum there is inter-dialectal variation of clitic-doubling strategies along two axes. While along the vertical north–south axis the dialects vary with respect to the categories that can be clitic-doubled, along the horizontal west–east axis they vary with respect to dependence on discourse factors. Thus, whereas in the Northern and Central morphologically rich Serbian dialects there is practically no clitic-doubling, in the South-Eastern Serbian dialects, in which the six oblique Serbian case forms are reduced to only one, clitic-doubling is frequent, though optional, and in most of the Macedonian and Bulgarian dialects, to the south and south-east of the Serbian dialects, where nominal cases are practically non-existent, clitic-doubling occurs with all types of NPs. On the other hand, whereas in the easternmost Bulgarian dialects we have almost total dependence on discourse factors, in the westernmost Bulgarian and easternmost Macedonian dialects there is clitic-doubling of direct or indirect objects that are not discourse-linked, and in the Central and Western Macedonian dialects, all definite direct objects and all specific indirect objects are clitic-doubled, regardless of discourse factors.

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1. INTRODUCTION

Clitic-doubling of dative and accusative nominal and pronominal complements is a prominent feature of two South Slavic languages, Macedonian and Bulgarian. It is, however, shown in this chapter that it also appears in the South-Eastern Serbian dialects and is to a very limited extent present in standard Serbian/Croatian/Bosnian/(Montenegrin).

The South Slavic languages are spoken by the people living in Slovenia, Croatia, Bosnia and Hercegovina, Serbia, Montenegro, Macedonia and Bulgaria, and by various minority language groups in Italy, Austria, Hungary, Romania, Greece and Albania. The area where the South Slavic languages are spoken represents a dialectal continuum with a chain of micro-variations. If you travel by train from Slovenia eastwards towards the capital of Serbia, Belgrade, and then southwards towards the Aegean see, south-eastwards towards the Black Sea or south-westwards towards the Adriatic sea, you would not notice any language barrier; the differences between the dialects of any two towns on different sides of the borders between the South Slavic countries on the Balkans being comparable to those between any two neighboring towns within each of these countries. The clitic-doubling phenomenon is, however, non-existent in the extreme north-west of the South-Slavic dialectal continuum, but appears elsewhere in the Balkan peninsula and gradually increases as you move towards the south in the map of the Balkan states on the next page.[1] Thus, it is non-existent in Slovenia and gradually increases as you move towards Macedonia and Bulgaria.

The differences in clitic-doubling are not strictly dependent on the standard languages spoken in given states and vary along a vertical north–south and a horizontal east–west axis. Along the north–south axis, conditions for clitic-doubling increase in direct proportion to loss of case inflections, whereas along the horizontal east–west axis, there is a gradual increase of dependence of clitic-doubling on discourse factors when one moves from west to east. In Standard Serbian/Croatian/Bosnian/(Montenegrin), where there are paradigms with distinct genitive, dative, accusative, vocative, instrumental and locative case forms for all nominal and pronominal types, only the non-inflecting direct objects of the deictics 'here' and 'there', functioning as verbs, are clitic-doubled. In the South-Eastern Serbian dialects, where only accusative and to some extent dative morphologically expressed cases occur, clitic-doubling may optionally appear with various types of objects. In Macedonian and Bulgarian, where morphologically expressed nominal cases are practically non-existent, clitic-doubling is common, though increasingly dependent on discourse factors as one moves from west to east. Thus, in the Northern Macedonian dialects, to the south of the South-Eastern Serbian dialects, both direct and indirect objects are optionally clitic-doubled, in the south-easternmost Macedonian dialects

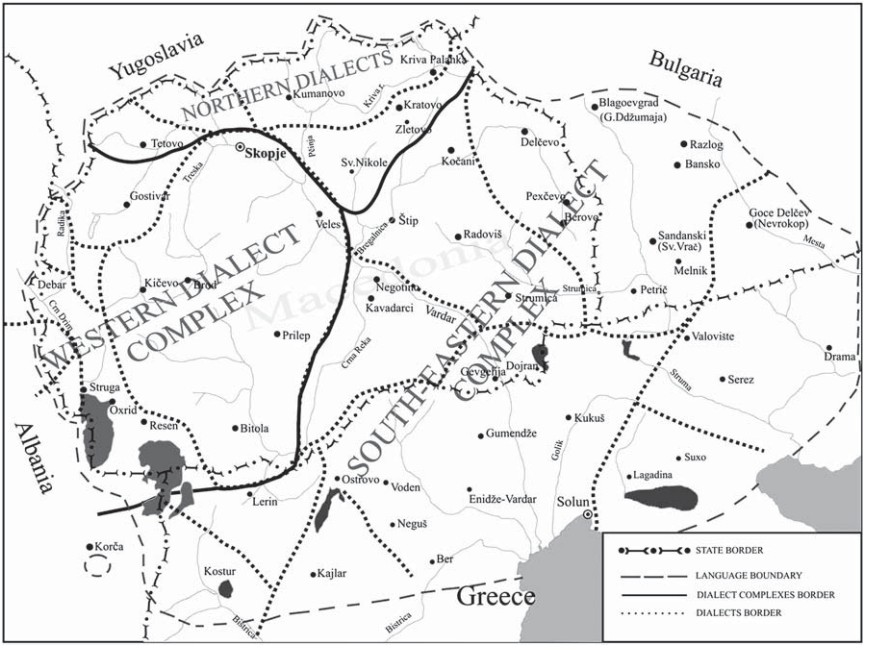
[1] The map is taken from Tomić (2006, p. xv).

Map 1: Map of the Balkans.

clitic-doubling may optionally be dependent on discourse factors, while in the dialects of the western Macedonian dialect complex it is invariably obligatory in all definite direct objects and all specific indirect objects.

As shown on the map of the Macedonian dialects below,[2] the dialect complexes extend over the state boundaries. After listing the forms of the South Slavic pronominal clitics, I shall discuss clitic-doubling in Macedonian, Bulgarian,

[2]The map was drawn by Marjan Markovik, a dialectologist, professor at the Faculty of Philology, University of Skopje. It was originally made for a book on Macedonian grammar, which I am preparing. Note that Serbia, including Kosovo, has been presented as Yugoslavia.



Map 2: Macedonian dialects.

Standard Serbian/Croatian/Bosnian/(Montenegrin)[3] and the South-Eastern Serbian dialects, in this order. Summing up the variation of clitic-doubling along the vertical north–south and the horizontal east–west axis within the South Slavic dialectal continuum, I shall represent, in two distinct tables, the variation of clitic-doubling of objects of various categories and the differences in dependence of clitic-doubling on discourse factors.

2. FORMS OF THE SOUTH SLAVIC PRONOMINAL CLITICS

Both dative and accusative South Slavic pronominal clitics inflect for person, number and, in the case of third person clitics, for gender (cf. Tomić 2004). In Table 1, I represent the Macedonian and Bulgarian pronominal clitics; in Table 2 the pronominal clitics of the Serbian/Croatian/Bosnian/(Montenegrin) standard varieties, which differ from their equivalents in Macedonian and Bulgarian in the third person singular feminine and all persons plural.[4]

[3]Standard Croatian differs to some extent from Standard Serbian, but the behavior of the clitics is analogous. Bosnian has not been explicitly standardized. Montenegrin fights for independence, which is why I have bracketed it.

[4]The Slovenian pronominal clitics are not represented, since they do not take part in clitic doubling.

(1)

Table 1: Macedonian and Bulgarian pronominal clitics.

	DAT		ACC	
	SG	PL	SG	PL
1st	*mi*	*ni*	*me*	*ne*
2nd	*ti*	*vi*	*te*	*ve*
3rdM/N	*mu*	*im*	*go*	*gi*
3rdF	*i*	*im*	*ja*	*gi*
Refl	*si*		se	

(2)

Table 2: Serbian/Croatian/Bosnian/(Montenegrin) pronominal clitics.

	DAT		Acc/Gen	
	SG	PL	SG	PL
1st	*mi*	*nam*	*me*	*nas*
2nd	*ti*	*vam*	*te*	*vas*
3rd M/N	*mu*	*im*	*ga*	*ih*
3rd F	*joj*	*im*	*je*	*je*
Refl	*si*		*se*	

If two pronominal clitics co-occur, the dative clitic precedes the accussative one and the third person clitic follows the first or second person one. While in Serbian/Croatian/Bosnian/(Montenegrin) first and second person pronominal clitics do not co-occur, in Macedonian they do, whether occurring as the only representatives of the direct and indirect object, as in (3a),[5] or along with non-clitic personal pronouns, as in (3b–c).[6]

[5]In the glosses of the examples, the following abbreviations are used: 1/2/3, 1st/2nd/3rd person; Acc, accusative (case); Aor, aorist; Cl, clitic; Dat, dative (case); Deict, deictic; Dist, distant; Distr, distributive (marker); DO, direct object; F, feminine; Imperf, imperfect (tense); IO, indirect object; M, masculine; Mark, marker; Mod, modal; Neut, neuter; Nom, nominative; Part, participle; Past, past (tense); Perf, perfective (aspect); Pl, plural; Pres, present (tense); Prox, proximate; Prox1, proximate to first person; Refl, reflexive; Sg, singular; Spec, specific; Subj, subjunctive; Superl, superlative.

The languages are abbreviated as follows: Bul, Bulgarian; Mac, Macedonian; Rom, Romanian; SE-Serb, South-Eastern Serbian; St-S/C/B/(M), Standard Serbian/Croatian/Bosnian/(Montenegrin); WBul, Western Bulgarian; WMac, Western Macedonian. Since I am a native speaker of Standard Serbian, Standard Macedonian and a South-Western Macedonian dialect, for data from these dialects I draw on my own judgments.

[6]While the first and second person singular personal pronouns have a common Dat/Acc form, the third person singular and all plural personal pronouns have distinct Dat and Acc forms, which always co-occur with Dat or Acc pronominal clitics. In (3b) the focused non-clitic personal pronoun *mene* is *in situ*. In (3c) we have two non-clitic personal pronouns — one of them (*tebe*) is in a topic position in the Left Periphery, along with the lexical subject *Јана*, another (*mene*) is in a focus position in the Left Periphery, to the left of the topic position. The focused pronoun can also

[See page 448 for footnote 6 cont.]

(3) a. Toj mi te pretstavi. (Mac)
he 1SG.DAT.CL 2SG.ACC.CL introduce.3SG.PERF.PAST
It was he who introduced you to me.

b. Petre ti me pretstavi
Petre 2SG.DAT.CL 1SG.ACC.CL introduce.3SG.PERF.PAST
mene.
me.DAT/ACC.CL
It was me that Petre introduced to you.

c. Jana tebe mene ti
Jana you.2SG.DAT/ACC me.DAT/ACC 2SG.DAT.CL
me pretstavi.
1SG.ACC.CL introduce.3SG.PERF.PAST
As for Jana introducing you, it was to me that she did it.

In Standard Serbian/Croatian/Bosnian/(Montenegrin) the full pronouns never co-occur with pronominal clitics, in Bulgarian they co-occur when not focused (cf. (30) later), while in Macedonian a full pronoun has to be clitic-doubled whenever it occurs (cf. (20) later). The mandatory clitic-doubling of the full pronouns in Macedonian actually contributes to the possibility of co-occurrence of the first and second person pronominal clitics.

3. MACEDONIAN

The South Slavic pronominal clitics are case marked functional categories derived or merged in agreement phrases. Until recently, the Macedonian and Bulgarian pronominal clitics were analyzed as heads of AgrIOP and AgrOP (cf. Rivero 1994, 1997; Dimitrova-Vulchanova 1995; Tomić 1996, 1997, 1999, 2000; Rudin 1997; Franks 1998, 2000; Caink 1999). Bošković (2001), however, analyzes them as non-branching XP/X^0 elements in specifier positions of AgrIOP and AgrOP nodes with empty heads.[7] In both types of analysis, the AgrIOP and AgrOP in which the pronominal clitics are derived would be to the

be in initial position in the Left Periphery, as in (i), but, when *in situ*, it can never be immediately preceded by another personal pronoun, as in (ii).

(i) MENE Petre ti me pretstavi. (Mac)
me.DAT/ACC.CL Petre 2SG.DAT.CL 1SG.ACC.CL introduce.3SG.PERF.PAST
It was me that Petre introduced to you.

(ii) *Petre ti me pretstavi tebe MENE.
Petre 2SG.DAT.CL 1SG.ACC.CL introduce.3SG.PERF.PAST you.2SG.DAT/ACC me.DAT/ACC
purported reading: It was to me that Petre introduced you.

In all of the listed examples the subject can be dropped.

[7]Bošković exploits Chomsky's (1998) proposal of a bare phrase-structure system. A prerequisite for the ambiguous XP/X^0 status of this phrase structure is that it does not branch.

right of TP and to the left of VP. Thus, (4a) would have the structure (4b), and (5a) would have the structure (5b).[8]

(4) a. Ti ja dade knigata.
2SG.DAT.CL 3SG.F.ACC.CL give.3SG.PERF.PAST book+the.F.SG
(S)he gave you the book.

b. [$_{NP}$pro[$_{TP}$[$_{AGRioP}$ti[$_{AGRio'}$[$_{AGRdoP}$ja[$_{AGRdo'}$[$_{VP}$[$_{V}$dade] [$_{NP}$ knigata]]]]]]]]

(5) a. Petre ti ja predloži NEJA.
Petre 2SG.DAT.CL 3SG.F.ACC.CL suggest.3SG.PERF.PASTher
It was her that Petre suggested to you.

b. [$_{NP}$Petre[$_{TP}$[$_{AGRioP}$ti[$_{AGRio'}$[$_{AGRdoP}$ja[$_{AGRdo'}$[$_{VP}$[$_{V}$predloži] [$_{NP}$ neja]]]]]]]]

The pronominal clitics move to TP along with the verb. In the analyses which treat the clitics as heads of agreement nodes, the verb has to right-adjoin to the clitics and 'push' them. In Bošković's analysis, on the other hand, each clitic 'jumps' and left-adjoins to the verb or the verb–clitic complex as soon as the verb moves to the head to its left, so the movement is in line with Kayne's (1994) leftward adjunction system. Being more restrictive, Bošković's analysis is theoretically more appealing, and I am adopting it, though I would like to point to a serious problem, namely, the Macedonian and Bulgarian clitic clusters, which in all current analyses are formed in syntax, in addition to the pronominal clitics include auxiliary, subjunctive and negation clitics, all of which are derived as heads.[9] Thus, the pronominal clitics, which are derived as specifiers, would cluster with items derived as heads.

Clitic-doubling in Macedonian depends on definiteness and specificity, with some exceptions in some dialects, which I will discuss in detail in the sections later. However, before discussing clitic-doubling of objects of various categories, clarification of the notions 'definiteness' and 'specificity' is in order. Following Heusinger (2002), I take definiteness to express uniqueness of items which

[8]In (4) the subject is dropped and the lexical direct object is not focused, whereas in (5) the subject is not dropped and the *in situ* non-clitic pronominal object is focused. As shown in (3), the focused non-clitic pronominal object can alternatively occur in the Left Periphery and can be preceded by a topicalized non-clitic pronominal object. In these cases, the non-clitic pronouns move from the VP to the Left Periphery. The analysis of this movement is, however, beyond the scope of this chapter.

[9]Here is an example of a clitic cluster with a negation clitic, modal clitic, subjunctive clitic, auxiliary clitic, Dat pronominal clitic and Acc pronominal clitic, in this order.

(i) Ti ne ќe da si mu gi
you not.CL will.MOD.CL SUBJ.MARK 2SG.AUX.CL 3SG.M.DAT.CL 3PL.ACC.CL
dala knigite na Petreta. (Mac)
given.F.SG.PART books+the.PL to Petre.ACC
It is not likely that you have given the books to Petre. (lit. You will not to have given the books to Petre.)

are not necessarily identified, while specificity expresses referential dependency between items introduced in the discourse. The specific reading involves a set defined at the NP level by the lexical properties of the nominal head, whereas the non-specific reading involves a set defined at the clause level (cf. Dobrovie-Sorin 1994, p. 225). The specificity of the NPs is actually determined by a mechanism that is partially constrained by the lexicon, by the definiteness of the NP and by a principle that requires quantifiers to be specific (cf. Enç 1991, p. 14). Though the [+specific] versus [–specific] ambiguity is typical for DPs with indefinite articles or determiners, it also occurs with definites.

3.1. Clitic-Doubling of Lexical Direct Objects

In the clitic-doubling of the Macedonian lexical direct objects, definiteness plays a central role. In Standard Macedonian, the Western Macedonian dialect complex[10] and the western part of the Eastern Macedonian dialect complex, all definite lexical direct objects are clitic-doubled, whether human or non-human, animate or inanimate, concrete or abstract and whether *in situ*, as in (6a) or in topic or focus position in the Left Periphery, as in (6b) and (6c).

(6) a. Jana go zaboravi Petka/
Jana 3SG.M.ACC.CL forget.3SG.PERF.PAST Petko.ACC
volkot/ pismoto/ problemot.
wolf+the.M.SG letter+the.NEUT.SG problem+the.M.SG
Jana forgot Petko/the wolf/the letter/the problem.

b. Petka/ volkot/ pismoto/ problemot
Petko.ACC wolf+the.M.SG letter+the.NEUT.SG problem+the.M.SG
go zaboravi Jana.
3SG.M.ACC.CL forget.3SG.PERF.PAST Jana
As for Petko/the wolf/the letter/the problem, Jana forgot it.

c. PETKA/ VOLKOT/ PISMOTO/ problemot
Petko.ACC wolf+the.M.SG letter+the.NEUT.SG problem+the.M.SG
go zaboravi Jana.
3SG.M.ACC.CL forget.3SG.PERF.PAST Jana
It was Petko/the wolf/the letter/the problem that Jana forgot.

In the Northern Macedonian dialects, however, direct as well as indirect lexical objects are only optionally clitic-doubled, whereas in the easternmost dialects of the South-Eastern dialect complex there may be optional dependence of clitic-doubling on discourse factors.

[10]Standard Macedonian was based on the West-Central Macedonian dialects.

Definite DPs are most often specific, but can also be non-specific. Specificity, defined as referential dependence between items introduced in the discourse, plays no role when the direct object is definite, however. The definite direct objects in (6) are both unique and referentially identified, i.e., they are specific definites. The Macedonian definite direct object in (7), on the other hand, can receive a specific or a non-specific interpretation. But, whether specific or not, it is invariably clitic-doubled.

(7) Jana *(go) bara režiserot.
Jana 3SG.M.ACC.CL look-for.3SG movie-director+the.M.SG
1. Jana is looking for the movie-director (namely, for X, who happens to be the movie-director).
2. Jana is looking for the movie-director (whoever he may be).

Indefinite Macedonian lexical direct objects are, as a rule, not clitic-doubled. Thus, in (8), where the direct objects have indefinite articles, the doubling clitics are not accepted, irrespective of whether the objects receive a specific or a non-specific interpretation.

(8) Jana (*go) bara eden slaven režiser.
Jana 3SG.M.ACC.CL look-for.3SG a.M.SG famous.M.SG movie-director
1. Jana is looking for a famous movie-director (she happened to meet the other day).
2. Jana is looking for a famous movie-director (whoever that may be).

With partitive indefinites, however, clitic-doubling of direct objects does involve specificity. As illustrated in (9), when the partitive indefinite direct object is specific, it is clitic-doubled, while when it is non-specific it is not clitic-doubled.

(9) a. Ja omaži edna od ḱerkite.
3SG.F.ACC.CL marry-off.3SG.PERF.PAST a.F.SG of daughters+the.PL
For one of his/her daughters (namely, Ana) (s)he found a husband.
(lit. One of his/her daughters (namely Ana) (s)he married off.)

b. Omaži edna od ḱerkite.
marry-off.3SG.PERF.PAST a.F.SG of daughters+the.PL
For one of his/her daughters (it does not matter which one) (s)he found a husband. (lit. One of his/her daughters (it does not matter which one) (s)he married off.)

But partitives are not true indefinites. As pointed out by von Heusinger (2002), partitives are complex expressions that involve an indefinite choice from a definite set, while on Anagnostopoulou and Giannakidou's (1995) scale of referentiality they are more referential than referential indefinites.

(10) referential indefinites > partitives > weak definites > novel definites > proper names and definite descriptions > definites > demonstratives > anaphoric pronouns.

Specific lexical indefinite direct objects in sentences involving embedded (subjunctive) clauses may also be clitic-doubled.

(11) (Go) nateraa eden čovek da
3SG.M.ACC.CL force.3PL.PERF.PAST a.M.SG man SUBJ.MARK
ja izvadi pločata.
3SG.F.ACC.CL remove.3SG.PERF.PRES boulder+the.F.SG
They forced a (specific) man to remove the boulder.

On the basis of the occurrence of the clitic in an example such as (11), Berent (1980) concludes that it is not definiteness, but rather specificity that is crucial for the clitic-doubling of Macedonian direct objects, and Franks and King (2000, pp. 252–253), referring to Berent's example, arrive at the same conclusion. Nevertheless, as shown by the unacceptability of the clitic in (8), specificity *per se* does not open the door for direct-object clitic-doubling. One might speculate that the subjunctive complement in sentences such as (11) is responsible for a type of specificity different from that in (8),[11] but even if this is the case, clitic-doubling is not obligatory, as it is with definite direct objects. Moreover, as shown by the unacceptability of the clitic in (12), where the noun is non-human, one might have to reckon not only with specificity, but also with humanness.

(12) (*Ja) videle edna krava kako vleguva vo kuќata.
3SG.F.ACC.CL seen.PL.PART a.F.SG cow how enter.3SG in house+the.F.SG
They saw a cow entering the house.

The occurrence of lexical direct objects in the Left Periphery, as a rule, has no effect on clitic-doubling in Standard and Western Macedonian, though in Eastern Macedonian clitic-doubling optionally depends on discourse factors. However, even in the Western Macedonian dialects, while not co-occurring with an Acc clitic when they are to the right of the verb (cf. 13a) or in a focus position in the Left Periphery (cf. 13b), indefinites which could conveniently be labeled 'topicalized indefinites' have to be clitic-doubled when occurring in topic position in the Left Periphery (cf. 13c).

[11]Anagnostopoulou and Giannakidou (1995) point out that, cross-linguistically, it is not always specificity narrowly defined that affects clitic-doubling.

(13) a. (*Go) zapalija edno
3SG.NEUT.ACC.CL set-on-fire.3PL.PERF.PAST a.NEUT.SG
drugo selo.
other.NEUT.SG village
They set on fire another village.

b. EDNO DRUGO SELO (*go)
a.NEUT.SG other.NEUT.SG village 3SG.NEUT.ACC.CL
zapalija.
set-on-fire.3PL.PERF.PAST
It is another village that they set on fire.

c. Edno drugo selo, *(go) zapalija.
a.NEUT.SG other.NEUT.SG village 3SG.NEUT.ACC.CL set-on-fire.3PL.PERF.PAST
As for one other village, they set it on fire.

Bare indefinite direct objects are, as a rule, not clitic-doubled. Thus, the clitic in (14) in not accepted, whatever the type of the noun.

(14) Jana (*go) sretna dete/volk/voz/problem.
Jana 3SG.M/NEUT.ACC.CL meet.3SG.PERF.PAST child/wolf/train/problem
Jana met a child/wolf/train/problem.

3.2. Clitic-Doubling of Lexical Indirect Objects

In Macedonian lexical indirect objects are clitic-doubled not only when definite but also when indefinite but specific.[12] Thus, while nouns determined by definite articles are always clitic-doubled, nouns determined by indefinite articles are clitic-doubled only when specific.[13]

(15) a. Jana mu go dade
Jana 3SG.NEUT.DAT.CL 3SG.NEUT.ACC.CL give.3SG.PERF.PAST
pismoto na deteto/ edno dete.
letter+the.NEUT.SG to child+the.NEUT.SG a.NEUT.SG child
Jana gave the letter to the child/a child (that I know).

[12]Note that in the Northern Macedonian dialects, clitic-doubling is optional, whereas in the easternmost dialects of the South-Eastern dialect complex it may optionally depend on discourse factors.

[13]The co-occurrence of the Dat clitic with indefinite indirect objects may vary from dialect to dialect and from speaker to speaker, but is, in general, much more frequent than the co-occurrence of the Acc clitic with indefinite direct objects.

b. Jana go dade pismoto
Jana 3SG.NEUT.ACC.CL give.3SG.PERF.PAST letter+the.NEUT.SG
na edno dete.
to a.NEUT.SG child
Jana gave the letter to a child (whose identity is not important).

The contrast between clitic-doubled and non-clitic doubled indefinite lexical indirect objects is more evident in the case of the determiner *nekoj* 'some', which can be morphologically marked for non-specificity by the morpheme *-si*.[14] When *-si* is present, the clitic is not accepted.

(16) Jana (*mu) go dala
Jana 3SG.NEUT.DAT.CL 3SG.NEUT.ACC.CL given.PART.F.SG
pismoto na nekoe-si dete.
letter+the.NEUT.SG to some.NEUT.SG.NON-SPEC child
Jana has given the letter to some child (whoever that may be).

Indirect lexical objects with definite determiners can also be clitic-doubled depending on specificity. Thus, the specific indefinite object in (17a) is clitic-doubled, while the non-specific indefinite object in (17b) is not.[15]

(17) a. Sakam da mu dadam
want.1SG SUBJ.MARK SG.M.DAT.CL give.1SG.PERF.PRES
cveќe na našiot najslaven režiser.
flower to our+the.M.SG SUPERL.MARK+famous movie-director
I want to give flowers to our most famous movie-director (namely to Milčo).

b. Sakam da dadam cveќe na
want.1SG SUBJ.MARK give.1SG.PERF.PRES flower to
našiot najslaven režiser.
our+the.M.SG SUPERL.MARK+famous movie-director
I want to give flowers to our most famous movie-director (whoever it is).

In the Western Macedonian dialects, however, the specificity effect does not always hold and the clitic can optionally be left out, even when the definite indirect object is obviously specific.

[14]The determiner *nekoj* inflects for gender and number and has the following forms: *nekoj* 'some.M.SG', *nekoja* 'some.F.SG', *nekoe* 'some.NEUT.SG', *nekoi* 'some.PL'.

[15]Note that direct object definites are always clitic-doubled. Thus, (i) is unacceptable, whether the object is specific or not.

(i) *Sakam da vidam našiot najslaven režiser. (Mac)
want.1SG SUBJ.MARK see.1SG.PERF.PRES our+the.M.SG SUPERL.MARK+famous movie-director
intended reading: 'I want to see our most famous movie-director.

(18) (Im) davam knigi na decava (WMac)
3PL.DAT.CL give.1SG books to children+the.PL.PROX1
I am giving books to these children.

Bare indefinite indirect objects, which may never be specific, can in these dialects also be optionally clitic-doubled.

(19) Jana (mu) go dade (WMac)
Jana 3SG.M.DAT.CL 3SG.NEUT.ACC.CL give.3SG.PERF.PAST
pismoto na dete.
letter+the.NEUT.SG to child
Jana gave the letter to a (mere) child.

The fact that the specificity effect does not always hold in clitic-doubling of indirect objects indicates that the Macedonian dative clitics are close to becoming mere case markers.

3.3. Clitic-Doubling of Personal Pronouns

The Macedonian personal pronouns that realize direct or indirect objects are always clitic-doubled. As a matter of fact, these pronouns refer to definite objects and behave as such.

In non-emphatic environments, personal pronouns are dropped in subject position, while in direct and indirect object position they are represented by dative or accusative pronominal clitics.

(20) a. Go vide.
3SG.M/NEUT.ACC.CL see.3SG.PERF.PAST
(S)he saw him/it.

b. Mu go dade.
3SG.M.DAT.CL 3SG.NEUT.ACC.CL give.3SG.PERF.PAST
(S)he gave it to him.

In emphatic environments, however, non-clitic personal pronominal objects occur.[16] As observed in (21) and (22), these objects are clitic-doubled not only

[16]The following forms may occur in direct or indirect object position: *mene* '1SG.DAT/ACC', *tebe* '2SG.DAT/ACC', *nemu* '3SG.M.DAT', *nego* '3SG.M.ACC' *nejze* '3SG.F.DAT' *neja* '3SG.F.ACC', *nam* '1PL.DAT', *nas* '1PL.ACC', *vam* '2PL.DAT', *vas* '2PL.ACC', *nim* '3PL.DAT', *niv* '3PL.ACC'. Note, however, that not all forms are used in all dialects. In the Eastern Macedonian dialects, the Dat forms are non-existent, indirect objects being represented by accusative forms preceded by the preposition *na* 'to'. In the South-Western dialects, on the other hand, the first and second person plural accusative forms, the third person feminine singular dative form, and the third person plural dative form are used in both direct and indirect object positions.

when occurring to the right of a focused verb, but also when appearing in focus position *in situ* or in the Left Periphery.

(21) a. Go VIDE nego.
3SG.M.ACC.CL see.3SG.PERF.PAST him.ACC
(S)he did see him.

b. Go vide NEGO.
3SG.M.ACC.CL see.3SG.PERF.PAST him.ACC
It is him (s)he saw.

c. NEGO go vide.
him.ACC 3SG.M.ACC.CL see.3SG.PERF.PAST
It is him (s)he saw.

(22) a. Petre mu go DADE
Petre 3SG.M.DAT.CL 3SG.M.ACC.CL give.3SG.PERF.PAST
proektot nemu.
project+the.M.SG him.DAT
Petre did give the project to him.

b. Petre mu go dade
Petre 3SG.M.DAT.CL 3SG.M.ACC.CL give.3SG.PERF.PAST
proektot NEMU.
project+the.M.SG him.DAT
It is to him that Petre gave the project.

c. NEMU Petre mu go dade
him.DAT Petre 3SG.M.DAT.CL 3SG.M.ACC.CL give.3SG.PERF.PAST
proektot.
project+the.M.SG
It is to him that Petre gave the project.

3.4. Clitic-Doubling of 'wh'-Words

Macedonian has an inflecting 'wh' pronoun, *koj* 'who', and a formally analogous inflecting 'wh' modifier *koj* 'which', which occur in direct or indirect object position and whose clitic-doubling is contingent on specificity.[17] The pronoun

[17]The pronoun *koj* 'who' is [+human], inflects for case and has the forms *koj* 'who.NOM', *kogo* 'who.ACC', *komu* 'who.DAT'. The modifier *koj* 'which' does not have any restriction on humanness; it inflects for gender and number and has the forms: *koj* 'which.M.SG', *koja* 'which.F.SG', *koe* 'which.NEUT.SG', *koi* 'which.PL'.

Note that, in addition to *koj* 'who/which', Macedonian has three inflecting 'wh' words — *kakov* 'what kind', *kolkav* 'what size' and *čij* 'whose', and an invariant 'wh' word, *što* 'what'. These 'wh' words are always non-specific and do not co-occur with a doubling clitic.

koj 'who' can refer to a specific or to a non-specific person and is clitic-doubled when specific.[18]

(23) a. Kogo vide?
whom.ACC see.2/3SG.PERF.PAST
Who did you/(s)he see?

b. Kogo go vide?
whom.ACC 3SG.M.ACC.CL see.2/3SG.PERF.PAST
Who (of the persons we know) did you/(s)he see?

(24) a. Komu dade podarok?
whom.DAT give.2/3SG.PERF.PAST gift
To whom did you/(s)he give a present?

b. Komu mu dade podarok?
whom 3SG.M.ACC.CL see.2/3SG.PERF.PAST gift
To whom (of the persons we know) did you/(s)he give a present?

The modifier *koj* 'which', on the other hand, always specifies the noun that it modifies and co-occurs with a doubling clitic obligatorily.

(25) Na koj student *(mu) dade
to which.M.SG student 3SG.M.DAT.CL give.2/3SG.PERF.PAST
desetka?
ten.NOUN
To which student (of the students we have) did you/(s)he give a ten?

4. BULGARIAN

Like their Macedonian counterparts, the Bulgarian pronominal clitics are functional categories derived or merged in AgrIOP and AgrOP, to the right of TP and to the left of VP and, following Bošković (2001), are best analyzed as non-branching XP/X^0 elements in specifier positions.[19] In Bulgarian, however, clitic-doubling substantially depends on discourse factors. In Western Bulgarian,

[18]As pointed out earlier, I take specificity to express referential dependence between items introduced in the discourse. With lexical NPs the specific reading involves a set defined by the lexical properties of the nominal head, whereas the non-specific reading involves a set defined at the clause level. With 'wh' pronouns such as those in (23)–(24), however, specificity can hardly be distinguished from D-linking.

[19]The phonological behaviour of the Bulgarian clausal clitics differs from that of their Macedonian counterparts. While the Macedonian clausal clitics are both syntactically and phonologically pre-verbal, the Bulgarian clausal clitics are syntactically pre-verbal, but always cliticize to their left and cannot appear in clause-initial position. The phonological behavior of the pronominal clitics is, however, irrelevant in a discussion of clitic-doubling.

and to a very limited extent in Standard Bulgarian, clitic-doubling of *in situ* objects may be allowed, though clitic-doubling of topicalized objects is strongly preferred. In the Eastern Bulgarian dialects, on which Standard Bulgarian is based, the clitic-doubled objects have to be in the Left Periphery. Clitic-doubling of indirect objects has an additional restriction in all dialects; Bulgarian indirect objects are clitic-doubled only if they occur in complex clauses in which the predicate includes a modifier or a complement.

By analogy with analyses of co-occurrences of clitics with objects in the Left Periphery in Romance (cf. Cinque 1984, 1990), the occurrence of the Balkan topicalized objects in the Left Periphery have been referred to as 'clitic left-dislocation (CLLD)' (cf. Iatridou 1990; Anagnostopoulou 1994; Arnaudova 2003). In my analysis, however, all direct and indirect objects that co-occur with pronominal clitics are referred to as 'clitic-doubled objects', the so-called CLLDs being treated as clitic-doubled topicalized objects in the Left Periphery (cf. chapter 4 in Tomić 2006).[20]

4.1. Clitic-Doubling of Lexical Objects

In all the Bulgarian dialects clitic-doubling of both direct and indirect lexical objects depends on discourse factors and to some extent on definiteness. As illustrated in (26), definite Bulgarian topicalized objects are clitic-doubled whether specific or not.[21]

(26) a. Ivan Marija go vidja.
Ivan Marija 3SG.M.ACC.CL see.3SG.AOR
Speaking of Ivan, Marija saw him.

b. Na Marija, apartamenta ne í xaresva.
to Marija apartment+the.F.SG not 3SG.F.DAT.CL like.3SG
As for Maria, she doesn't like the apartment.

c. Pismata Marija vinagi gi prašta
letters+the.PL Marija always 3PL.ACC.CL send.3SG
na vreme.
on time
Speaking of the letters/As for the letters, Marija always mails them on time.

There can be multiple topicalizations of definite lexical direct and indirect objects, each of which is clitic-doubled. Arnaudova (2003, pp. 175–176) gives the following example.

[20]Note that not all topicalized objects are clitic-doubled.

[21]In (26a) we have a specific definite topicalized direct object; in (26b) a specific definite topicalized indirect object; in (26c) a non-specific definite topicalized direct object. The examples are from Arnaudova (2003, p. 163), but I have also checked them with Iliyana Krapova.

(27) Az učebnika na Stojan mu go dadox.
I textbook+the.M.SG to Stojan 3SG.M.DAT.CL 3SG.M.ACC.CL give.3SG.AOR
As for me, I gave the texbook to Stojan.

In the Western Bulgarian dialects, and to some extent in Standard Bulgarian, not only definite lexical objects in the Left Periphery but also post-verbal definite direct or indirect lexical objects can be clitic-doubled.[22]

(28) a. Ivan gi ostavi tezi pari. (WBul)
Ivan 3PL.ACC.CL leave.3SG.AOR these money
As for that money, Ivan left it.

b. Dadox mu go az učebnika
give.1SG.AOR 3SG.M.DAT.CL 3SG.M.ACC.CL I textbook+the.M.SG
na Stojan.
to Stojan
I did give the book to Stojan.

Indefinite (articled) topicalized direct or indirect objects are, as a rule, clitic-doubled only in sentences including adjuncts or embedded subjunctive clauses. As we see, clitic-doubling is allowed in (29a), where we have an adjunct, and (30), where we have an embedded subjunctive clause, whereas the simple sentence in (29b) is not acceptable, whether with or without the doubling clitic.

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[22]Example (28a) is from Arnaudova (2003, p. 176), example (28b), from Arnaudova (2003, p. 87). Arnaudova (2003, Section 8) refers to the latter example as 'clitic right-dislocation'. In all such examples the VP is focused, and Arnaudova argues that they represent information predicated of the "subject of predication", which is removed from the domain of the focus projection and right-dislocated.

Arnaudova (2003, p. 176) provides an example of an *in situ* direct object with an indefinite article that is clitic-doubled.

(i) Vidjaxa go edin učebnik.
see.3PL.AOR 3SG.M.ACC.CL a.M.SG textbook+the.M.SG
They did see a textbook.

According to Petja Asenova (p.c.), however, the clitic-doubling of direct objects that do not carry definite articles, whether the nouns precede the verb, i.e., occur in the Left Periphery, as in (28a), or are post-verbal, as in (i), is 'legitimate' only in 'utterances expressing habitual actions', such as (ii).

(ii) Jana go čete edno pismo po tri časa.
Jana 3SG.M.ACC.CL read.3SG.M.SG a.NEUT.SG letter DISTR three hours
Jana spends three hours reading a letter.

Note, however, that the sentence in (ii) includes an adjunct, which may be the reason why Asenova allows the clitic-doubling (see later). In any case, Asenova seems to be much less 'permissive' than Arnaudova, which shows that there is not only dialectal but also idiolectal variation in clitic-doubling in Bulgarian.

(29) a. Edin paket go izgubixa po pogreška.
a.M.SG parcel.M 3SG.M.ACC.CL lose.3PL.AOR by mistake
As to a parcel, they lost it by mistake.

b. *Edin paket (go) izgubixa.
a.M.SG parcel.M 3SG.M.ACC.CL lose.3PL.AOR
purported reading: As to a parcel, they lost it.

(30) Na edna moja prijatelka, brat mi í
to a.F.SG my.F.SG friend.F brother 1SG.DAT.CL 3SG.F.DAT.CL
pomogna da si kupi apartament.
help.3SG.AOR SUBJ.MARK.CL DAT.REFL.CL buy.3SG.PERF.PRES apartment
As to a friend of mine, my brother helped her to buy an apartment for herself.

Bare direct or indirect objects are, as a rule, not clitic-doubled, though they can be topicalized (cf. 31a), just as they can be focused (cf. 31b).

(31) a. Pismo (*go) vidja ANI.
letter 3SG.NEUT.ACC.CL see.3SG.AOR Ani
As for a letter, Ani saw it.

b. PISMO (*go) vidja Ani, (ne kartička).
letter 3SG.NEUT.ACC.CL see.3SG.AOR Ani not postcard
It was a letter that Ani saw (not a postcard).

In generic clauses, the bare NP can, however, optionally be clitic-doubled.

(32) Na kuče treva ne (mu) se dava.
to dog grass not 3SG.M.ACC.CL ACC.REFL.CL give.3SG
As for dogs, one should not give them grass.

4.2. Clitic-Doubling of Personal Pronouns

The Bulgarian non-clitic personal pronouns are clitic-doubled only when non-focused, thus differing from their Macedonian counterparts and resembling the clitic-doubling behavior of the pronouns of Modern Greek — a non-Slavic Balkan language.[23] As illustrated in (33), the doubling clitic is acceptable

[23] Note that in Romanian, a Balkan language in which all strong DPs/NPs are clitic-doubled, the conditions of clitic-doubling of personal pronouns resemble that of Macedonian. As seen in (i), the presence of the doubling clitic to the left of the personal pronoun is obligatory. (The example is from Tomić 2006, p. 285.)

(i) Am văzut *(o) pe ea. (Rom)
have.1SG.CL seen.PAST.PART 3SG.F.ACC.CL ACC.MARK her.ACC
I've seen her.

when the non-clitic personal pronoun appears to the right of a focused verb, but not when it occurs in a focused position itself.[24]

(33) a. POKAZAX mu go na nego.
show.1SG.AOR 3SG.M.DAT.CL 3SG.NEUT.ACC.CL to him
I did show it to him.

b. Pokazax (*mu) go NA NEGO.
show.1SG.AOR 3SG.M.DAT.CL 3SG.NEUT.ACC.CL to him.DAT
It is to him that I showed it.

c. NA NEGO (*mu) go pokazax.
to him.DAT 3SG.M.DAT.CL 3SG.NEUT.ACC.CL show.1SG.AOR
it is to him that I showed it.

Personal pronouns in impersonal constructions are never focused and are always clitic-doubled:

(34) a. NJAMA go nego văv spisăka.
not+have.IMPERS 3SG.M.ACC.CL him in list+the.M.SG
He is not (to be found) on the list.

b. Nego go NJAMA văv spisăka.
him 3SG.M.ACC.CL not+have.IMPERS in list+the.M.SG
As for him, he is not (to be found) on the list.

4.3. Clitic-Doubling of 'wh'-Words

Forms of the "wh" pronoun *koj* 'who' and the "wh" modifier *koj* 'which' can optionally be clitic-doubled if specific.[25]

(35) a. Na kogo (gi) dade cvetjata?
to who.M.SG.ACC 3PL.ACC.CL give.3SG.AOR flowers+the.PL
To whom (of the persons we know) did you give the flowers?

[24]The examples have been checked with Olga Arnaudova, Iliyana Krapova and Olga Mladenova.

[25]The 'wh' pronoun *koj* 'which' inflects for gender and number and in the case of masculine nouns for case, so that we have the forms *koj* 'who.M.SG.NOM', *kogo* 'who.M.SG.ACC', *koja* 'who.F.SG', *koe* 'who.NEUT.SG', *koi* 'who.PL'. The 'wh' modifier *koj* 'which', however, inflects only for gender and number.

Note that for Krapova (p.c.), an interrogative clause with two doubling clitics, such as (i), is not acceptable.

(i) *Na kogo mu gi dade cvetjata? (Bul)
to whom 3SG.M.DAT.CL 3PL.ACC.CL give.3SG.AOR flowers+the.PL
intended reading: To whom (of the persons we know) did you give the flowers?

b. Na koj student (mu)
to which.M.SG.NOM student 3SG.M.DAT
pisa petica?
write.3SG.AOR five.NOUN
To which (of the students you have) did you give a five?'

5. STANDARD SERBIAN/CROATIAN/BOSNIAN/(MONTENEGRIN)

Standard Serbian/Croatian/Bosnian/(Montenegrin) are languages with morphologically distinct genitive (Gen), dative (Dat), accusative (Acc), vocative (Voc), instrumental (Instr) and locative (Loc) case forms for all nominal and pronominal types and pronominal clitics that originate in the VP but move to what is referred to as the 'second position' in the clause.[26] The pronominal clitics, as a rule, do not double direct or indirect objects. However, direct objects featuring definite animate NPs[27] *can* be clitic-doubled if they occur in clauses in which the proximate and distant deictics *evo* 'here' and *eno* 'there' function as verbs. As a matter of fact, the direct objects of the deictics *evo* 'here' and *eno* 'there', functioning as verbs, can occur not only in the Acc, but also in the Nom case. As observed in (36), there is a mismatch between the object with a Nom and the one with an Acc morphological case: when the lexical direct object is in the Nom case, it is clitic-doubled, when it is in the Acc case it is not.

(36) a. Eno ga Petar/ tvoj
there.DIST.DEICT 2SG.M.ACC.CL Petar.NOM your.2Sg
brat/ vuk. (StS/C/B/(M))
brother.NOM wolf.NOM

b. Eno Petra/ tvog brata/ vuka.
there.DIST.DEICT Petar.ACC your.2SG.ACC brother.ACC wolf.ACC
There is Petar/your brother/the wolf.

While in standard Serbian/Croatian/Bosnian/(Montenegrin) direct objects of deictics in either the Nom or the Acc are allowed, individual dialects show preference for one of the two alternatives.

[26]The second position clitics are Dat or Acc complements that move to the immediate right of an initial element in the clause. For most analysts (Wilder and Ćavar 1994; Franks and Progovac 1995; Progovac 1996, 1998, 1999, 2000; Tomić 1996; Rivero 1997; Franks 1998, 2000) the 'initial' element is a CP-initial word or phrase, if a CP is projected, or an IP-initial word or phrase, if no CP is projected. Radanović-Kocić (1996) and Bošković (2000, 2001), however, argue that it is an initial word or phrase after an intonation boundary. While for Radanović-Kocić, the clitics move in phonology, Bošković (2001), argues that movements of clitics take place in syntax and phonology plays only a passive filtering role by 'selecting' outputs of syntax, i.e., by ruling out certain syntactically well-formed sentences, due to violations of phonological requirements on clitics.

[27]In S/C/B/(M) definiteness is not denoted by articles.

6. THE SOUTH-EASTERN SERBIAN DIALECTS

In the South-Eastern Serbian dialects, clitic-doubling does occur, though not equally throughout the territory. Indirect lexical objects are optionally clitic-doubled throughout the South-Eastern Serbian speaking area, whereas in the eastern periphery of the South-Eastern Serbian dialects, both definite and indefinite lexical direct objects can optionally be clitic-doubled by Acc or Dat pronominal clitics, which, like the pronominal clitics in Standard Serbian, originate in the VP but move to 'second position'.

6.1. Clitic-Doubling of Lexical Objects

In the western periphery of the South-Eastern Serbian dialects, direct objects are not clitic-doubled, while indirect objects very often are. The following examples are from the dialect of Prizren.[28]

(37) a. A mojemu mužu došlo mu
and my.DAT husband.DAT come.NEUT.SG.PART 3SG.M.DAT.CL
da kreči.
SUBJ.MARK.CL whitewash.3SG
And my husband wants to whitewash (the walls). (lit. And to my husband it occurred that he should whitewash.)

b. Ja gi vikam ženama.
I 3PL.DAT/ACC.CL say.1SG women.DAT
I am saying to the women.

In the eastern periphery of the South-Eastern Serbian dialects, both direct and indirect objects may be optionally clitic-doubled. Comparing (38a) to (38b) we see that the direct object may be clitic-doubled only when it has a definite article,[29] while comparing (39a) to (39b) we see that the indirect object may be clitic-doubled when it has a specific interpretation.

(38) a. Nesăm (ga) videl ovčaratoga.
not+ be.1SG.CL 3SG.M.ACC.CL seen.M.SG.PART shepherd+the.M.SG
I haven't seen the shepherd.

[28]The examples are from Topolinjska (2001, p. 216), who has taken them from Remetić (1996). (Glosses and translation are mine.) Note that, in this dialect, the Dat case suffix, which has disappeared from most of the South-Eastern Serbian dialects, is also viable. Both the Dat case suffix and the clitic doubling of indirect objects is presumably due to contact with Albanian, where the Dat case is regularly distinctly morphologically marked and indirect objects are, as a rule, clitic-doubled.

[29]The definite articles in these dialects make triple spacial distinctions and have Acc forms distinct from the Nom ones.

b. Nesăm (*ga) videl ovčara.
not+ be.1Sg.CL 3SG.M.ACC.CL seen.M.SG.PART shepherd.ACC
I haven't seen a shepherd.

(39) a. Dala săm (mu) cveće na šefa/ jedno dete.
given.F.Sg.Part be.1Sg.CL 3SG.M.DAT.CL flowers to chief.ACC a.NEUT.SG child
I gave flowers to the chief (namely to X, who happens to be the chief)/to a child (that can be identified).

b. Dala săm (*mu) cveće na šefa/ jedno dete.
given.F.SG.PART be.1SG.CL 3SG.M.DAT.CL flowers to chief.ACC a.NEUT.SG child
I gave flowers to the chief (whoever that may be)/to a child (whose identity is not important).

The occurrence of the object in the Left Periphery does not play any role in clitic-doubling of indirect or direct objects in the South-Eastern Serbian dialects. Thus, both the topicalized NP in (39a) and the non-topicalized NP in (39b) are clitic-doubled. As shown in (40), on the other hand, even the clitic-doubling of topicalized NPs is optional.

(40) Na deteto knjigu (mu) dade Jana, a ne Petar.
to child+the.NEUT.SG book 3SG.M.DAT.CL give.3SG.AOR Jana and not Petar
It is Jana who gave a book to the child, not Petar.

6.2. Clitic-Doubling of Pronouns

In all the South-Eastern Serbian dialects, personal pronouns are clitic-doubled, whether in the Left Periphery, as in (41a), or *in situ*, as in (41b), while 'wh' pronouns, as shown in (42), are optionally clitic-doubled if specific.

(41) a. Mene *(me) je zemnja pritisnula.
me.ACC 1Sg.ACC.CL be.3Sg.CL land pressed.F.SG.PART
I have to till the soil. (lit. The land has pressed me.)

b. Vikaše *(ni) nas.
call.3SG.IMPERF 1PL.ACC.CL us
(S)he was calling us.

(42) Na kogo (mu) (ju) dade knjigu(tu)?
to whom 3SG.M.DAT.CL 3SG.F.ACC.CL give.2/3.AOR book+the.F.Sg.ACC
To whom (specifically) did you/(s)he give the book?

7. CONCLUSIONS

Clitic-doubling in South Slavic varies along a vertical north–south and a horizontal east–west axis in the South Slavic dialectal continuum. Whereas along the north–south axis there is variation with respect to the categories that can be clitic-doubled, along the west–east axis there is variation in dependence of clitic-doubling on discourse factors.

As one moves from the north to the south in the South Slavic dialectal continuum, the types of objects that can be clitic-doubled increase in direct proportion to loss of case inflections. In Standard Serbian/Croatian/Bosnian/(Montenegrin), where there are paradigms with distinct genitive, dative, accusative, vocative, instrumental and locative case forms for all nominal and pronominal types, only the non-inflecting direct objects of the deictics 'here' and 'there' are clitic-doubled. In the South-Eastern Serbian dialects, to the north of the Macedonian dialects and to the east of the Bulgarian ones, where merely accusative and partly dative nominal cases occur, clitic-doubling of nominal and pronominal direct and indirect objects is possible. In Bulgarian and Macedonian, where nominal cases are practically non-existent, clitic-doubling of all types of objects is possible, though under different conditions. Variation of clitic-doubling along the north–south axis is represented in Table 3.

(43)

Table 3: Variation of clitic-doubling of objects of various categories.

Category		Language			
		St-S/C/B/(M)	Se-Serb	Bul	Mac
lexical DO	def	yes*	yes^{Opt}	yes^{PredTop}	yes^{Obl}
	indef	no	no	no	yes^{OptExPos}
	bare	—	no	no	no
lexical IO	def	no	yes^{Opt}	yes^{PredomTop}	yes^{Obl}
	indef [+spec]	no	yes^{Opt}	yes^{ExPos}	yes^{Obl}
	indef [−spec]	no	no	no	no
	bare	—	no	no	yes^{ExDPos}
personal pronoun as DO/IO		no	yes^{Obl}	yes^{Top}	yes^{Obl}
wh word [+spec] as DO/IO [−spec]		no	yes^{Opt}	yes^{Top}	yes^{Obl}
		no	no	no	no

Notes: ExDPos, exceptional dialectal possibility in the Western Macedonian dialects; ExPos, exceptional possibility with topicalized objects in sentences involving embedded subjunctive clauses or adjuncts; Obl, obligatory; Opt, optional; OptExPos, optional exceptional possibility in sentences involving embedded subjunctive clauses; PredomTop, predominately when topicalized. There are dialectal differences, which are illustrated in Table 4; Top, when topicalized.

As one moves from the west to the east in the South Slavic dialectal continuum, the role of discourse factors in clitic-doubling increases and culminates in its easternmost part of the territory. In standard Serbian/Croatian/Bosnian/

(Montenegrin), the South-Eastern Serbian dialects, Standard Macedonian, the Western Macedonian dialects, and the western part of the dialects of the South-Eastern Macedonian dialect complex, discourse factors play no role in clitic-doubling. In the easternmost dialects of the South-Eastern Macedonian dialect complex, adjoining the Western Bulgarian dialects, discourse-linking is optionally possible. In the Western Bulgarian dialects, and to some extent in Standard Bulgarian, clitic-doubling of direct or indirect objects that are not discourse-linked is possible, though discourse factors predominate, while in the Eastern Bulgarian dialects we have total dependence of clitic-doubling on discourse factors. Variation of clitic-doubling along the east–west axis is presented in Table 4.

(44)

Table 4: Variation in dependence of clitic-doubling on discourse factors.

Dialect	Dependence on discourse factors
Standard S/C/B/(M)	no
South-Eastern Serbian	no
Standard Macedonian	no
Western Macedonian	no
Standard Macedonian	no
Eastern Macedonian	yes$^{\text{Opt}}$
Western Bulgarian	yes$^{\text{Predom}}$
Standard Bulgarian	yes$^{\text{StrPredom}}$
Eastern Bulgarian	yes$^{\text{Tot}}$

Notes: Opt, optionally possible. Clitic-doubling of *in situ* objects is at least as frequent as clitic-doubling of topicalized objects; Predom, predominant; Clitic-doubling of *in situ* objects is possible, though clitic-doubling of topicalized objects predominates; StrPredom, strongly to predominant; Clitic-doubling of *in situ* objects is possible, though clitic-doubling of topicalized objects strongly predominates; Tot, total. There is no clitic-doubling of *in situ* objects.

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