

Null subjects in OI

1. Introduction

In this work I intend to analyze the complex distribution of null subjects in Old Florentine of the XIII century, which, following the tradition of the “Grammatica dell’italiano antico” (Grammar of Old Italian), I will refer to as Old Italian (OI) from now on. The reason why I will limit my investigation to this period is that there are well founded reasons (see Franco et alii (2016)) to believe that after the turn of the XIV century the original V2 system is destabilized and data might be even more difficult to interpret than the already rather complex ones I will present here. I will therefore rather take one single system, the one of the XIII century and examine it in detail. The set of examples I will use comes from the online data base of the OVI (opera del vocabolario italiano) and from a new data base on Old Italian under construction at the university of Frankfurt as well as from manual screening of the data.

The main theoretical question I would like to answer is the following: which are the factors that rule the distribution of null and lexical pronominal subjects in OI? The system has clearly changed, since, as originally noted by Benincá et alii (1984) OI allows for embedded lexical subject pronouns which are clearly coreferential with the subject of the main clause in cases in which modern Italian definitely only allows for a pro:

- (1) E così ne provò _ de’ più cari ch’elli avea. (oFlor.; Testi fiorentini,74)
and so of-it tested3sg _ of-the most dear that-he had
“So he tested some of the best friends he had.”

On the other hand, it is also interesting to note that the opposite is also true: in OI there exist some cases of embedded null subjects are not really interpretable/felicitous in modern Italian:

- (2) E [la gente d’oltremare] i vuol gran male [a’ Romani] j perché Øi fur già segnoreggiati
and the people of overseas wants great evil to.the Romans since were already dominated
da loro, e Øj fecero loro dura e aspra signoria
by them and did.3pl them hard and harsh rule
‘The people from overseas hates the Romans because they have been ruled by those, and the Romans ruled in a hard and harsh way’ (VeV 100)

I provide here the entire context in order to show that the null subject of the embedded clause is coreferent with the subject of the matrix clause, *la gente d’oltremare* ‘people from oversea’ while the null subject of the second clause starting with *e*, which is probably an independent matrix clause, is coreferent with the dative *a Romani*, an interpretation which is excluded in Modern Italian unless a full pronoun appears signalling the change of topic. Following the work by Frascarelli (2007), I will interpret cases of this type (see Poletto (2014) for a more detailed discussion) as null Shift Topics binding the pro subject.

Example (2) shows that in OI it is possible to license a shift null topic in the left periphery of the clause which binds the pro subject, while in Modern Italian this type of Topic has to be phonetically realized in the left periphery of the clause either as a DP or as a lexical full pronoun, as Frascarelli (2007) shows. Furthermore, OI is different from modern Italian with respect to the realization of personal pronouns also in main clauses. Sentences like (3) display a subject pronoun which would sound rather superfluous in modern Italian since the addressee has just been mentioned:

- (3) E tu Satanas inimico di Dio rimarra’ti tu mai di trovar novità
and you Satan enemy of God will.remain.2sg you never of find.inf novelty
per torre a Dio l’anime delli uomini...?

to take.inf from God the souls of.the men
'And you, Satan, God's enemy, will you ever stop searching for new ways to take
men's souls from God?' (VeV 81)

The hypothesis I will put forth in this work is that the distribution of null subjects in OI cannot be completely understood without making reference to the two additional factors illustrated in (2) and (3), i.e. the types of null topics that were possible in OI (and are not possible in modern Italian) and the distribution of lexical full pronouns.

The problem is thus more complex than simply assuming that OI had a different pro drop system with respect to modern Italian, which is definitely true, but not enough. To provide a general explanation we also need to consider the occurrence of lexical pronouns and their formal properties. In this work I will try to identify the factors that control the occurrence of a null subject or a lexical pronoun in main and embedded clauses. I will show that it is not possible to explain the distribution of null and lexical subjects in OI without distinguishing between at least two types of licensing of null subjects, in a vein that has recently been productively exploited for the Germanic languages (see Volodina and Weiß 2016). In addition to this, I will also put forth that the formal properties of lexical pronouns are different from those of the modern tonic pronouns: in OI lexical subject pronouns could spell out a smaller portion of syntactic structure leaving out left peripheral features like Topic and Focus that are nowadays obligatorily present in tonic pronouns. This will account for the complex distribution of null subjects as well as for the distribution of lexical pronouns.

2. What type of null subject had OI?

The phenomenon of pro drop has been traditionally tied to the property of verb second in Old French (OF) since Adam's work in 1987, since pro drop is mainly found in main clauses and rather rare in embedded clauses, and when it occurs in embedded clauses, these are mainly contexts in which we might suppose embedded V2 to have occurred, like sentences embedded under bridge verbs or sentences introduced by the element which is the equivalent of German *weil*, which also allows for embedded V2 in the spoken language under specific discourse conditions. This state of affairs led Roberts (1993) Vance (1997) and more recently Zimmermann (2012) among others to assume that pro drop is only licensed by V to C in OF. Zimmermann (2012) states that OF was not a null subject language, but actually shows with a detailed quantitative analysis that the distribution of null subjects is exactly the one already noted in Adams (1987), i.e. OF indeed displays a robust main/embedded asymmetry. Abstracting away from the label we want to give to this phenomenon, there is general consensus on the fact that OF null subjects are different from those of "standard" pro drop languages like modern Spanish or modern Italian. Since V2 triggered null subjects, French developed into a non-null subject language since it lost V2. As for Old Italian (OI), Renzi, Vanelli and Benincá (1984) already noted a higher rate of lexical pronouns in embedded clauses and made the hypothesis that this might be tied to the V2 property of OI. Since Italian developed into a null subject language, OI is the perfect counterpart to OF¹ and it is interesting to consider how it developed in order to understand what factors brought to the split between the two languages. Benincá (2006:16) formalizes her previous work proposing that the asymmetric nature of pro drop for both OF and OI is a direct indication of the V2 character of these

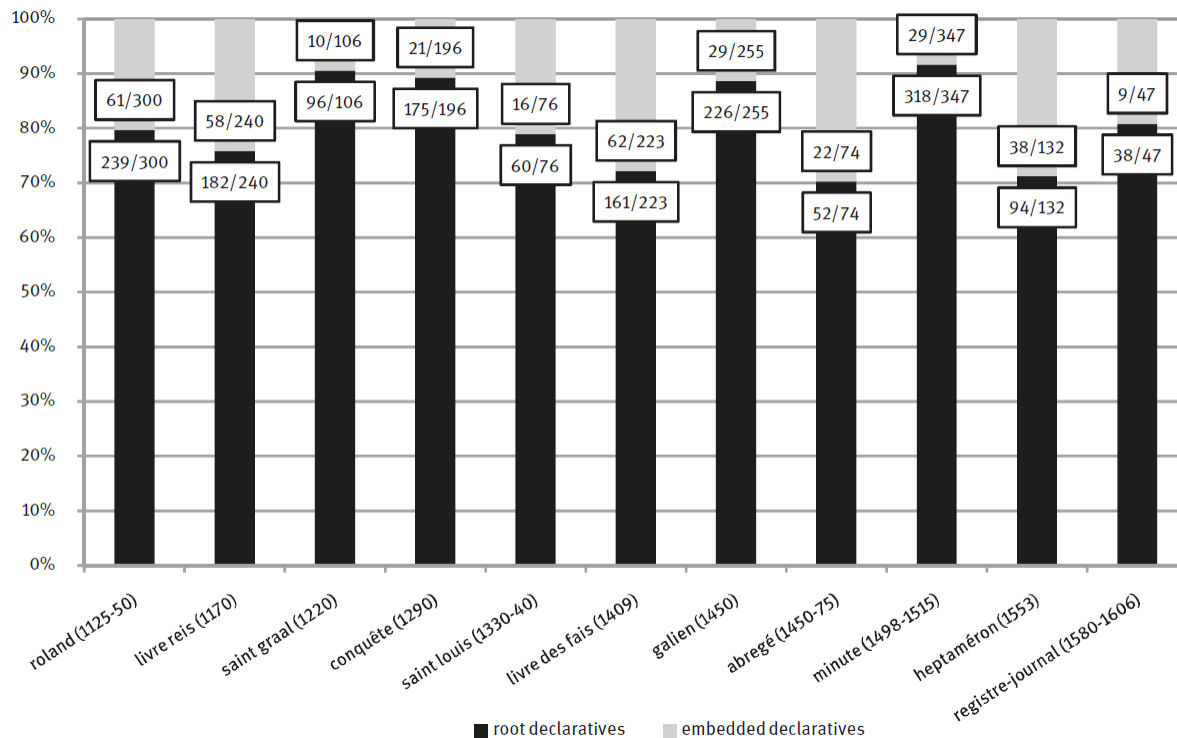
¹ The perfect counterpart of French are actually Northern Italian dialects, since asymmetric pro drop corresponds to the languages that have developed subject clitics, i.e. to the Celtic areas (with the addition of Liguria and Veneto). See Poletto (in preparation) for a detailed examination of the distribution of null and lexical subjects in Old Veneto.

languages. She assumes that *pro* can only be licensed in a government configuration when the inflected verb raises to C, i.e. higher than the preverbal subject position. Beninca' provides some cases in which there is a null subject in the main clause but the following embedded clause displays a lexical pronoun of the type quoted above and argues as follows: "This asymmetry can be taken as evidence for V movement to C° in main clauses, by making the following hypothesis. When the inflected verb moves to C (as it does in main clauses), it locally governs the subject position, so it transmits its features to *pro* and licenses it as a subject; but when the verb doesn't raise to C (as is typically the case in subordinate clauses), it cannot license *pro* as a subject. This hypothesis accounts for the asymmetry of *pro*-drop, as V movement to C° is primarily a root phenomenon." Beninca' is perfectly aware of the fact that the asymmetry between main and embedded clauses in OI is not as clear-cut as one might want it to be, actually much less neat than the one Adams originally found in her investigation of OF and assumes that the cases of *pro* drop in embedded clauses are to be explained by V to C in embedded contexts, a well-known phenomenon also in modern V2 languages of the Germanic family. She argues that V to C is actually systematically blocked only in embedded interrogatives, since they never display subject inversion. This means that if the hypothesis that *pro* drop is directly licensed by V to C, then embedded interrogatives should be the only context in which *pro* drop is never allowed. Hence, the hypothesis that *pro* drop in OI is dependent on V to C should be immediately testable, since no embedded interrogative should allow for a null subject. However, Munaro (2010), in his chapter on interrogatives in OI notices that embedded interrogatives can have both lexical or null subjects, which is thus not expected if the only factor triggering *pro* drop is V to C movement. One further problem is due to the fact that actually, although we never find subject inversion in embedded interrogatives, we do find cases of embedded interrogatives in which there is another fronted constituent between the *wh*-item and the inflected verb:

- (4) *Per pensare che sopra queste vicende avessero a fare* (Bono Giamboni Libro cap 49 par. 12)
To think what about these happenings had to do
'to see what they had to do about these problems'

This means that some type of preposing is active also in embedded interrogatives, even though subject inversion is never possible, it might still be the case that the verb is moving higher than T and this would explain why we have null subjects even in embedded interrogatives. This leaves us with the major problem that there is virtually no type of embedded clauses in OI in which *pro* drop, i.e. according to the standard account V to C, is not banned. This state of affairs in turn implies that OI is essentially a symmetric V2 language of the Icelandic type, in which V to C can be found in all types of embedded clauses, but then proving that *pro* drop is related to V2 becomes rather difficult, since we find at best a difference in percentages but not a clear cut distinction between main and embedded clauses. On the other hand, simply tying the occurrence of null subjects to V2 misses a part of what I believe to be a single phenomenon, namely the fact that both in main and in embedded clauses the occurrence of lexical subject pronouns seems to be related to different discourse conditions with respect to modern Italian, as shown in (2) and (3). Zimmermann (2012) treats OI like Old Spanish and essentially as modern Italian in allowing for *pro* in both main and embedded clauses without distinction. However, this is not correct, as already shown by Beninca' (2006), since OI has an astonishing number of lexical subject pronouns in embedded clauses that in modern Italian cannot be interpreted as co-referent with the subject of the main clause. So, OI is much more similar to OF than Zimmermann acknowledges. Before we undertake a systematic study of the distribution of null subjects in OI, let us briefly consider the

major differences with respect to OF: as the following table reported from Zimmermann (2012:120, figure 5.) shows, in OF the asymmetry between main and embedded clauses is rather marked, although also in French we do not really find a clear cut distinction between main and embedded clauses. However, since Zimmermann only considered embedded declaratives, the raw numbers of null subjects found in embedded clauses could actually be explained by means of assuming embedded V2 in the usual embedded V2 contexts also known from Germanic.²



Furthermore, OF displays a rather massive presence of lexical expletive subjects, which in OI are rather rare. I considered the whole *Vita nuova* by Dante and in the whole text there are only two examples of lexical expletive subjects, both of them resume an embedded clause, in (5) a finite, in (6) an infinitival clause:

- (5) s' **elli** avvenisse che molti le potessero audire. (V.N cap. 20 parr. 1-2)
 if it came that many them could hear
 'If it happened that many people could hear them'
- (6) **Elli** era tale a veder mio colore, che faceva ragionar di morte altrui (V.N. cap 23 parr17/18)
 It was such to see my color, that made think of death others
 'My face color was such that everybody thought of death'

² A detailed quantitative analysis of pro drop in embedded domains according to the type of embedded clause still needs to be performed and might reveal interesting differences beyond the assumption made since Vance on that pro only occurs associated to embedded V2.

On the other hand, examples of null expletives are much more common: in the same text I counted 20 cases of null expletives only with the verbal form *parea* ‘seemed’, of which I report here just one example:

- (7) E per questa cagione, cioè di questa soverchievole voce che **parea** che m' infamasse
 And for this reason, i.e. of this widespread rumor that seemed that me defamed
 ‘And for this reason, i.e. for the widespread rumor that it seemed that it defamed me...’

Hence, OI was indeed a normal pro drop language at least for expletive subjects, although we still have to explain cases like those in (5) and (6), which, although they are rare, they are still part of the language.

As for referential subjects, I made a count of all embedded clauses in two texts: *Fiori e Vita de Filosafi* and Dante’s *Vita nuova*, the results are reported in the following tables. I have also split the results according to person, to see whether there is any significant effect across persons that might be relevant to our discussion. The reasons why a person split might be relevant are twofold: first, Walkden (2013) notices that Old English has almost exclusively third person null subjects, which means in his view that the logophoric agent and patient present in the left periphery (i.e. the speaker and the addressee) do not probe into TP. Second, what we call OI is actually Old Florentine, which developed into a variety that nowadays has subject clitics only for some persons (the second singular and plural and the third singular and plural, but not the first singular and first person plural). One might hypothesize that there was a split among the persons already during the medieval period, and that this split is the origin of the non-perfect match between embedded clauses and lexical subject pronouns. Unfortunately, as we see from the tables this rather appealing hypothesis is not empirically supported.

Table 1: Fiori e Vita de Filosafi: distribution of subject in embedded clauses

Null pro	Lexical PRO	Lexical DP
178	72	145 ³

Clearly, the proportion that Zimmermann notices for OF are reversed, since here the number of null subjects is over the double than the one of lexical personal pronouns. If we split the subjects by person, we obtain the following result:

Table 2. Distribution of null pro divided per person

1SG	2SG	3SG	1PL	2PL	3PL
0	16	125	6	4	27

Table 3. Distribution of lexical pro divided per person

1SG	2SG	3SG	1PL	2PL	3PL
7	16	42	3	1	9

³ This number includes 13 cases of *quello/quegli/colui*, which are demonstrative pronouns.

Apart from the first person singular, there seems to be no effect of person on the distribution among persons. Since the numbers of the first person are too small to be statistically significant, I have systematically searched the first 10 chapters of Dante's *Vita nuova*. The results are in the following table. I do not report any results for the first and second person plural, because I found no occurrences.

Table 4. Third person singular

	DP	PRON	pro
Embedded clauses	23	7	10
Main clauses	25	7	13

Table 5: Third person plural

	PRON	pro
Embedded clauses	0	2
Main clauses	0	2

As for third person singular and plural, the table shows that there is no significant distinction between the distribution of null subjects and lexical subject pronouns in main and embedded clauses.

Table 6: Second person singular

	PRON	Pro
Embedded clauses	1	
Main clauses		1

Table 7: First person singular

	PRON	Pro
Embedded clauses	33	16
Main clauses	7	45

Although the numbers between main and embedded clauses are reversed for the first person singular (no cases of first and second person plural were found in the texts), both lexical and null subject pronouns are possible. Suppose that we take the standard view generally advocated for OF and by Beninca' also for OI, i.e. that *pro* is only possible when the verb has moved to C, this means that the number of lexical pronouns corresponds to the number of embedded non-verb second clauses, which, at least for third person pronouns is almost the same as the cases in which we have null subjects, i.e. V to C in embedded domains. If this were so, we would expect to find the same rate of subject inversion, since subject inversion is only possible in V2 contexts. The problem in using subject inversion as a

diagnostic for V2 is that OI also had vP internal subjects, which are not distinguishable from inverted subjects if the tense does not contain an auxiliary and a past participle so that the subject is inserted between the two. Since the number of these examples, also due to the fact that they concur with null subjects, is rather limited, I have based myself on another criterion that diagnoses V2, namely the presence of the particle *sì*, which is a SpecFocus element. In Dante's *Vita nuova* the number of relevant examples is 12 in main clauses, and only 2 in embedded clauses: one of the two embedded examples occurs after the verb 'say' (reported here as (8)) and one after the verb 'happened':

(8) Dico che in questo tempo che questa donna era schermo di tanto amore, quanto da la mia parte, **sì**
 Say that in this time that this woman was screen of such love, as.wel from the my part, so
 mi venne una volontade di volere ricordare lo nome di quella gentilissima (V.N. cap. 6 parr.1-2)
 me came a will to want to.remember the name of that very.gentle

On the other hand, in embedded clauses the particle *sì* occurs very frequently in front of the complementizer (36 examples) or in front of the element come 'how' (40 examples).

(9) Queste parole fa che siano quasi un mezzo, **sì** che tu non parli a lei immediatamente (V.N. cap. 12
 These words make that are almost a means so that you not talk to her immediately parr. 1-9)

(10) però che quella che ti dee audire, **sì** com' io credo, è ver di me adirata. (V.N. cap. 12 parr. 10-15)
 But that that.one that you must help, so as I believe, is really of me angry

The distinction between main and embedded clauses is rather striking, though the numbers are rather small. The same distribution is found in the *Fiori e vita de Filosafi*, where the particle is found in main clauses in 14 cases, and only 3 in embedded (one after the verb 'say' and two after the shortened form *che'* with the value of 'then') while *sì* occurs 21 times before the complementizer of embedded declaratives and 13 times before *come* 'how'. The following table sums up the results:

Table 5: distribution of the Focus particle *sì*

	Main clauses	Embedded clauses	Embedded clauses before <i>che</i>	Embedded clauses before <i>come</i>
Fiori de Filosafi	14	3	36	40
Vita nuova	12	2	21	13
Total	26	5	57	53

The picture resulting from the diagnostic of particle *sì* is not the one of a symmetric V2 language like Icelandic, but rather an asymmetric V2 language of the German and OF type. The same type of result is provided by another typical phenomenon related to the V2 phenomenon, namely the Tobler Mussafia law that rules the distribution of enclisis and proclisis of object clitics: enclisis is analyzed as movement of the inflected verb to the Topic^o position leaving the clitic behind, i.e. enclisis is a diagnostic for movement to the C domain, but it is virtually non-existent in embedded domains, thus confirming the idea that OI was an asymmetric V2 language. Hence, OI does not have so much embedded V2 as to justify the licensing of the quantity of null subjects we have observed above. In other words, if we assume that null subjects are licensed by V to C, we have a number of null subjects occurring in embedded clauses that remains to be explained. In what follows I will try to illustrate how the system of

OI pronouns works before returning to the problem of the licensing of null subjects in embedded clauses.

3. The pronominal system of OI

In looking for an explanation to the problem pointed out above, the first observation to be made concerns the fact that in OI the link between morphology and syntax is looser than in modern Italian. While modern Italian has 6 distinct endings out of 6 for all indicative tenses, OI displays 5 distinct endings in the imperfect, in the past subjunctive⁴, where the first person singular identical to third person singular and in the simple past, where the third plural can drop the *-no* plural ending and become identical to the third singular. All these endings are distinct in modern Italian. In addition to this, also the endings of the first person singular of the present subjunctive are syncretic, as they are in modern Italian. Nevertheless, null subjects seem to be licensed also in ambiguous contexts, as the following example attests where the auxiliary *avea* is ambiguous between the first and the third person singular but there is no lexical subject pronoun.⁵

(12)... ricordandomi che già l' **avea** veduta fare compagnia a quella gentilissima, (V.N: cap.8 parr. 1-3)
Remembering that already her had seen do company to that very.gentle,
'remembering that I had already seen her paying company to that very gentle lady'

Still, from the morphological point of view, if one looks at the paradigm of the subject pronouns, one notices that the form for the first person singular is often reduced from *io* to *i'* and that the forms for the third person pronouns are *elli/ella/eglino* similar to the modern Italian *egli/ella/essi* analyzed as weak pronouns by Cardinaletti and Starke (1999), which might indicate that they had different properties from the full pronouns of modern Italian.

One further interesting observation is that also full object pronouns, which in modern Italian are restricted to focused or topical contexts, in OI do not obey such restriction and can occur in contexts in which in modern Italian there would be a clitic:

(13) lo imaginava di guardare verso lo cielo, e pareami vedere moltitudine d' angeli li quali tornassero
I imagined to look towards the sky and seemed.me to.see wealth of angels the which came
in suso, ed aveano dinanzi da loro una nebulletta bianchissima.
in upwards and had in front of them a small cloud very-white.
'I imagined I looked towards the sky and I thought I saw many angels who came back upwards and
who had in front of the a snow-white cloud.
A me pareo che questi angeli cantassero gloriosamente, e le parole del loro canto mi pareo udire
To me seemed that these angels sing gloriously and the words of their song me seemed hear
che fossero queste (V.N. cap. 23 parr. 1-16)
that were these
'It seemed to me that these angels sang gloriously and I thought I heard them sing the following
words of their song'

⁴ The only exception is the verb *essere* 'be', which has the form *fossi*, while *avere* 'have' and regular verbs has the form *avesse* which is identical to the third person singular.

⁵ On the other hand, OI lacks generic *pro* and uses *si* like modern Italian, therefore, it shares this property with consistent *pro* drop languages and not with partial *pro* drop languages.

An example like (13), where the presence of the tonic pronoun *a me* is clearly not required either for Focus reasons or for change of Topic reasons, since it is clearly a continuation of a Topic, where the Topic remains the author, shows that Old Italian used full pronouns in a different way with respect to modern Italian. The occurrence of the full pronoun in (13) might be due to the necessity to avoid the Tobler-Mussafia law, since this would be a case of V1 with an enclitic. However, examples like the following ones show that this is not an isolated fact and does not even have to do with the left periphery of the clause, since in the following example, the full pronoun is located in its argumental postverbal position:

- (14)a. *Ella era in questa vita già stata tanto, che ne lo suo tempo lo cielo stellato era mosso verso la parte d'oriente de le dodici parti l'una d'un grado, sì che quasi dal principio del suo anno nono nono apparve a me, ed io la vidi quasi da la fine del mio nono.* (V.N. cap-2 parr. 1-10)
 She had in this life already been as.much that in the her time to sky starred was moved to the part part of orient of the twelve parts the one of.one degree so that almost from beginning of her year ninth appeared to me, and I her say almost from the end of my ninth.
- b. *D'allora innanzi dico che Amore segnoreggiò la mia anima, la quale fu sì tosto a lui disponsata,*...
 From then on I.say that Love ruled the my soul, the which was so early to him disposed,...
 'From then on I say that love has ruled my soul, which was dedicated to him so early,...

Furthermore, also the distribution of subject pronouns is not only different from modern Italian in embedded clauses, but also in main clauses, since we find a number of subject pronouns in main interrogatives precisely in those inversion contexts that should license pro drop:

- (15) a. *Sa' tu qua' sono le credenze...?*
 know.2sg you which are the beliefs
 'Do you know which are the beliefs?' (VeV 35)
- b. *E sai tu quanti sono i comandamenti...?*
 and know.2sg you how.many are the commandments
 'Do you know how many are the commandments?' (VeV 36)
- c. *Vuo' tu diventare nostro fedele, e giurar le nostre comandamenta?*
 want.2sg you become.inf our faithful and swear.inf the our rules
 'Do you want to become our follower and swear on our rules?' (VeV 38)
- d. *Credi tu bene i detti sacramenti...?*
 believe.2sg you well the said sacraments
 'Do you believe truly in the mentioned sacraments?' (VeV 37)
- (16) a. *Cui mi saprestù contare...?*⁶
 who to.me would.be.able.to.2sg-you tell.inf
 'About whom would you be able to tell me?' (VeV 21)
- b. *Perché mi facesti tu venire in questo misero mondo...?*
 why me did.2sg you come.inf in this miserable world
 'Why did you put me in this miserable world?' (VeV 3)
- c. *Come ti contien tu nel servizio e nella grazia di Dio?*
 how refl stay.2sg you in.the service and in.the grace of God
 'How are you doing in the service and grace of God?' (VeV 32)

⁶ Notice that here the pronoun is clustered with the inflected verb and part of the inflectional ending has been deleted. The phenomenon is not very widespread, but one should keep in mind that this is Old Florentine and that Modern Florentine has subject clitics and (in its more conservative version) also displays subject clitic inversion of the typical Northern Italian type (see Poletto (2000), Manzini and Savoia (2005)).

- d. Onde credi tu che nascan tanti dolori di capo?
 from.where believe.2sg you that are.born many pains of head
 'What source do you think many headaches have?' (VeV 42)

Again, this is by no means obligatory, as the following example with a null subject attests:

- (17) a. E credi le credenze...?
 and believe.2sg the beliefs
 'Do you believe in the beliefs?' (VeV 37)
- b. E chi fa contra le dette comandamenta, credi che pecchi mortalmente?
 and who acts against the said rules think.2sg that sins mortally
 'Do you think that who breaks those rules commits a mortal sin?' (VeV 37)

but it is striking to find so many second person pronouns precisely in contexts in which they are rather clearly not needed, either syntactically or for interpretation reasons. Munaro (2010) notices that in general the presence of a lexical subject in main interrogatives is related to the presence of an object clitic. Hence, there are also other factors interfering in the realization of a subject pronoun. The occurrence of lexical pronouns when modern Italian would use a *pro* are also found in embedded but also in main clauses, as the following examples attest:

- (18) a. **Io** confesso ch' **io** feci questo fatto e non domando che voi mi perdoniate (Br. Latini Rett. 112)
 I confess that I did this fact and not ask that you me forgive
 'I confess that I did this and I am not asking for you to forgive me'
- b. Dice la reda: «**io** ti debbo dare que' ch' **io** vorrò» (Br. Latini Rett. 127)
 says the heiress: "I you have to give what that I will.want"
 'The heiress says: "I will have to give you what I want'
- c. che s' io allora non perdessi ardire, farei parlando innamorar la gente. E **io** non
 that if I then not lose courage, I.would speaking make.fall.in.love the people. And I not
 vo' parlar sì altamente, ch' io divenisse per temenza vile; (cap. 19parr. 4-14)
 want to.talk so highly, that I became for fear coward

The formula in (18a) is particularly interesting, since it can be compared with same types of fixed expressions in modern Italian where the subject pronoun at the beginning is not necessary at all.⁷ Furthermore, some cases of continuation of a Topic are marked through a subject pronoun, which is generally not used in modern Italian:

- (19)a. E però lo dolcissimo signore, lo quale mi signoreggiava per la vertù de la gentilissima donna, ne la mia imaginazione apparve come peregrino leggermente vestito e di vili drappi. **Elli** mi parea disbigottito, (V.N. 9 parr. 1-8)
- b. D'allora innanzi dico che Amore signoreggiò la mia anima, la quale fu sì tosto a lui disponsata, e cominciò a prendere sopra me tanta sicurtade e tanta signoria per la vertù che li dava la mia

⁷ One case would be the fixed form used when taking an oath in front of a judge, where in modern Italian the form *Lo giuro* 'it swear' without any subject pronoun.

immaginazione, che me convenia fare tutti li suoi piaceri compiutamente. Elli mi comandava molte volte che io cercasse per vedere questa angiola giovanissima;

That Topic continuity is marked differently in OI from modern Italian is also attested by the fact that it can be marked by the morpheme *e* in cases like the following (see Poletto (2014) for a detailed analysis of *e* as a continuity topic marker) where the whole temporal and locative frame setting continues:

- (20) quando entrò nella chiesa, et uno parlò e disse
 when got.3sg into.the church, and one spoke and said
 ‘when he entered the church, one of them spoke and said...’ (Nov. XXV, 189)

There are good reasons to believe that this instance of *et* is not the normal conjunction, since it is impossible to conjoin an embedded clause with a main clause. Notice furthermore that the continuity Topic marker can cooccur with the conjunction head *e* (thus giving the impression of “conjunction doubling”).

- (21) e, inebriato il pane dell’odore che n’uscita, del mangiare, e quelli
 and put the bread in.the smoke that of.it came.out of.the food, and he
 lo mordea, e così, il consumò di mangiare, ricevendo il fumo e mordendolo
 it bit.3sg and so, it finished.3sg of eat.inf getting the smoke and biting-it
 ‘He was putting the bread close to the smell which came out of the meat and then he
 ate the bread up biting it’ (Nov. VIII, 147)

Summing up, we have noticed that a) OI has more ambiguous verbal forms than modern Italian, b) the distribution of subject and dative personal pronouns is not limited to contexts of Focus or Topic like in modern Italian, so that full pronouns occur in contexts in which modern Italian would have either a *pro* or a clitic (in the case of the object) c) in cases in which there is continuation of a Topic there can be a lexical personal pronoun which in modern Italian would be superfluous (in the case of the first person) or interpreted with a different referent (in the case of the third person). Furthermore, in the introduction I already reported an observation I made in Poletto (2014), where cases of null Shift Topics are reported. We conclude that the licensing of null Topics in OI obeys different conditions with respect to those found in modern Italian: OI can mark Topic continuity through lexical pronouns leaving shift Topics unrealized.

4. Different types of Topics

Let us now go back to the problem we formulated at the end of section 2: since OI seems to be an asymmetric V2 language, but the number of null subjects is rather high in embedded clauses, there still remains a number of null subjects in embedded clauses that are unaccounted for. Cases like the following are particularly daring, since exactly the same syntactic context seems to give different results in terms of *pro* drop:

- (22) Le quali *io* non intendea se non poche; tra le quali \emptyset intendea queste. Dante Vita Nova 3
 The which I not meant if not few, among the which meant these
 Which I only meant few, among which I meant these

In addition to this empirical problem, the traditional analysis of *pro* as being licensed by V to C faces a theoretical one: taking up Beninca’s hypothesis we need to update it, since lexical government is not a

notion we can work with in the present syntactic theory. I would like to kill two birds with a stone and solve both problems by means of a single hypothesis, which has to do with the fact that licensing of null Topics has changed from old to modern Italian. This will also explain the peculiar distribution of lexical full pronouns in main clauses in contexts in which the pronoun represents neither a new Topic nor a Focus.

In order to solve the puzzle, I would like to make use of an idea that has been proposed to account for the licensing of pro originally by Holmberg (2010) and in the Germanic languages from Walkden (2013) and Volodina and Weiß (2016, submitted), i.e. the idea that there is no unitary way to license null subjects and that different types of null arguments are also possible within the same language. I will adopt here the technical implementation put forth by Walkden (2013), which seems to me the most straightforward basis to implement the peculiar system of OI.⁸ According to Walkden, the logophoric agent and patient (i.e. the speaker and the addressee) as well as null Shift/Aboutness Topics can bear a probe which looks directly into SpecT and establishes an agreement relation with it. Walkden (2013) adopts Holmberg's (2010) idea of partial pro drop languages for some Old English texts and explains why Old English null subjects are mainly found in main clauses and are primarily third person: since Old English only allows for null Shift Topics/Aboutness Topics to directly probe into TP, the licensing of null arguments can only occur in main clauses where Aboutness Topics are possible and of third person, since shift Topics are generally of this type.

According to Walkden's (2013) typology (see his table 7), there exist languages where only the logophoric agent and patient can probe into T (Finnish), i.e. languages that only have first and second person null subjects, or where only shift Topic can probe into T (Old English) or languages that have both. Walkden assumes for Old English that the speaker and the addressee (the logophoric agent and patient in Sigurdsson's (2004) terms) do not probe into TP, which means that Old English does not have first and second person null subjects. Modern Italian is classified by Walkden into class 1 in his table 7, i.e. among those languages in which all left peripheral null topics can probe into TP. OI would be a language of the same type, since we have found no distinction between first, second and third person null subjects. On the other hand, we know that the distribution of null subjects in OI is different from the one of modern Italian. Therefore, the system proposed by Walkden requires further fine-tuning to account for the changes across the history of the Italian system. In any case, a language like modern Italian also requires an additional mechanism to license null subjects, since they can freely occur in embedded clauses, where Aboutness/Shift Topics are not licensed unless we are in a context of embedded V2. However, since Beninca' (1988) we know that there exist different types of topics, some of which are clearly base generated in the left periphery and only occur in main clauses, like Hanging Topics (which are only Aboutness topics), scene setting elements which occur primarily in main clauses, but are also marginally possible in embedded clauses, and clitic left dislocations, (which can be either Aboutness Topics or familiarity Topics) that are nowadays generally considered as moving from the clause to its left periphery. Suppose that OI had two different ways to license a null subject, one of which is the same as the one advocated for OE by Walkden: Aboutness Topics⁹ and Shift Topics as well as the logophoric patient and agent can be null in OI, as noticed above (and discussed at length in Poletto 2014) and probe into TP thus. Since these topics are base generated in the left periphery, they

⁸ Volodina and Weiß (2016) also investigate a type of null subjects that I have left out from this investigation, namely null arguments that occur at the beginning of a clause which is the second member of a clause coordination with the same subject. This is an different structure from the ones I investigate here and therefore I think it is justified to leave it out.

⁹ The notion of Aboutness Topic was first formalized by Reinhard (1981) as: what the sentence is about. It has been recently used by Frascarelli in a number of papers (see

also have to be licensed somehow. A similar idea has been discussed in Sigurdsson (2011), who assumes that any definite argument, overt or silent, positively matches at least one C/edge linker in its local C-domain, where C/edge linkers include Top(ic) features and speech participant features (“speaker,” “hearer”). This means that all pronouns must be linked to some element in the left periphery in order to be interpreted. Sigurdsson assumes that in standard pro drop languages like modern Italian the morphological ending of the verb acts like a weak pronoun, an idea which has been used by several authors (see among others the implementation made by Taraldsen (2002)). Sigurdsson argues that radically null arguments can circumvent the potential interveners in the left periphery of the clause by moving the null elements to the left periphery themselves. Following this line of reasoning, it is tempting to tie this property to V2 and in particular to verb movement to the Topic° position typical of V1 constructions as proposed by Beninca’ (2006). The special character of OI with respect to modern Italian is precisely that, being a V2 language, the verb can move to Topic°, which enables the presence of about/shift as well as logophoric null Topics, which in turn enables of null subjects in SpecTP. This type of licensing mechanism is probably at work for all types of Topics in OI: Hanging Topics (Aboutness Topics and shift topics in Frascarelli’s typology), scene setting elements (in Beninca’ and Poletto’s (2004) system) for the speaker and the addressee as well as familiarity topics. This means that OI does not have pronominal inflectional morphology but rather adopts a German-style of null argument licensing. Since German is a strict V2 language, where the linear restriction is always respected, then Null Topics require V1, while this is not the case in OI, where the linear restriction is clearly not respected, even by lexical Topics. Up to now I have been using Frascarelli’s typology of topics, but since this typology is not syntactic but pragmatic in nature, and there is no one to one correspondence (at least in Romance) between pragmatics and syntax (see Bocci and Poletto (2016) for a detailed discussion on the tests showing the different positions in Romance and a review of the massive literature on Topic and Focus)) I will provide here a correspondence table between the syntactic positions discussed in Beninca’ and Poletto (2004) and the pragmatic types Frascarelli and Hinterhölzl (2007) and Frascarelli (2007) propose.

Table 6: comparison between syntactic and pragmatic notions of Topics

Syntactic notion	Pragmatic notion
Hanging Topic	Aboutness Topic, Shift Topic
Clitic left Dislocation	Aboutness Topic, Shift Topic, Familiarity Topic
Topicalization ¹⁰	Familiarity Topic

In addition to this typology there are scene setting adverbs and PP (generally locative or temporal items) that are located in the same frame space of the left periphery that hosts Hanging Topics.

The complex left periphery proposed by Beninca’ and Poletto (2004) which I assume here is the following one:

(23) [Hang. Topic [Scene Sett. [Left disl. [List interpr [[CONTR. CP1 adv/obj, [CONTR. CP2 circ.adv. [INFORM. CP]]]]]]

¹⁰ I use the term topicalization here to distinguish those cases in which there is no clitic doubling. In modern Italian they are banned for direct objects and genitives and only possible for dative objects, in OI there were possible for all arguments.

This structure clearly shows that there is no correspondence between the pragmatic notions and the syntactic notions, since Left dislocations can have all pragmatic functions of Aboutness, Shift and Familiarity Topics although they are located in a single position inside the left periphery. With these distinctions in mind let us go back to discussion on OI.¹¹ We then assume following Beninca´ (2006) that the inflected verb can raise up to the left peripheral position of Left dislocation, where it can license null aboutness, shift and familiarity Topics in the LD position(s).¹²

(24) [_{HT} [_{Scene} SettP [_{LDP} [_{SpecLD} NULL TOPIC] [_{LD°V}] [_{LIP} [[_{CONTR. CP1} adv/obj, [_{CONTR. CP2} circ.adv. [_{INFORM. CP}]]]]]

Hence, there is no need to assume that the inflected verb can raise to different Topic heads, it just needs to reach the LD position and the type of Topic will be determined by the context, and by the fact that some types of topics (aboutness and shift Topics) are excluded from embedded clauses (see Bianchi and Frascarelli (2010) on this). This means that main clauses have a high rate of null subjects, which is due to the possibility to have all types of null Topics, which in turn are licensed by V to Topic°. However, if this were the only mechanism licensing null subjects in OI, we would expect the same sharp asymmetry between main and embedded clauses that we find in Old English and OF. Notice that assuming that null Topics are possible in OI only if the inflected verb raises to Topic° captures on the one hand Walkden’s proposal that pro is always linked to a Topic. It is also similar to Sigurdsson’s (2011) proposal that the C-linking of radical null Topics is invisible and as such uninterpretable through other C-linkings unless the topic itself is moved to the C domain. I also propose that null Topics can be licensed through a Spec-head relation in LDP with the inflected verb that moves to Topic° in a way similar to other criterial positions (like wh-, focus, negation) that have been proposed in the literature. I will therefore assume that Shift/Aboutness Topics are criterial in OI and require V to LD°, at least when they are null. The fact that the movement of the V to Topic° is obligatory to license a null Topic can also explain the Tobler-Mussafia law, which states that when the verb is in first position, then clitics must be enclitics. The real reason for enclisis is that a proclitic element, being itself C-linked would interfere in the Spec-head agreement mechanism between the verb and the null Topic in its specifier. Hence, the only way to avoid the minimality induced by the clitic is to leave the clitic behind. Whatever technical mechanism accounts for the fact that the clitic can be left behind, either excorporation of the clitic, or a hypothesis that clitics are themselves remnant-XPs and can independently move as such, what is important here is that the motivation for enclisis is essentially to be reduced to a relativized minimality effect with other C-linked elements that would interfere in the licensing of null Topics through Spec-Head in the LD projection. Notice that the Tobler Mussafia effect is first destabilized and then vanishes slower than the V2 phenomenon in terms of CP expletives: in texts of the XVI century we still find some cases of Tobler Mussafia, although the V2 system is essentially gone from the language. This can only be explained if we assume that the Tobler Mussafia effect has only partially to do with the V2 property per se, and is related to V2 only indirectly, i.e. through the system of licensing of null Topics. I think that the

¹¹ Actually, Hanging Topics are only aboutness Topics only, so for them the pragmatic notion and the syntactic one coincide.

¹² At least one type of Hanging Topics might be completely external to the clause, while scene setting adverbs might be sentence internal, though base generated there. I have found up to now no evidence that null scene setting elements could be licensed in OI. Therefore I will assume that the inflected verb stops in the LD position.

peculiar type of V2 system paired to a split left periphery OI displays can only be accounted for by assume that V2 in OI results from the sum of several projections having a V2 requirement, i.e. FinP, FocusP, whP, and TopicP¹³ and that each projection could have lost its V2 property at different times. Actually, if the term “residual verb second” adopted by Rizzi (1991) is correct, this is just what it implies. He assumes it for wh-items, but it is probably valid for a whole set of elements located in the left periphery, hence, also for Topics.

Even assuming that null shift and aboutness Topics are licensed through V to Topic we still have to capture the following facts: a) the fact that in OI null subjects are possible also in embedded clauses where no shift or aboutness Topics are possible, and b) the fact that in OI there are unexpected lexical pronouns both in main and embedded contexts in which modern Italian would have a pro. This second observation immediately does away with the hypothesis that OI embedded clauses had the same system as modern Italian embedded clauses. I will discard the hypothesis that OI inflectional morphology is pronominal as it is the case in modern Italian. I think that the solution to the puzzle lies in the type of licensing of topics: we have seen that in main clauses null Topics are licensed in LDP through movement of the inflected verb to Topic°, which is not possible in embedded clauses. In embedded clauses there are no shift/aboutness topics, but notice that familiarity Topics are allowed without any problems, and actually in OI they are present since the very first attestation of the “vulgar” language, the *Placiti cassinesi*, which has a set of embedded left dislocations:

(25) Sao ko kelle terre, per kelle fini que ki contene, trenta anni le possette parte Sancti Benedicti

Know that those lands, for those borders that here are, thirty years them possessed S.B.

If familiarity Topics are possible in embedded clauses, then null familiarity Topics can indeed be licensed in embedded domains although through a different mechanism with respect to null shift/aboutness Topics. In contrast to shift and aboutness Topics, null familiarity Topics are immediately linked to the preceding discourse, since they take up an XP that is already present in the universe of the discourse (either explicitly mentioned or implicit in the previous information) and as such are subject to different licensing conditions, i.e. they do not need the inflected verb in their Topic° position because their link is recoverable from the preceding discourse. The reason why we do not find any person distinction is that speaker and addressee are rather akin to familiarity Topics, since they are already clearly presupposed in the universe of the discourse. This explains the percentages we see in main and embedded clauses: in main clauses shift/aboutness Topics and familiarity Topics are licensed via two distinct mechanisms (shift/aboutness Topics are licensed through a typical syntactic configuration of Spec-head agreement, while familiarity Topics are licensed through a pragmatic mechanism of recovery of information already updated into the discourse), hence the probability of having a null subject is higher than in embedded clauses, where the only type of Topic that is licensed is the familiarity one, since it is the only one that does not require the spec-head syntactic configuration with the V in LD°. This solves the problem of the apparent contradiction we noticed between the fact that while OI seems to be a well-behaved asymmetric V2 language, the number of embedded null subjects seems to be too high for the licensing to occur only in V to Topic contexts, which is strictly limited in embedded domains. Notice furthermore that a well-known difference between OI (and in general Old Romance) and its modern counterpart is

¹³ See Franco et alii (2016) for the idea that OI also had to satisfy the negative criterion in the CP domain.

the possibility to have null resumption in the case of direct object Topics, which is sharply ungrammatical in the modern language.

- (26) queste tre cose in uno uomo ragunate ha sì per bene Dio onnipotente
these three things in one man gathered has so for well God almighty
'God almighty has gathered these three things in one man' (VeV 84)

This suggests that the very same mechanism of licensing of a null familiarity Topic through linking to the previous context is active for both the subject and the direct object. The last piece of the puzzle that remains to be explained is why OI allows for lexical subject pronouns that are coreferent with the subject of the main clause, a context in which modern Italian typically requires a *pro*, i.e. cases like the following one:

- (27) Lo figliuolo lil domandò tanto [ch'elli l'ebbe]
The son DAT.ACC;3SG asked much that he ACC;3SG had
'The son asked him of it so much that he got it.'

In order to explain this, I would like to capitalize on another difference between familiarity and aboutness topics, i.e. the fact that in general familiarity topics are not base generated in the left periphery but are moved from inside the clause. In modern Italian they generally leave behind a clitic form or a *pro* (see Cinque 1990), which can be analyzed as the remnant of the original DP containing both the clitic and the topic category moved to the left periphery. Hence, Sigurdsson's hypothesis for German null Topics is applicable to OI as well, but only to familiarity Topics, which raise to the C domain to reach their link (I adopt here the terminology proposed by Sigurdsson 2011) located in the previous discourse without the interference of other C-links. To be even more precise, I think that in Romance it is not the whole null nominal expression that raises to the C domain, but only part of it, leaving behind a null or a lexical remnant realized as a pronoun.¹⁴ Recall that we have seen that in OI full pronouns do not necessarily occur as Foci or Topics as in modern Italian; they can also occur in contexts that are unmarked from the pragmatic point of view as it is the case in non *pro* drop languages and this is the case in main as well as embedded clauses. This was noted for subjects but also in the case of datives, and suggests that one additional distinction between old and modern Italian lies in the pragmatic/formal properties of the full pronominal series, which in OI spells out a smaller category that does not lexicalize Focus or Topic features. This means that full pronouns are small enough to be used as the remnant left from the null familiarity Topic that moves to SpecLD, i.e. as resumptive pronouns. The cases of embedded clauses where we see full pronouns can also be analyzed as cases of null Topics where the Topic has split from its remnant pronoun and has moved to the left periphery. OI has two lexical realizations for the same structure where a remnant/resumptive pronoun is left behind by movement to SpecTopic, one in which the remnant is null, the other where the remnant can be a full pronoun. This then explains why cases like (27) are possible in OI: the occurrence of embedded subject pronouns does not depend on the fact that OI cannot license a *pro* in embedded clauses, but on the fact that the full

¹⁴ In Poletto (2008) I examined cases of subject clitic doubling in the modern Italian dialects and noticed that full pronouns, which always have a Focus or Topic feature, are the first nominal expressions to be doubled in any Northern Italian dialect investigated. This empirical generalization can be explained assuming that the split inside the original DP starts out from the outer layers of the DP, i.e. from the Topic and Focus features that are encoded in the internal left periphery of the nominal expression itself.

lexical pronoun is small enough, either in its structure and/or in its feature composition to be treated as a resumptive for the null familiarity Topic that has moved to the left periphery of the embedded clause.

5. Concluding remarks

In this paper I have examined the distribution of null subjects in OI. I have shown that there is no clear-cut asymmetry between main and embedded clauses as much as in OF or Old English since null subjects are also possible in embedded domains in a relevant number of examples. Nevertheless, it cannot be stated that the syntax of null subjects is identical in old and modern Italian as proposed for instance by Zimmermann (2012), since in OI embedded clauses we find subject pronouns in contexts in which there is obligatory pro drop in modern Italian, which immediately discards an analysis in terms of licensing of pro works as in consistent modern pro drop languages. I have also discarded the possibility that pro drop in embedded domains depends on the fact that OI was a symmetrical V2 language, since typical diagnostics for V2 do not hold in OI embedded clauses. Capitalizing on Sigurdsson (2011) and Walkden (2013) I have proposed that in OI pro drop licensing is performed through linking to a null Topic: in main clauses, shift/aboutness and familiarity Topics can only be licensed through a Spec-head relation with the verb, i.e. by V to Topic°, while familiarity Topics are possible through a pragmatic linking procedure to the immediate context enabled by the movement part of the nominal expression itself which reaches SpecTopic. This accounts for the high rate of pro. In embedded contexts only one type of Topic, i.e. familiarity Topic, is possible, hence the lower rate of embedded pros. Furthermore, I have shown that the pronominal system of OI has different properties with respect to the one of modern Italian: while in modern Italian full pronouns always lexicalize Topic or Focus, this is not necessarily so in OI, which means that OI full pronouns can resume, i.e. be left behind by a null Topic moving to the left periphery, while modern Italian can only use either pro or clitics for this purpose. The distribution of null and lexical subject pronouns of OI is thus accounted for as the combined effect of the licensing conditions of different types of Topics and the lexical properties of full pronouns.

References

- Adams, Marianne (1987). 'From Old French to the Theory of pro-drop', *Natural Language and Linguistic Theory* 5: 1-32.
- Benincà, Paola (1984). 'Un'ipotesi sulla sintassi delle lingue romanze medievali', *Quaderni Patavini di Linguistica* 4: 3-19.
- (1988). 'L'ordine degli elementi della frase e le costruzioni marcate', in Lorenzo Renzi, Giampaolo Salvi and Anna Cardinaletti (eds.), *Grande grammatica italiana di consultazione, vol. I*, Bologna: Il Mulino, 115-95.
- (2006). 'A Detailed Map of the Left Periphery of Medieval Romance', in Raffaella Zanuttini, Héctor Campos, Elena Herburger and Paul Portner (eds.), *Negation, Tense and Clausal Architecture: Cross-linguistics Investigations*. Georgetown: Georgetown University Press, 53-86.
- Benincà, Paola and Cecilia Poletto (2004). 'Topic, Focus and V2: defining the CP sublayers', in Rizzi (ed.), 52-75.
- Bianchi, Valentina, & Frascarelli, Mara. (2010). Is topic a root phenomenon? *Iberia* 2:43-88.
- Bocci, G. and C. Poletto (2016). Syntactic and Prosodic Effects of Information Structure in Romance", in collaborazione con G. Bocci, in *Handout of Information structure*, in cura di C. Féry et al., Oxford University Press, Oxford & New York. 642-662.

- Cardinaletti, Anna and Michael Starke (1999). 'The typology of structural deficiency: A case study of the three classes of pronouns', in Henk van Riemsdijk (ed.), *Clitics in the Languages of Europe*, Berlin: Mouton de Gruyter, 145-233.
- Cinque, Guglielmo (1990). *Types of A'-Dependencies*, Cambridge, MA: MIT Press.
- Franco, I. O. Kellert, G. Mensching and C. Poletto (2016) "A diachronic study of the (negative) additive «anche» in Italian" *Caplletra* 61. 227.258
- Frascarelli, Mara (2007), Subjects, Topics and the Interpretation of Referential pro. An interface approach to the linking of (null) pronouns. In *Natural Language and Linguistic Theory*, 25, 4: 691-734.
- Frascarelli, Mara and Roland Hinterhölzl (2007). 'Types of Topics in German and Italian', in Susanne Winkler and Kerstin Schwabe (eds), *On Information Structure, Meaning and Form*. Amsterdam: John Benjamins, 87– 116.
- Holmberg, Anders (2010). Null subject parameters. In T. Biberauer, A. Holmberg, I. Roberts, & M. Sheehan (eds.), *Parametric variation: Null subjects in Minimalist theory*. Cambridge: Cambridge University Press. 88–124.
- Manzini, Maria Rita and Leonardo Maria Savoia (2005). *I dialetti italiani e romanci. Morfosintassi generativa*. Alessandria: Edizioni dell'Orso.
- Munaro, Nicola (2010). 'La frase interrogativa' in Renzi and Salvi (eds.), 1147-85.
- Poletto, C. (2000) *The Higher Functional Field: Evidence from Northern Italian Dialects*. Oxford/New York: Oxford University Press.
- Poletto, C. (2008) . "Doubling as a spare movement strategy", in *Microvariation in Syntactic Doubling*, S. Barbiers, O. Koenenman, M. Lekakou & M. van der Ham (eds.), Emerald, Bingley, pp. 38-68.
- Poletto, C. (2014) *Word Order in Old Italian*, Oxford University Press, Oxford & New York, 2014.
- Poletto, Cecilia (in preparation) The structure of the clause in Old Veneto. In *Grammatica del Veneto antico*, J. Garzonio (ed.).
- Reinhart, T. (1981), "Pragmatics and linguistics: An analysis of sentence topics", *Philosophica* volume 27, no 1.
- Rizzi, L. (1991) 'Residual Verb Second and the Wh-Criterion'. Geneva Generative Papers 2. Reprinted in A. Belletti and L. Rizzi (eds.) (1996) *Parameters and Functional Heads*, New York/Oxford: Oxford University Press, 63-90.
- Roberts, Ian (1993). *Verbs and Diachronic Syntax: a Comparative History of English and French*. Dordrecht: Kluwer.
- Sigurðsson, Halldór Ármann. 2004. The syntax of Person, Tense, and speech features. *Italian Journal of Linguistics* 16:219–251.
- Sigurðsson, H. Á. 2011. Conditions on argument drop. *Linguistic Inquiry* 42:267–304.
- Taraldsen, Knut Tarald. (2002). The que/qui alternation and the distribution of expletives. In Peter Svenonius (ed.). *Subjects, Expletives and the EPP*, 29- 42. Oxford: OUP.
- Vance, Barbara (1997). *Syntactic Change in Medieval French*. Dordrecht: Kluwer.
- Vanelli, Laura, Lorenzo Renzi & Paola Benincà. 1985/6. "Tipologia dei pronomi soggetto nelle lingue romanze medievali". *Quaderni Patavini di Linguistica* 5: 49-66.
- Volodina, Anna and Weiß, Helmut (2016), Diachronic development of null-subjects in German. In: S. Featherston & Y. Versley (eds.): *Quantitative Approaches to Grammar and Grammatical Change. Perspectives from Germanic*. Berlin: de Gruyter Mouton, 187-205. [Trends in Linguistics: Studies and Monographs 290]
- Volodina, Anna and Weiß, Helmut (subm.), Referential Null Subjects in German: Dialects and Diachronic Continuity. In: Federica Cognola, Jan Casalicchio (eds.), *Understanding null-subjects. A synchronic and diachronic perspective*. Oxford: Oxford University Press.
- Walkden, George (2013). Null subjects in Old English. *Language Variation and Change* 25(2): 155-178

Zimmermann, M. (2012) The evolution of expletive subject pronouns in French. PHD Thesis University of Konstanz.