5. *Pro*-drop in interrogatives across older Germanic and Romance languages

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Abstract

This chapter investigates the mechanisms of null subject licensing in direct interrogatives, an environment which is generally neglected in investigation into null subjects, using data from a range of early Romance and Germanic languages considered to be asymmetric *pro*-drop languages, i.e. languages in which null subjects are favoured in main clauses. We find that there is subtle variation between the languages in question, but that two factors in particular – interrogative type and person – are crucial in conditioning this variation, and we sketch analyses based on the differential availability of Agree relations with left-peripheral elements. Therefore, null subjects in main interrogative clauses are licensed in two slightly different manners in the two language families – a fact which we show follows from differences in the structure of their left periphery and in agreement morphology.

5.1 Introduction[1]

It has long been established that the older Romance languages are null subject languages. More recently, a flurry of work has shown that this is true for all the older Germanic languages too, albeit to different extents. What is not agreed on is the precise analysis of null subjects in these varieties: a range of proposals exist (see the contributions in Cognola & Casalicchio 2018a for some contenders).

In this paper we address this problem through the lens of questions (direct interrogatives). This under-investigated clause type has the potential to tease apart the subtle differences in predictions made by the main analyses of null subjects on the market. We do so by means of a quantitative and qualitative corpus-based investigation of texts from several older Germanic and Romance languages. We find that there is subtle variation between the languages in question, but that two factors in particular – interrogative type and person – are crucial in conditioning this variation, and we sketch analyses based on the differential availability of Agree relations with left-peripheral elements (following Frascarelli 2007, 2018 and Sigurðsson 2011).

The chapter is structured as follows. § 2 sets out the theoretical background and the motivation for the present study. § 3 discusses our methodology and approach, in general terms. § 4 presents the texts studied and our findings for the individual languages. Reaching an adequate analysis is the aim of § 5, and § 6 concludes.

5.2 Theoretical background

Since Rizzi's (1982) seminal early work it has been clear that not all null subject languages allow null subjects in the same contexts. Rizzi distinguished between languages in which only nonreferential subjects may be null and languages in which all subjects, including referential subjects, may be null (1982: 143). Subsequent work has identified a number of additional factors that influence whether subjects (and other arguments) may be omitted: person, clause type, syntactic position, information-structural role, and morphological properties of verbs are all frequently alluded to. Based on some of these considerations, Roberts & Holmberg (2010: 5–13), D'Alessandro (2015: 203–206) and Cognola & Casalicchio (2018b: 2–3) identify four types of null subject languages: consistent/canonical, expletive, discourse/radical, and partial.

The theory of null subjects developed by Rizzi (1986: 518–523) has two components, both of which serve to constrain the empty category *pro*. Licensing is a Case-marking relation between *pro* and a functional head, whose availability is assumed (following Taraldsen 1978) to relate to the richness of agreement. Identification is the inheritance of the φ-features of that functional head by *pro*. 21st-century research has begun to explore the possibility of other syntactic relations between the null subject and the left periphery (Frascarelli 2007, 2018; Sigurðsson 2011), picking up on Rizzi's notion of identification and linking it to information structure: Frascarelli makes the case that a referential null subject is a pronominal variable, the features of which are valued via an Agree relation with the local Aboutness-shift Topic (A-Topic), and Sigurðsson argues that *all* definite arguments have to enter into such a relation with some left-peripheral element.

On the face of it, the early Germanic and Romance languages present a problem for traditional approaches to null subjects, because they display something that is not obviously predicted by any of them: an asymmetry between clause types in the extent to which null subjects are permitted. The existence of such 'asymmetric' null subject languages was flagged up in generative research by Benincà (1984) and Vanelli, Renzi & Benincà (1986), who noted that a subset of the medieval Romance languages – including Old French and Old Italian – seemed to exhibit such behaviour. The same is true for all of the early West Germanic languages (Walkden 2014: ch. 5).

The classic analysis of asymmetric null subject languages was provided by Adams (1987) in a detailed discussion of Old French. Adams (1987) draws on earlier literature showing that Old French permits null subjects much more freely in main clauses than in subordinate clauses. Her analysis is based on the claim that Old French is a V2 language, which Adams analyses as involving V-to-C movement via INFL. Following den Besten's (1989) intuition that V-to-C is blocked when a complementizer occupies C, Adams argues that the asymmetry of *pro*-drop in Old French follows from the fact that *pro* must be governed by INFL, a variant of Rizzi's licensing requirement. She furthermore argues that the direction of government in Old French is consistently to the right. Since *pro* is in Spec-IP, INFL can only govern it if it is moved to C, which it can only do when C is not occupied by a complementizer. The clause-type asymmetry is thus derived.[2] Axel (2005, 2007) adopts this V-in-C analysis more-or-less unaltered for Old High German (see also Axel & Weiß 2011, Volodina & Weiß 2016, Weiß & Volodina 2018).

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[2]Adams observes (1987: 9–10, footnote 11) that some apparently embedded clauses in Old French feature both V2 and *pro*. These clauses, she claims, are actually main clauses to all intents and purposes, in a paratactic relationship with the apparent embedding clause. The complementizer is thus above C in such clauses, and so both V-to-C and *pro* are possible. For more details, including a Minimalist reconstruction of this account, see Cognola & Walkden (2019: § 2).

We defer a more general discussion of the descriptive adequacy of this type of account (and others) to § 5. For present purposes, we can note that different types of account make different predictions for the behaviour of interrogative clauses in these languages:

- A 'naïve morphological' account, in which rich verbal morphology is the only predictor of null subject availability, predicts no differences between clause types, including interrogatives, since in none of the older Germanic and Romance languages does morphology vary systematically across clause types: hence, interrogatives should exhibit null subjects in these languages (insofar as the morphology counts as rich).

- An Adams-Axel-style V-in-C account predicts that interrogatives should systematically exhibit null subjects in the older Germanic and Romance languages, since interrogatives in all of these languages exhibit V-to-C movement (Eythórsson 1995, Fuß 2002 for Germanic; Vanelli, Renzi & Benincà 1986, Poletto 2013, 2014, and Wolfe 2018 for Romance).

- A topic-drop account in which arguments can only be null if they are in Spec-CP, as proposed for modern German (Ross 1982, Huang 1984), predicts that null subjects should be ruled out entirely – at least in *wh*-questions, since the *wh*-element occupies Spec-CP; for yes-no questions it depends whether we posit an operator in Spec-CP.[3]

- A left-periphery-linking account following Frascarelli (2007) and Sigurðsson (2011) does not predict that null subjects should be systematically available or

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[3]Admitting the possibility of an articulated left periphery along the lines of Rizzi (1997), Benincà & Polettto (2004) and Frascarelli & Hinterhölzl (2007) weakens this prediction very substantially, though, since more than one specifier position is available. Since such a periphery is in our view extremely well motivated, the traditional analysis of topic drop may have to be rethought.

ruled out. Rather, it allows for the possibility of subtle differences in these configurations depending on the precise left-peripheral 'action' going on, positions filled, intervention in Agree relations, and so forth.[4] These potential subtle differences are further explored in § 5.

In what follows we will argue that the data cast substantial doubt on the clear predictions of the naïve morphological, V-in-C, and topic-drop accounts.

5.3 Methodology

We collected data from several older Germanic and Romance languages: Gothic, Old English (OE), Old High German (OHG), Old Norse-Icelandic (OIce), and Old Saxon (OS) for Germanic, and Old Italian (OI) and Old Spanish (OSp) for Romance. In each case, we investigated a small number of relevant texts; following common practice in historical syntactic studies, we used autochthonous (non-translated) prose texts where possible, though these are not always available (e.g. for Gothic and Old Saxon). All direct questions were extracted, or the first 100 in texts where there were more than this. These were then entered into a spreadsheet and manually analysed for the following features:

- Type of interrogative (*wh*-interrogative or yes-no)
- (if *wh*-interrogative) Type of *wh*-element
- Person agreement on the verb (1st, 2nd, or 3rd)
- Number agreement on the verb (singular or plural)

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[4]Bianchi & Frascarelli (2010) argue more specifically that aboutness-shift topics can only be realized in clauses endowed with independent illocutionary force, an account which predicts that null subjects in embedded clauses are instances of embedded root phenomena (cf. also Walkden 2014: 213 and the data in Frascarelli 2018: 222–238).

- Subject status (null, pronoun[5], or full DP)

- (if full DP) Discourse status of subject (focus, topic, none/other)

- (if translated) Does the subject status match the source? (yes or no)

§ 4 presents each of the languages in turn, first discussing the text(s) selected, then giving a quantitative overview, and finally (where relevant) providing a more detailed qualitative discussion of the data.

5.4 The individual languages

5.4.1 Old Italian

We investigated main direct questions in four texts which can be taken to be representative of OI, i.e. of the Romance variety spoken between 1200 and 1380 in Tuscany. All texts are included in the *Opera del Vocabolario Italiano* (OVI) database.

The first text is the *Novellino*, dating back to the late XIII Century (1280). It contains 50 short stories (*novelle*) written by an anonymous author. This work represents an original text, i.e. it is not a translation of a Latin text, even though the materials of the short stories were possibly elaborations of present materials. The second text we analysed is Brunetto Latini's *Rettorica* (1260) which translates Cicero's *De inventione.* The third text is the Tuscan *Diatessaron*, the translation of Tatian's Gospel Harmony (unification of the facts told in the four Gospels in a coherent narrative), written in Rome around 170. The original text was written in Syriac and then immediately translated in Latin. The Tuscan *Diatessaron* is transmitted in 25 manuscripts. According to Vaccari & Vatasso (1938), all

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[5] The limitations of working with historical data mean that we also have no access to the prosodic properties of overt pronouns (i.e. whether they are weak or strong). In principle, some (strong) pronouns may bear a discourse role such as focus; it is not possible to identify all of these, though context often provides valuable clues.

manuscripts derive from a Latin translation in OI dating back to 1200 (see the specific and very archaic lexical, morphological and syntactic features, Vaccari & Vatasso 1938: 184-190). This translation in OI, which is considered the archetype, stems from a Latin text which was very close to the Fulda manuscript (according to the critical edition of Ranke 1868 used by the authors) but with some differences (e.g. in the interpolation of the material; chapters are not numbered). According to Vaccari & Vatasso (1938), three of the oldest manuscripts from 1300 are copies of the archetype: S = Codice Senese (I.V.9) (Siena), P = Palatino Latino 56 – Biblioteca Apostolica Vaticana (Rome), and L = Riccardiana 2335 (Florence); the later manuscripts are copies of these three texts.

The last text we considered is Boccaccio's *Decameron* – an original text containing one hundred short stories written by Boccaccio.

In Table 1 we provide an overview of the OI texts considered in our corpus with the dating provided in the OVI database.

Text	Date	Language	Type	interrogatives considered
Novellino	1280	Fiorentino	original text	all (82)
Rettorica	1260–61	Fiorentino	Translation from Latin	all (20)
Diatessaron	1373	Fiorentino	Translation from Latin	all (183)
Decameron	1370	Fiorentino	original text	First 100

Table 1. Overview of the OI texts considered

5.4.1.1 Quantitative overview of the data

In Table 2 we provide an overview of the quantitative distribution of null subjects across texts.

We see that the numbers of null subjects present in the text varies in relation to the investigated text. In the *Novellino* and in *Diatessaron* the percentage of null subjects in main interrogative clauses is around 40%, whereas in the other texts it is lower, around 10%. According to quantitative data, *Novellino* and *Diatessaron* are texts featuring a close grammar of null subjects – despite the different dating according to OVI (but see Vaccari & Vatasso 1938 who claim that the oldest manuscripts transmitting the text from 1300 are copies of an archaic OI translation from 1200).

Text	Null	Overt	Total	% Null
Novellino	33	49	82	40%
Rettorica	2	18	20	10%
Diatessaron	81	102	183[6]	44%
Decameron	11	88	99	11%
Total	127	257	384	33%

Table 2. Distribution of null and overt subjects in the OI corpus

5.4.1.2 *Novellino*

Let us consider in detail the number concerning the variable known to influence the distribution of null subjects across OI and asymmetric *pro*-drop languages in general (see § 2 and Cognola & Walkden 2019).

As shown in Table 3, null subjects appear to be more frequent in *wh*-interrogative clauses. This difference is significant in a Fisher's exact test (p=0.0098).

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[6] We only consider here the sentences which translate a Latin sentence featuring a null subject. As discussed in Cognola & Walkden (2019), in fact, in all cases in which an overt subject features in the Latin it is also translated in OI.

	Novellino		% Null
	Null	Overt	
Yes-no interrogatives	3/20	17/20	15%
Wh-interrogatives	30/62	32/62	48%
Total	33/82	49/82	40%

Table 3. Distribution of null and overt subjects in yes-no and *wh*-interrogatives

As for the distribution of null subjects across *wh*-types, we see in Table 4 that null subjects are mostly attested with *why, what* and *how* interrogative elements.

	Novellino		% Null
	Null	Overt	
Wh-element: *why*	7/17	10/17	41%
What (object)	10/19	9/19	52%
Who (object)	0/2	2/2	0%
Whom (indirect object)	1/1	0/1	100%
Wh-phrase (*how much/many*)	5/8	3/8	63%
Where	1/1	0/1	100%
When	1/2	1/2	50%
How (come, chente)	5/12	7/12	41%
Total	30/62	32/62	48%

Table 4. Distribution of null subjects across *wh*-types

Finally, as shown in Table 5, null subjects appear in all persons except for the first plural and are mostly numerous in the second and third person singular. Third person null subjects all appear in *wh*-interrogative clauses.

	Novellino		% Null
	Null	Overt	
1 SG	2/5	3/5	40%
1 PL	0	0	-
2 SG	24/46	22/46	52%
2 PL	2/13	11/13	15%
3 SG	5/15	10/15	33%
3 PL	0/3	3/3	-
Total	33/82	49/82	40%

Table 5. Distribution of null subjects across persons

In (1) we give some examples of null subjects appearing in the text.[7]

(1)   a. E me,   come conoscesti *pro* essere figliuolo di   pistore?

          and me   how knew.2sg *pro* be   child   of   baker

          'How did you know I am a baker's son?'   (Nov_128_71)

      b. di   che   fazione era   *pro*,   e   di   che   guisa vestito?

         of   which party was   *pro*   and   of   which way   dressed

         'To which party did he belong and how was he dressed?'   (Nov_178_25-

26)

      c. Voi   predicate   la   Croce e   *pro* spregiatela tanto?

        you.2pl   preach   the   Cross and   *pro* despise-it so much

        'You preach the Cross and despise it so much?'   (Nov_185_ 33_34)

      d. E   perché il   fate   *pro*?

       and   why   it   do.2pl *pro*

       'Why are you doing it?'   (Nov_252_19_bis)

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e. Che   debbo   *pro*   fare?

what should.1sg   *pro*   do

'What should I do?'   (Nov_329_6)

5.4.1.3 *Diatessaron*

Let us now consider the distribution of null and overt subjects across interrogative types in the *Diatessaron.* As shown in Table 6, subjects are more frequently null in *wh*-interrogatives. In Table 7 we see that the most frequent *wh*-elements are *why, what* and *how* and that the percentage of null subjects is above 50% with all *wh*-elements.[8]

	Diatessaron		% Null
	Null	Overt	
Yes-no interrogatives	22/70	48/70	31%
Wh-interrogatives	58/113	55/113	51%
Total	80/183	103/183	43%

Table 6. Distribution of null and overt subjects in yes-no and *wh*-interrogatives

	Diatessaron		% Null
	Null	Overt	
Wh-element: *why*	20/34	14/34	58%
What (object)	16/35	19/35	45%
Whom (indirect object)	1/7	6/7	14%
Wh-phrase	5/8	3/8	63%
Where	1/5	4/5	20%
When	2/5	3/5	40%
How (come, chente)	7/9	2/9	77%
Total	52/103	51/103	50%

Table 7. Distribution of null and overt subjects across *wh*-types

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[8] We excluded from the counting in Table 8 those examples featuring wh-elements appearing less than 5 times, that is why in Table 8 the total is 103.

Finally, Table 8 shows that null subjects are attested in all persons with percentages between 35% and 94%. All persons can be null in both yes–no and wh-interrogative clauses (despite third person null subjects being more frequent in yes-no interrogative clauses).

	Diatessaron		% Null
	Null	Overt	
1 SG	7/18	11/18	40%
1 PL	16/17	1/17	94%
2 SG	22/62	40/62	35%
2 PL	26/63	37/63	41%
3 SG	8/19	11/19	42%
3 PL	2/4	2/4	50%
Total	81/183	102/183	44%

Table 8. Distribution of null and overt subjects across persons.

5.4.1.4 Partial conclusions

In Table 9 we summarise the distribution of null subjects in interrogative clauses in the *Novellino* and in *Diatessaron* according to interrogative type, *wh*-types and persons.

We see that the two texts exhibit a series of asymmetries in the distribution of null subjects. First, in both texts null subjects are more frequent in *wh*-interrogative clauses, and the *wh*-elements with which null subjects are mostly found are *why*, *what* and *how* in both texts. As for person, null subjects are found in the second person singular, second plural and third singular in both languages. The languages differ in the distribution of null subjects in yes–no interrogatives, which is reduced in *Novellino*, and across persons, since in *Diatessaron* null subjects are possible in all persons and not reduced to second singular/plural and third singular, unlike in *Novellino*.

	Novellino	% Null	*Diatessaron*	% Null
	Null		Null	
Yes-no interrogatives	3/20	15%	22/70	31%
Wh-interrogatives	30/62	48%	58/103	51%
Why clauses	7/17	41%	20/34	58%
What clauses	10/19	52%	16/35	45%
How clauses	5/12	41%	7/9	77%
2 SG	24/46	52%	22/62	35%
2 PL	2/13	15%	26/63	41%
3 SG	5/15	33%	8/19	42%
1 SG	2/5	3/5	7/18	40%
1 PL	-	-	16/17	94%

Table 9. Distribution of null subjects in *Novellino* and *Diatessaron*

5.4.1.5 *Decameron*

As shown in Table 2 in § 4.1.1, the *Decameron* exhibits a lower percentage (11%) of null subjects in comparison to the other considered OI texts. Due to these reduced numbers, the distribution of null/overt subjects according to the variables investigated in this paper is summarized in a single Table 10.

The data presented in Table 10 show that interrogative type does not play a role in feeding null subjects in this text, since the percentage of null subjects is identical in both *wh*- and yes–no interrogatives. In this text null subjects are only found, among *wh*-interrogative clauses, in *why, what* and *how* interrogative clauses, whereas with other *wh*-elements an overt subject is present. Finally, the persons featuring a null form are the 1st plural the 2nd and 3rd singular.

	Decameron		% Null
	Null	Overt	
Yes-no interrogatives	5/46	41/46	11%
wh-interrogatives	6/53	47/53	11%
Why clauses	2/11	9/11	18%
What clauses	2/25	23/25	8%
How clauses	2/11	9/11	18%
1 PL	4/11	7/11	36%
2 SG	6/41	35/41	14%
3 SG	1/17	16/17	6%

Table 10. Distribution of null subjects in *Decameron*

In (2) we give some examples involving a referential null subject.[9]

(2)   a. Che   attendiamo   *pro*?

          what   wait.1pl   *pro*

       'What are we waiting for?

 (Decameron_38)

      b. Non sai   *pro*   che   io   mi   dico?

        neg know.2sg   *pro*   what   I   to-me   tell

        'Don't you know what I am telling myself?'   (Decameron_167)

      c. Come   andò   *pro*?

        how   went.3sg   *pro*

       'How did this person go?'   (Decameron_300)

5.4.1.6 *Rettorica and the syntax of DP subjects*

The last OI text to be considered is *Rettorica*. As shown in Table 2, in *Rettorica* there are 20 interrogative clauses, of which only 2 contain a null subject.

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[9]   After the example we indicate the page number.

The presence of such a reduced number of null subjects is not due to abstract properties of the OI grammar of this text, but of the text's rhetorical construction. All the questions in the text, in fact, have a precise narrative/rhetoric function: they serve to introduce new topics functioning as sort of *exempla*. Let us exemplify this with the paragraph in (3) which is found at the beginning of a new chapter and serves to introduce the topics to be discussed in the chapter. The passages from the *Rettorica* are given in Hubbell's (1949) translations of Cicero's *De inventione* when possible (the OI text is not identical to the Latin in all parts).[10]

(3)   La contraversia del fatto si puote distribuire in tutti tempi: che ssi puote fare quistione che è essuto fatto, in questo modo:

"**Ulixes uccise Aiace o no?**" Et puotesi fare questione che ssi fa ora, in questo modo : "**Sono i Fregelliani in buono animo verso lo comune o no ?**" Et puotesi fare questione che ssi farà, in questo modo : "**Se noi lasciamo Cartagine intera, everranne bene al comune o no?**"   (Ret_65_10_16)

'As to the dispute about a fact, this can be assigned to any time. For a question can be "What has been done?" *e g* "Did Ulysses kill Ajax?" and "What is being done?", *e g* "Are the Fregellans friendly to the Roman people"", and what is going to occur, *e g* "If we leave Carthage untouched, will any harm come to the Roman state?""'

(Hubbell 1949: 23)

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[10]   We indicate after the example page number, chapter and line according to the cited text.

In the paragraph in (3) appear three interrogative clauses whose function is to exemplify the way in which the chapter's topic (*contraversia del fatto*) can be approached. All three interrogative clauses feature an overt DP subject. This DP subject exhibits a presuppositional character, since it is evident that it refers back to stories / facts which are familiar to the author and the reader. Moreover, these subjects are *non-anaphoric*, i.e. they introduce novel entities in the narration. Based on this, we propose that the reason why these DP subjects cannot be silent is because they play an important functional role in the narration, qualifying as newly shifted Aboutness topics (Frascarelli & Hinterhölzl 2007). As predicted by Frascarelli (2007, 2018) and shown by Cognola & Walkden (2019), these cannot be left silent in *pro*-drop languages.

This hypothesis is backed up by the two examples featuring a null subject in the text. The only two cases in which the subject remains null in the text clearly involve configurations in which the A-Topic is established and then remains null. In (4a) we give the passage introducing the topic (in the translation by Hubbell 1949) which licensed the null subject in the interrogative clause in the Italian (4b).

(4a)   In quel tempo che lla gente vivea così malamente, fue un uomo grande per eloquenzia e savio per sapienzia, il quale cognobbe che materia, cioè la ragione che l'uomo àe in se naturalmente per la quale puote l'uomo intendere e ragionare, e racconciamento a fare grandissime cose, cioè a ttenere pace et amare Idio e M proximo, a ffare cittadi, castella e magioni   e bel costume, et a ttenere iustitia et a vivere ordinatamente se fosse chi lli potesse dirizzare, cioè ritrarre da bestiale vita, e melliòrare per comandamenti, cioè per insegnamenti e per leggi e statuti che ili afrenasse.

'At this juncture a man – great and wise I am sure – became aware of the power latent in man and in the wide field offered by his mind for great achievements if one could develop this power and improve it by instruction. Men were scattered in the fields and hidden in sylvan retreats when he assembled and gathered the in accordance with a plan, he introduced them to every useful and honourable occupation, though they cried out against it at first because of its novelty, and then when through reason and eloquence they had listened with greater attention, he transformed them from wild savages into a kind and gentle folk.'   (Hubbell 1949: 7)

(4b)   A-Topic overt in the previous paragraph <the uncultured people>

Et qui cade una quistione, che potrebbe alcuno dicere: 'Come si potieno *pro* melliorare, da che non erano *pro* buoni?'.

'At this point somebody might wonder: "How could they improve themselves, since they were not good?"'   (Ret_16_17_29)

5.4.2 Old Spanish

5.4.2.1 Overview of the data

In this subsection we consider two OSp (Old Castillian) texts. As discussed in Wolfe (2015) OSp should be considered a relaxed V2 language which makes it an interesting object of research for the present study.

We consider two texts. One is a later text, *El Conde Lucanor*, written around 1330 by the *infante* Don Juan Manuel. The is a collection of stories and *exempla*

framed within a conversation between the *Conde Lucanor* and his councillor Patronio.

This text is interesting for us because it is the text considered in Wolfe's (2015) study.

We also consider the first 100 sentences of an earlier text dating back to 1270,

General Estoria (Libro 1), which is part of the *General Estoria* in several volumes – a

huge enterprise aiming at providing a systematization of the whole knowledge of that

time promoted by the king Alfonso el Sabio.

Text	Date	Language	Type	interrogatives considered
General Estoria (Libro 1)	1270	Castillano	Original	First 100
El Conde Lucanor	1330/1335	Castillano	Original	all (16)

Table 11. Overview of the considered OSp texts

Text	Null	Overt	Total	% Null
El Conde Lucanor	15	1	16	94%
General Estoria (Libro 1)	57	43	100	57%

Table 12. Distribution of null and overt subjects in the OSp corpus

5.4.2.2 Qualitative analysis

In this subsection we consider the distribution of null and overt subjects in the

General Estoria in relation to the three variables relevant to us in this paper:

interrogative type, type of *wh*-element and person. In Table 13 we see that in the

General Estoria null subjects appear slightly more frequently in *wh*-interrogative

clauses.

	General Estoria		% Null
	Null	Overt	
Yes-no interrogatives	14/30	16/30	46%
Wh-interrogatives	43/70	27/70	61%
Total	57/100	43/100	57%

Table 13. Distribution of null and overt subjects in yes-no and *wh*-interrogatives

Among *wh*-elements, null subjects are more frequent in *why, what* and *how* interrogatives – and *why* interrogatives are those with which null subjects appear at the highest rate (90%), see Table 14. Finally, null subjects are found in all persons, more frequently attested in the 1st singular and in the 2nd persons, as shown in Table 15. In (5) we give some examples of sentences featuring a null subject in the text.

	General Estoria		% Null
	Null	Overt	
Wh-element: *why*	18/21	3/21	85%
What (object)	12/21	9/21	57%
How	6/14	8/14	42%
Who (direct object)	1/1	0/1	100%
Who (indirect object)	0/2	2/2	0%
Wh-phrase	4/6	2/6	67%
Where	2/4	2/4	50%
When	1/1	0/1	100%
Total	44/70	26/70	62%

Table 14. Distribution of null and overt subjects across *wh*-types

	General Estoria		% Null
	Null	Overt	
1 SG	5/11	6/11	45%
1 PL	4/4	0/4	100%
2 SG	33/45	12/45	71%
2 PL	11/13	2/13	84%
3 SG	2/18	16/18	11%
3 PL	3/9	6/9	33%
Total	58/100	42/100	58%

Table 15. Distribution of null and overt subjects across persons

(5)　　a. ¿destruirás *pro* 　a 　　ellos 　e 　　a 　　toda 　la 　　Cibdad?

　　　　 destroy.2sg *pro* 　to 　　them 　and 　to 　　whole 　the 　　city

　　　　 'Are you going to destroy them and the whole city?' 　　(Page_177_b)

　　　 b. ¿Por qué 　nos 　　feziste 　　　*pro* 　　aquesto?

　　　　 why 　　　　to-us 　did.2pl 　　　*pro* 　　this

　　　　 'Why did you do this to us?' 　　　　　　　　　　　 (Page_187_a)

　　　 c. ¿levaré 　　*pro* 　a 　　él 　　a 　　aquel 　logar donde tú saliste?

　　　　 bring.1sg 　*pro* 　to 　him 　to 　this 　place where you came out

　　　　 'Will I bring him to the place from which you came out?' (Page_202)

　　　 d. ¿Coñocedes 　　　*pro* 　a 　　Labam?

　　　　 know.2pl 　　　　*pro* 　to 　Labam

　　　　 'Do you know Labam?' 　　　　　　　　　　　　　 (Page_248_a)

　　　 e. ¿Son 　　　*pro* 　tuyos?

　　　　 are.3pl 　　*pro* 　yours

　　　　 'Are they yours?' 　　　　　　　　　　　　　　 (Page_264)

21

In the other text considered, *El Conde Lucanor,* interrogative clauses are rarer, since there are only 16 examples of interrogative clauses. However, what we find in these examples is straightforward: null subjects are found in the great majority of cases, irrespective of interrogative type and person, which are thus irrelevant in favouring null subjects in this text.

	Conde Lucanor		% Null
	Null	Overt	
Total	15/16	1/16	94%

Table 16. Distribution of null and overt subjects in *El Conde Lucanor*

5.4.3 Old High German

We considered three OHG prose texts. The OHG *Diatessaron* is a translation of Tatian's Gospel Harmony and was written around 850 in an East Franconian dialect. It is transmitted in a bilingual Latin-OHG manuscript, the Codex Sangallensis 56 (ms Sankt Gallen, Stiftbibliothek 56).[11] The second text is the OHG translation of Isidor's *De fide catholica ex veteri et nove testamento contra Iudeos,* written by Isidor of Sevilla. The OHG translation is written in a South-Rhine-Franconian variety and dates to around 800 (Sonderegger 2003:129 in Axel 2007:3). Finally, we considered the *Psalmen* by Notker Labeo (ca. 950–1022), which contains very free translations of Latin texts and comments to them written in an Alemannic variety. The OHG texts were investigated through the electronic editions available in the TITUS Database.

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[11]   See Cognola & Walkden (2019:105) for discussion of this text as source.

Text	Date	Language	Type	interrogatives considered
Isidor	ca. 800	South-Rhine-Franconian	Translation	all (20)
OHG Diatessaron	ca. 850	East Franconian	Translation	all (183)
Notker	ca. 980	Alemannic	Translation and free	First 50

Table 17. Overview of the OHG texts considered

5.4.3.1 Quantitative overview of the data

In Table 18 we provide an overview of the quantitative distribution of null subjects across texts. We see that null subjects are virtually absent in Isidor and Notker, whereas they are found in about 30% of interrogative clauses in the OHG *Diatessaron*.

Text	Null	Overt	Total	% Null
Isidor	2	18	20	17%
OHG Diatessaron	58	125	183	30%
Notker	1	51	52	4%

Table 18. Distribution of null and overt subjects in the OHG corpus

5.4.3.2 Tatian

As shown in Table 19, interrogative type does not appear to play any role in favouring null subjects in OHG Tatian, since the percentage of null subjects is around 30% in both considered interrogative types. The difference is not significant in a Fisher's exact test (p=0.8683).

	OHG Diatessaron		% Null
	Null	Overt	
Yes-no interrogatives	22/70	48/70	31%
Wh-interrogatives	34/113	79/113	30%
Total	56/183	127/183	30%

Table 19. Distribution of null and overt subjects in yes-no and *wh*-interrogatives

Table 20 considers the distribution of null subjects in *wh*-interrogative clauses according to *wh*-type. We see that *why* and *what* are the *wh*-elements quantitatively most present in the texts, but the percentage of null subjects is not favoured with any of them and remains around 30%.

	OHG Diatessaron		% Null
	Null	Overt	
Wh-element: *why*	8/34	26/34	23%
What (object)	13/35	22/35	37%
Whom (indirect object)	2/7	5/7	29%
Wh-phrase	2/8	6/8	25%
Where	4/5	1/5	80%
When	1/5	4/5	20%
How	3/9	6/9	33%
Total	33/103	70/103	32%

Table 20. Distribution of null and overt subjects across *wh*-types

Finally, we consider the distribution of null/overt subjects according to person. The data in Table 21 indicate that 1st and 2nd person appear to favour null subjects, since null subjects are found in around 40% of examples in the first person and in the second singular. As discussed in Cognola/Walkden (2019), third person null subjects are excluded from *wh*-interrogative clauses and only found in yes/no interrogatives.

	OHG Diatessaron		% Null
	Null	Overt	
1 SG	7/18	11/18	39%
1 PL	9/17	8/17	53%
2 SG	29/62	33/62	46%
2 PL	8/63	55/63	12%
3 SG	5/19	14/19	26%
3 PL	1/4	3/4	25%
Total	59/183	124/183	32%

Table 21. Distribution of null and overt subjects across persons

5.4.3.3 Isidor and Notker

In the other two texts we considered, Isidor's *De fide* and Notker's *Psalmen*, null subjects are virtually absent. We think it is not by chance that the very few cases of null subjects are all found in the 2nd singular (see table 6.22). The three examples featuring a null subject found in Isidor and Notker are shown below.

	Isidor	Notker
	Null	Null
2 SG	2/2	1/9

Table 22. Distribution of null and overt subjects in Isidor and Notker

(6)   a. Spahida   dhes gotliihhin   fater huuanan   **findis** *pro*?

       wisdom   of.the divine   father, where   find.2sg *pro*

       'Where do you find the wisdom of the divine father?'

                                             (Isidor, Cap_1_sen_8_d)

     b. sitzi   *pro* azs   zesuun halp   mn«?

      sit.2sg *pro* at.the right   side   my

      'Are you sitting at my right side?'   (Isidor, Cap_3_sen_7_a)

c. Vuára-zuô chúmest   *pro*?

why   come.2sg   *pro*

'Why are you coming?'   (Notker, Cap_9_page_34_line_2)

5.4.4 Old Saxon

For Old Saxon, only one text of any length is transmitted to us. This is the *Heliand*, a gospel harmony written in alliterative verse, whose original dates to the first half of the ninth century. Although it is a translation of Tatian's *Diatessaron*, the translation style is so loose that 'recomposition' is perhaps a better term (Grein 1869), so that it can safely be assumed to reflect autochthonous Old Saxon syntax. More of a concern for syntactic investigations is its metrical nature, though this too is substantially less strict than that of other Germanic poetic traditions, particularly as regards unstressed positions (Suzuki 2004). The version of the text investigated is that in the HeliPaD (Walkden 2015; see Walkden 2016a for details), which is a parsed version of Sievers' (1878) edition of the C manuscript, the most complete of the *Heliand* manuscripts. It is known that Old Saxon permits null subjects (Behrmann 1879; Walkden 2014: 190–195), but interrogatives have not specifically been investigated before.

5.4.4.1 Quantitative overview of the data

All questions were extracted automatically using CorpusSearch 2 and then manually analysed. Table 23 gives the overall figures for the *Heliand* after eliminating irrelevant contexts (subject questions, nonreferential subjects), while Table 24 gives the numbers of null and overt subjects across interrogative types.

Text	Null	Overt	Total	% Null
Heliand	2	54	56	4%

Table 23: Null subjects in interrogatives in Old Saxon

	Heliand		% Null
	Null	Overt	
Yes-no interrogatives	2/9	7/9	22%
Wh-interrogatives	0/47	47/47	0%
Total	2/56	54/56	3,5%

Table 24: Distribution of null and overt subjects in yes-no and *wh*-interrogatives

There are only two examples of null referential subjects in interrogatives in Old Saxon, both of which are found in yes-no interrogatives. These are discussed in the following subsection. A Fisher's exact test yields a significant difference between the two types of interrogative (p=0.0234). However, with such low numbers it is difficult to conclude anything with confidence. On the one hand, the figure of 4% is not inconsistent with the low overall rate reported by Walkden (2014: 190): 109/2452 examples, or 4.4%. On the other hand, accidental occurrence (or non-occurrence, in the case of *wh*-interrogatives) cannot be ruled out.

5.4.4.2. Qualitative discussion

The two examples of null referential subjects in Old Saxon interrogatives are given in (7) and (8). The second conjunct in (7), consisting solely of the verb form *nis* 'is not', does not contain a subject; another *it* might be expected.

(7)   is   it   reht   the   nis   *pro*?

         is   it   right   or   NEG-is *pro*

         'Is it true or isn't it?'

         (OSHeliandC.2196.3813 and OSHeliandC.2197.3813)

(8)   Ni   mugun *pro*   samad   mid   mi   uuacon ena tid?

              NEG   may *pro*   together   with   me   wake   a   time

              'Can you (pl.) not stay awake with me for an hour?'

              (OSHeliandC.2792.4777-4778)

Both main manuscripts (M and C) agree in omitting the subject here. If we take these patterns at face value, we find null subjects only in yes-no questions but not in *wh*-questions in OS. However, the data is too sparse to be confident in this as a generalization.

5.4.5 Old English

Null subjects in Old English have been studied relatively extensively (Pogatscher 1901; van Gelderen 2000, 2013; Rusten 2013, 2015, 2019; Walkden 2013, 2014: 171–184, 2016b), but again never with a focus on interrogatives. The Old English corpus is characterized by extensive variability with regard to null subjects: some texts show none, others a relatively high percentage. Of the four texts that Walkden (2013) identifies as robustly exhibiting null subjects, three – Bald's *Leechbook*, *Beowulf*, and the E manuscript of the *Anglo-Saxon Chronicle* – contain no or vanishingly few questions due to their text type (instructional in the case of Bald's Leechbook, a medical text; narratives of different kinds in the other two cases).[12] The handful of questions found in these texts contain no null referential subjects.

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[12]   The highest percentage is found in the Lindisfarne Gospels (Walkden 2016b). However, since this is an interlinear gloss, it was not considered suitable for further investigation here.

The other text is the Old English translation of Bede's *Ecclesiastical History of the English People*, the Latin original of which was completed circa 731; the translation itself is usually dated to the end of the ninth century, and attributed to an anonymous translator (Whitelock 1962; Lemke 2015: 18). Though traditional scholarship has held that the Old English translation (henceforth *OEHE*) is erratic and infelicitous, and the syntax and style are often described as Latinate (e.g. Whitelock 1962: 75–76; Guenther Discenza 2002: 72–73, 77 and references cited there), recent work has rehabilitated the translator as a creative individual who deliberately reshaped and streamlined Bede's work (see especially Rowley 2011; Lemke 2015: ch. 5), sometimes translating literally but rarely deviating into the unidiomatic. Thus, the *OEHE* is a suitable source for syntactic investigation. We used the version in the YCOE corpus (Taylor et al. 2003), which is based on Miller's (1890) edition of the T manuscript.

5.4.5.1 Quantitative overview of the data

All questions were extracted automatically using CorpusSearch 2 and then manually analysed. Table 25 gives the overall figures for the *OEHE* after eliminating irrelevant contexts (subject questions, nonreferential subjects).

Text	Null	Overt	Total	% Null
OEHE	0	46	46	0%

Table 25: Null subjects in interrogatives in Old English

Of the 33 *wh*-questions and 13 yes-no questions, not a single one has a null referential subject, as can be seen in Table 25. It cannot be ruled out that this is an accident of

transmission, but we have no clear evidence that null referential subjects were possible at all in Old English interrogatives.

5.4.6 Old Norse-Icelandic

The Old Norse-Icelandic texts are substantially later than their West Germanic counterparts. As for the other early Germanic languages, null subjects have been syntactically investigated (Kinn, Rusten & Walkden 2016 and references there), but not with regard to interrogatives in particular. We used the IcePaHC (Wallenberg et al. 2011) to retrieve interrogatives. Two early texts – the *Old Icelandic Homily Book* (put together around 1200, based on earlier exemplars) and the kings' saga *Morkinskinna* (manuscript c. 1275, but original thought to be from circa 1220) – displayed a substantial number of interrogatives, and so were selected for further manual investigation.

5.4.6.1 Quantitative overview of the data

The figures for the two Old Norse-Icelandic texts after eliminating irrelevant contexts (subject questions, nonreferential subjects) are given in Table 26.

Text	Null	Overt	Total	% Null
Homily Book	0	25	25	0%
Morkinskinna	0	62	62	0%

Table 26: Null subjects in interrogatives in Old Norse-Icelandic

In the *Homily Book* there are 24 *wh*-questions and 1 yes-no question; in *Morkinskinna* there are 35 *wh*-questions and 27 yes-no questions. Table 26 shows that neither text features a single referential null subject in a question. This is despite the fact that the two texts do contain null subjects: 49/1870 (2.6%) for the *Homily Book* and a robust

95/1262 (7.5%) for *Morkinskinna* overall, according to Kinn, Rusten & Walkden (2016: 39). For *Morkinskinna*, this difference is very unlikely to be due to chance (Fisher's exact test, p=0.0193), though for the *Homily Book* it may well be (Fisher's exact test, p=1).

5.4.7 Gothic

The last Germanic language to be considered is Gothic. Due to its attestation as a translation of Greek, this language poses special problems: see Walkden (2014: 11–13) and in particular Ratkus (2016) for recent linguistically-informed discussion of the syntactic possibilities offered by the Gothic Bible. Studies have nevertheless generally concluded that Gothic permits null subjects relatively liberally (Fertig 2000; Ferraresi 2005; Walkden 2014: 158–164).

The only sure-fire evidence of genuine Gothic syntax is to be had when the Gothic deviates from the Greek. We conducted a small study of the interrogatives in the Gothic Gospels of Matthew and Mark, comparing the subject status in the Greek New Testament in all cases. The Greek text used was the Majority Text (Robinson & Pierpont 2005), since this edition leans more heavily on the Byzantine manuscript-type, to which the (unknown) Greek original is likely to belong (Ratkus 2011: 33–39).

5.4.7.1 Quantitative overview of the data

The figures for the Gothic Gospels of Matthew and Mark after eliminating irrelevant contexts (subject questions, non-referential subjects, fragment questions with no finite verb) are given in Tables 27 and 28. From Table 28 onwards, figures for Matthew and Mark are given together, as there is no reason to expect them to behave differently.

Text	Null	Overt	Total	% Null
Matthew (Gothic)	23	13	36	64%
Mark (Gothic)	52	32	84	62%

Table 27: Null subjects in interrogatives in Gothic

	Matthew & Mark (Gothic)		% Null
	Null	Overt	
Yes-no interrogatives	24/42	18/42	57%
Wh-interrogatives	51/78	27/78	65%
Total	75/120	45/120	62,5%

Table 28: Distribution of null and overt subjects in yes-no and *wh*-interrogatives

As can be seen, Gothic is very clearly an outlier compared to the other languages considered, with almost two thirds of subjects unexpressed. However, these results should not be leant on too heavily: in all but two of the 120 examples investigated, the status of the subject (pronoun, full overt DP, null) exactly matched that of the corresponding subject in the Greek Majority Text. Thus, we cannot be sure that the quantitative findings here reflect the syntax of Gothic rather than that of New Testament Greek. The difference between yes-no and *wh*-interrogatives is not statistically significant (Fisher's exact test, *p*=0.4311). A representative example is given in (9).

(9)   Greek: Ἀλλὰ τί   ἐξήλθετε   *pro*   ἰδεῖν

           Gothic: akei hva   usiddjeduþ   *pro*   saihvan?

                but   what out-went.2PL *pro* see.INF

                'But what did you go out to see?'   (Matthew 11:8)

5.4.7.2 *Wh*-type, person and number in Gothic

A breakdown of the overall figures by *wh*-type is given in Table 29, and by person

and number in Table 30. The caveats in the previous subsection apply: it is likely that

these numbers reflect the syntax of New Testament Greek, not that of Gothic.

	Matthew & Mark (Gothic)		% Null
	Null	Overt	
Wh-element: *why*	7/13	6/13	54%
What (object)	24/38	14/38	63%
Whom (indirect object)	2/2	0/2	100%
Wh-phrase	2/4	2/4	50%
Where	2/4	2/4	50%
When	5/5	0/5	100%
How	9/12	3/12	75%
Total	51/78	27/78	65%

Table 29. Distribution of null and overt subjects across *wh*-types

	Matthew & Mark (Gothic)		% Null
	Null	Overt	
1 SG	5/5	0/5	100%
1 PL	12/15	3/15	80%
2 SG	12/16	4/16	75%
2 PL	37/41	4/41	90%
2 DUAL	4/4	0/4	100%
3 SG	4/23	19/23	17%
3 PL	1/16	15/16	6%
Total	75/120	45/120	62%

Table 30. Distribution of null and overt subjects across persons

No obvious generalization emerges from Table 29: all types of *wh*-element allow null

subjects at a rate of 50–100%. Table 30 appears to suggest that null subjects are

disfavoured in the third person compared to the first and second; however, there are

no third person pronouns at all in interrogatives in the Gothic Gospels of Matthew and

Mark, and the low proportion of null subjects is solely due to the high proportion of

full DP subjects. Thus, we hypothesize that this asymmetry does not reflect a

grammaticality difference, but rather arises for discourse reasons, in that newly-

introduced or newly returned-to subjects must be expressed by an overt DP.

5.4.7.3 Qualitative discussion

The two examples in which there is a mismatch are both in the better-transmitted

Gothic Gospel of Mark, and both involve insertion of material in the Gothic where

there is no counterpart in the Greek *Vorlage*. In Mark 2:24, a DP subject (*siponjos*

þeinai 'your disciples') is inserted, perhaps for stylistic reasons (cf. Held 1903: viii),

since the understood (shifted) aboutness topic in the Greek is not otherwise obvious.

The remaining example is given below in (10).

(10)	Greek: Tí	ἔτι	ρείαν	ἔχομεν	μαρτύρων
	what	still	need.ACC	have.1PL	witnesses.GEN
	Gothic:hva	þanamais	þaurbum	**weis**	weitwode?
	what	more	need.1PL	we	witnesses.GEN
	'What further need do we have of witnesses?'				(Mark 14:63)

In (10), a Greek light-verb-plus-object construction with the structure 'have need (of)'

is rendered into Gothic with a form of a single verb 'need'. Perhaps the translator felt

licensed by this deviation to include a further one, inserting the first-person plural

pronoun *weis* 'we'.

This small study is consistent with previous findings that in general the Gothic text is somewhat more likely to insert a pronoun in the absence of a Greek equivalent than vice versa (Fertig 2000; Ferraresi 2005: 47–49; Walkden 2014: 158–164). Opinions differ on what can be concluded from this. On one view, the few discrepancies between Gothic and Greek indicate that Gothic occupied a different, less permissive position in the typology of null subject languages than New Testament Greek (Fertig 2000: 11). A second view is that the fact that these differences are so trivial suggests that Gothic and New Testament Greek were both consistent null subject languages (Walkden 2014: 160). A third possibility is that the evidence is too meagre to have any confidence one way or the other.

5.5 Discussion and analysis

5.5.1 Quantitative analysis

Let us start this section by giving an overview of the quantitative distribution of null subjects across the texts. As shown in Table 31, the texts can be divided into three groups, containing both Old Germanic and Old Romance texts.

In a first group of texts, featuring Gothic, the OHG *Diatessaron*, the OSp *General Estoria*, the OI *Diatessaron* and *Novellino*, we see a mixed system as far as the distribution of null and overt subjects is concerned. Null subjects appear a high percentage of the time but are not as frequent as one would expect in a null-subject language. Conversely, overt subjects are also present – though not in such a high number as one would expect from a non-null-subject language.

A second group features texts lacking any kind of variation in the realization of subjects, i.e. texts in which null subjects are either virtually absent (*Old Norse-*

Icelandic, Old English texts) or are the overwhelming number of cases (*El Conde Lucanor*).

The last group of texts (OHG Isidor, OI *Rettorica* and OI *Decameron*) sets itself between the two groups in having around 15% of overt subjects which is higher than a non-null-subject language, but much less than in a non-null-subject language.

	Null	Overt
Matthew (Gothic)	64%	36%
Mark (Gothic)	62%	38%
Novellino (OI)	40%	60%
Diatessaron (OI)	44%	56%
General Estoria (OSp)	43%	57%
Diatessaron (OHG)	30%	70%
Isidor (OHG)	17%	83%
Decameron (OI)	11%	89%
Rettorica (OI)	10%	90%
Notker (OHG)	4%	96%
Heliand (OS)	4%	96%
Ecclesiastical History of the English People (OE)	0%	100%
Homily Book (OIce)	0%	100%
Morkinskinna (OIce)	0%	100%
El Conde Lucanor (OSp)	94%	16%

Table 31. Overview

In what follows we focus on the texts in Group 1 which exhibit the most challenging distribution of null/overt subjects.

5.5.2 Descriptive generalizations

5.5.2.1 On the role of interrogative type

In this section we consider the distribution of overt and null subjects in yes-no and *wh*-interrogative clauses in the texts of group 1, i.e. those texts exhibiting a mixed syntax in the realization of subjects (null subjects above 30% and lower than 65%). As shown in Table 32, the interrogative type is a relevant variable in favouring the distribution of null subjects in all these texts except for the OHG *Diatessaron* and the Gothic Matthew & Mark in which the percentage of null subjects is equally distributed between interrogative types. In the Old Saxon *Heliand* null subjects are only found in yes-no questions, but the data is extremely scarce for this text, so this conclusion might not be so solid. We do not consider the *Heliand* further in this section. In all other texts, on the other hand, *wh*-interrogative clauses are the environment favouring the presence of null subjects.

	% NS in yes-no	% NS in *wh*-element
Novellino (OI)	15%	47%
Diatessaron (OI)	31%	40%
General Estoria (OSp)	46%	61%
Matthew & Mark (Gothic)	57%	65%
Diatessaron (OHG)	31%	31%
Heliand (OS)	22%	0%

Table 32. The role of interrogative type in Group 1 texts

In all the texts in which null subjects are favoured in *wh*-interrogative clauses, *why, what* and *how* interrogatives are those appearing more frequently in the texts. Gothic has a very high proportion of null subjects with all *wh*-elements. With the only

exception of OHG *Diatessaron* the percentage of null subjects is above 50% for all

texts.

	why	*what* (obj)	*how*
Novellino (OI)	41%	52%	41%
Diatessaron (OI)	58%	45%	77%
Matthew & Mark (Gothic)	54%	63%	75%
General Estoria (OSp)	90%	57%	46%
Diatessaron (OHG)	23%	34%	33%

Table 33. The role of the *wh*-element in Group 1 texts

At this point a distinction begins to emerge between the Old Romance texts and the

Old Germanic texts in question. In all the Old Romance texts null subjects are

favoured in *wh*-interrogative clauses, and there is a high percentage of null subjects

with *why, what,* and *how*. In the Old Germanic texts, on the other hand, these effects

are not found: in the Gothic Matthew & Mark and the OHG *Diatessaron* we see no

effect of interrogative type and no effect of *wh*-type.

5.5.2.2 On the role of person

As shown in Table 34 all texts featuring a mixed (null-overt) distribution of null

subjects share the fact that null subjects are possible in the second person singular. In

Gothic the second person singular does not seem to be exceptional, but this is likely

related to the exceptionally high percentage of null subjects across the board.

	1 SG	2 SG	3 SG	1 PL	2 PL
Novellino (OI)		**52%**	33%		
Diatessaron (OI)	44%	**35%**	80%	94%	38%
General Estoria (OSp)	45%	**72%**			84%
Diatessaron (OHG)	39%	**42%**		53%	
Matthew & Mark (Gothic)	100%	75%		80%	90%

Table 34. The role of person in Group 1 texts

5.5.2.3 Partial summary

In Table 35 we summarize the behaviour of the Old Romance and Old Germanic languages (group 2 not considered, see below) considered in this paper in relation to the distribution of null subjects according to interrogative type and person.

Interrogative type		Person		
Wh-interrogatives	Yes-No	2sg	1-2, sg-pl	3
Novellino (OI)	*Heliand* (OS) (?)	*Novellino (OI)*	*Diatessaron* (OHG)	*Novellino (OI)*
Diatessaron (OI)		*General Estoria* (OSp)	*General Estoria* (OSp)	*Diatessaron* (OI)
General Estoria (OSp)		*Diatessaron* (OI)	Gothic	Gothic
Gothic		Gothic		
		Diatessaron (OHG)		
		Isidor		
		Notker		

Table 35. Summary of conditioning factors in Group 1 texts

We see from Table 35 that the two variables considered – interrogative type and person – do play in a role in favouring the presence of null subjects, but the role of the two factors is not identical in the Romance and Germanic languages considered. More

specifically, *both* variables play a role in the Romance languages, whereas in the OHG texts the only variable at play is person, and in Gothic neither variable appears to be crucial.

In all the Romance languages considered, null subjects are favoured with *wh*-interrogative clauses. Moreover, in these languages there is also an effect of person which varies across Old Romance. Null subjects are always favoured in the 2nd person singular in these languages; null subjects are also favoured in the 1st/ 2nd persons in OSp (*General Estoria*), and in the 3rd person singular in OI (*Novellino* and *Diatessaron*). In OHG, null subjects are favoured in the 2nd person singular, and in the OHG *Diatessaron* in particular null subjects are also favoured in the 1st/ 2nd persons.

5.5.3 Towards an analysis

We propose that the data discussed above indicate that the licensing of null subjects in all persons relies on a double mechanism which involves both the structure of the left periphery and agreement. Crucially, these mechanisms appear to also be interconnected, as the OI data show. More specifically, the data show that if null subjects are favoured in *wh*-interrogative clauses, they will also be favoured in the third person.

These facts follow naturally from Frascarelli's (2018) analysis of null subjects, which states that null subjects are licensed by a shift topic in the left periphery, and by asymmetries in the structure of the left periphery between Old Romance and Old Germanic. We focus here initially on the languages of Group 2, that is, those exhibiting a 'mixed' system in which interrogative type and/or person play a role.

5.5.3.1 Old Romance

Let us consider first OI – a language in which null subjects are favoured in *wh-*interrogatives and possible in all persons.

We propose, following Frascarelli (2018), that null subjects are licensed through an Agree relation between *pro* and an Aboutness-Shift Topic (A-Topic) appearing in the left periphery. The Shift head bears a feature which acts as a probe, and hence enters into an Agree relation with a *pro* at the edge of the *v*P phase, as in the configuration in (6) (Frascarelli 2007: 718, her (30)). This operation collapses Rizzi's (1986) notions of formal licensing and identification into a single relation.[13]

(11) $[_{\text{ShiftP}} \text{DP}_{[\alpha\text{Pn}]} [\text{Shift}° [… [_{\text{AgrSP}} [\text{Agr}° [_{v\text{P}} pro_{[\alpha\text{Pn}]} [_{\text{VP}}]] …]]]]]$

Frascarelli further assumes that ShiftP is a criterial position, at least in predicational sentences, and that a topic (possibly silent) must be present in the specifier of ShiftP. This 'Topic Criterion' is given in full in (12).

(12) **Topic Criterion** (Frascarelli 2018: 212)

a) The high Topic field in the C-domain contains a position in which the [+Aboutness] feature (an extended EPP feature) is encoded and matched (via Agree) by the local (third person) N[ull]S[ubject].

b) When continuous, the [+Aboutness] Topic can be null (i.e., silent).

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[13] See Cognola & Walkden (2019:100, notes 5 and 6) for more detail.

Let us illustrate how this works with the following example from the *Novellino*. In the sentence in (d) there is a null subject referring back to *una cornacchia* 'a crow' mentioned in the previous sentence.

(13) a: Dimmi, donna: hai   *pro*   questa mattina veduti di questi uccelli
    tell me woman   have.2sg *pro* this morning seen of these birds
    grandi,   siccome   corbi, cornillie   o gazze?
    big   that is   crows crows   or magpies
     'Tell me, woman, did you see this morning these big birds, crows or
      magpies?'

b. E   la femina   rispuose:
    and   the woman   answered
    'And the woman answered:'

c. Ségner oc, ie[u] vi <**una cornacchia**> un su uno ceppo di salce.
    Sir   yes I . saw a crow   in on a   stump of willow
    'Yes, sir, I saw a crow on a willow stump.'

d. Or mi di',   donna: enverso qual   parte tenea *pro* volta   sua coda?
    now me say, woman, towards which part kept   *pro* turned his tail
    'So, tell me, woman, in which direction did it keep its tail turned?'

Following Frascarelli (2018) and Cognola & Walkden (2019) we propose that a new information focus (*crow* in (c)) can license a silent Aboutness-shift topic in the left periphery of the following sentence (d). The shift topic licenses the aboutness feature which is matched via Agree by the local (third person) N[ull]S[ubject] in AgrS°.

(14) [ShiftP Una cornacchia[αPn] [Shift° [FocusP enverso qual parte [Focus° tenea [AgrSP

pro[αPn] [Agr° ~~tenea~~ [vP ~~*pro*~~[αPn] [VP]] …]]]]]

The structure in (14), in which both ShiftP and FocusP in the left periphery are occupied, is possible by virtue of the fact that this language was a relaxed V2 language, in which obligatory V-to-C movement took place within an articulated left periphery (Benincà 2006, Poletto 2014 among many others).

First and second person null subjects work differently: Frascarelli (2018: 219–222) argues that these do not interfere in topic chains and are not licensed by the same mechanism as third person null subjects. Instead, first and second person null subjects enter into an Agree relation with a logophoric agent (Λ_A) or logophoric patient (Λ_P), syntactically present in the left periphery. Like the [+Aboutness] Topic feature, the features of Λ_A and Λ_P are C/edge linkers (CLn) in the sense of Sigurðsson (2011).

(15) **C/Edge-Linking Generalization** (Sigurðsson 2011: 282)

Any definite argument, overt or silent, positively matches at least one CLn in its local C-domain, where CLn is an element of the set {Λ_A, Λ_P, Top … }

Let us consider how the mechanism in (15) works with an example from *Novellino*.

(16) Messer   Amari lo   dimandò.

Sir   Amari him   asked

"Come   hai   ***pro*** tue di   rendita   l'anno?"

how   have.2sg   *pro* yours of   income   the year

Beltramo	rispuose:		
Beltramo	answered		
"Messer,	tanto	e	tanto."
Sir,	this	and	this
"Come	dispendi	*pro*?"	
how-much	spend.2sg	*pro*	

'Sir Amari asked him: "How much is your yearly income?" Beltramo
answered: "Sir, this and this." "How do you spend your money?"'

As shown in (17) the licensing mechanism of 1st–2nd person null subjects is identical
to that assumed for 3rd persons, with the difference that *pro* is licensed by an
anaphoric operator sitting in the left periphery.

(17)   [FP ΛP[αPn] [F° [FocusP Come [Focus° f finite verb [AgrSP *pro[αPn]*   [Agr° ~~finite~~
~~verb   finite verb~~ [vP *pro*[αPn]   [VP]]   …]]]]]

According to the proposed analysis the mechanism licensing the null subject in OI is
identical to the mechanism licensing it in present-day Italian. However, as pointed out
in the literature (starting with Benincà 1984), null subjects are much rarer in OI, more
specifically they tend to be absent in non-root embedded clauses.

    In Cognola & Walkden (2019), we show that in the OI and OHG
Diatessaron referential null subjects can appear (but do not have to) in two types of
embedded clauses: those introduced by *that* and those introduced by *why*. We
proposed that none of the introductory elements is hosted in the lower portion of CP,
but *that* lexicalizes a high FP within the periphery (presumably Force°) and *if/why* are

hosted in InterrogativeP (Rizzi 2001). Below both FPs hosting *that* and *if/why* a TopicP is found.

(18) [_ForceP_ *that* [_TopicP_ Null Topic [_InterrP_ *if/why* [_TopicP_ [_FocusP_ [_FinP_ [_TP_]]]]]]]

Based on the structure in (18) we propose that referential null subjects can potentially only be licensed in sentences in which the element introducing the embedded clause is hosted either in ForceP or in InterrP and it is able to activate the TopicPs of the left periphery (see Haegeman 2006 for the idea that the presence of the projections TopP and FocusP in root clauses and peripheral adverbials leads to the activation of ForceP). Since TopicPs are activated, a Topic chain with a preceding topic can be established. Therefore, embedded clauses tend to be an environment disfavouring null subjects only if the complementizer is low in the structure in OI (see Bianchi & Frascarelli 2010 and Frascarelli 2018 for the role of the selecting verb in the licensing of null subjects in embedded clauses).

A second environment in which null subjects are rarer in OI is interrogative clauses. As discussed by Cognola & Walkden (2019), null subjects are more frequent in main declarative clauses (90%) and rarer in interrogative clauses (44%) in OI (and OHG) *Diatessaron.* Moreover, null subjects are frequently found with some *wh*-elements (as shown in § 4.1. and 4.2): *why, what, how* and much rarer with other *wh*-elements. We propose that this distribution of null subjects in interrogative clauses is fed by a mechanism similar to that assumed by Cognola & Walkden (2019) for embedded clauses. More specifically, we put forth that i) *wh*-elements count as interveners for the agreeing mechanism between a Shift Topic/logophoric operator and *pro*; ii) *wh*-elements occupy different positions within the left periphery in these

varieties (Rizzi 2001, Munaro 1999 among others)[14]. As for the former idea, we suggest that, unlike in present-day Italian, *wh*-elements could count as interveners for the matching relation between the Shift Topic/logophoric operator and *pro*, i.e. minimality effects could be found between two different A' (Topic and operator) chains, unlike in present-day Italian (cf. Cinque 1990, Frascarelli 2007, Rizzi 2004). As discussed in Cognola (2013, 2019) and Casalicchio & Cognola (2019, 2020) Relativized Minimality effects (henceforth RM) between constituents belonging to two different (Topic and Focus) featural classes are rare but not absent in relaxed V2 languages, as OI is claimed to be. Therefore, although they are excluded from Rizzi's (2004) latest version of Featural Relativized Minimality (Rizzi 2001, 2004; Friedmann, Belletti, & Rizzi 2009, Villata, Rizzi, & Franck 2016), they are found in Rhaeto-Romance varieties and Mòcheno. Cognola (2019) and Casalicchio & Cognola (2019) demonstrate that this happens because topics move in these languages, i.e. both operators and topics undergo movement to the left periphery. Therefore, it is not unexpected that in relaxed V2 languages an Operator chain can interfere with a Topic chain.

For the case of OI, we assume that interference between the two chains can only be seen indirectly (i.e. there are no Relativized Minimality effects between fronted topics or Operator and topic, see Cognola 2019), but are only found under certain structural conditions key in the licensing of *pro*.

As shown in (19) we assume that when *wh*-elements occupy a low position in the left periphery, and are only preceded by a TopicP, they count as interveners for the matching relation between the Shift Topic/logophoric operator and *pro.*
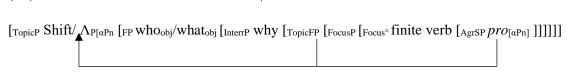
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[14]   The claim that *wh*-elements in interrogative clauses occupy different positions within the left periphery is obviously not to be taken to be valid for all Older V2 Romance languages. As pointed to us by Christine Meklenborg Nilsen, *wh* elements show up in the same position in Old French interrogative clauses (Meklenborg Salvesen 2009).

(19)

[FP Shift/$\Lambda_{P[\alpha Pn}$ [FocusP where$_j$ [Focus° t$_j$ finite verb [AgrSP *pro$_{[\alpha Pn]}$* [Agr° ~~hai~~ [vP *pro$_{[\alpha Pn]}$*[VP]]]]]]]

　　　　　　　　　　　　　*

We suggest that the intervening effect blocking the licensing of the null subject in (19) is circumvented in sentences in which two TopicPs are available in the left periphery. The presence of a lower TopicP in the left periphery functions as a sort of 'escape hatch' for the Topic chain, which can be established circumventing the Operator chain. Here we follow Rizzi (2001a) in assuming that InterrogativeP is found in the Topic area above FocusP and can be preceded and followed by TopicPs. When the wh-element appears higher in the left periphery, like in the case of why which appears in InterrogativeP (Rizzi 2001a) it does not count as an intervener because the ShiftTopic can establish a Topic chain via the TopicP below InterrogativeP.

(20)

[TopicP Shift/$\Lambda_{P[\alpha Pn}$ [FP who$_{obj}$/what$_{obj}$ [InterrP why [TopicFP [FocusP [Focus° finite verb [AgrSP *pro$_{[\alpha Pn]}$*]]]]]]]

We suggest that the property shared by high *wh*-elements is that they do not move through Spec-FocusP when they appear in the left periphery, i.e. they are either externally merged in the left periphery or they are moved directly to their higher position in the periphery. We assume that *perché* 'why' is moved to Spec-InterrogativeP, whereas the other two *wh*-elements are moved to another Operator

position higher than FocusP.[15] We thus derive a predicted difference between 'high' *wh*-items (by hypothesis *why, what, how* in all or most cases) and 'low' *wh*-items, which should correlate with a difference in interpretation: we leave detailed testing of this prediction to future research.

The proposed analysis is also potentially able to account for the observed preference for null subjects in *wh*-interrogative clauses in Old Romance. We put forth that the presence of a high *wh*-element in the left periphery activates the relevant TopicP/FP which is vital for the agree relation with *pro* in AgrSP.

5.5.3.2 Old Germanic

Following Walkden (2014) and Cognola & Walkden (2019), we propose that Frascarelli's (2007, 2018) mechanism of licensing of null subjects can also be applied to at least some Old Germanic languages. We here focus on OHG, as null subjects in interrogatives in the other Old Germanic languages are either too sparse (OIce, OE, OS) or too rich and mysterious (Gothic) to be very telling.

For OHG we could demonstrate very clearly that only one variable feeding null subjects plays a role, i.e. person. Moreover, we also found that null subjects are possible in the second person singular in all texts and in the first and second persons

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[15] As correctly pointed out by Christine Meklenborg and an anonymous reviewer, the fact that *what* patterns with *why* and *who* is unexpected, given that the presence of InterrogativeP has been put forth for *perché* 'why' and *se* 'if' in Italian. We do not have an explanation for this, and can only speculate at this stage. It is well-known that in present-day Romance dialects interrogative *wh*-elements appear in different positions within the left periphery, and that these differences in their distribution is connected both to their syntactic and pragmatic (special vs real interrogative) function (Munaro 1999, Munaro & Obenauer 2002, Munaro, Poletto & Pollock 2001). This asymmetry across interrogative *wh*-elements that we observe in Northern Italian dialects might be a continuation of an OI pattern which we indirectly see in the licensing of *pro*. Moreover, note, that OI exhibited a double-complementiser system according to which the complementiser *che* 'what' could appear in both a higher and a lower position within the left periphery, presumably in ForceP and FinP respectively (Paoli 2003, 2007; Poletto 2014: 7). Since in V2 languages the position of complementisers is tightly connected to the positions of the finite verb and fronted XPs are able to satisfy the EPP feature, we could assume that there exist two areas within the left periphery containing FPs able to host the finite verb, XPs counting for EPP and complementisers.

in the *Diatessaron*. Crucially, in no OHG considered texts are null subjects possible in the 3rd person in interrogative clauses.

Theoretically, this empirical result implies that in interrogative clauses OHG only relies on the possibility of licensing null subjects in an Agree relation with a logophoric operator and not with a Shift Topic. Moreover, the fact that in all OHG varieties there is i) no effect of interrogative type on the distribution of null subjects, and ii) null subjects are not more frequent with *why, what, how* indicates, in our view, that all *wh*-elements appear in the same FP of the left periphery.

We do not think it is a coincidence that precisely the second person singular and the first and second persons exhibit the highest morphological richness in OHG.

Person	Number	*ziohan* 'to pull'	*salbôn* 'to anoint'
1		ziuhu	salbôm, salbôn
2	sg	ziuhis(-t)	salbôs(-t)
3		ziuhit	salbôt
1		ziohemês, ziohen	salbômês, salbôn
2	pl	ziohet	salbôt
3		ziohent	salbônt

Table 36. Verbal endings in the OHG Tatian (cf. Axel 2007: 316)

We account for these facts starting out from the idea that OHG is a Force-V2 language (Wolfe 2019), i.e. in which Force° is associated with an EPP feature forcing the finite verb to raise to Force° and an XP to move to Spec-ForceP (Axel 2007, Holmberg 2015 for an analysis of V2). In OHG V3 word orders are possible in sentences involving a scene setter adverbial appearing in FrameP (Tomaselli 1995, Cognola & Walkden 2019). We further assume that in OHG *Diatessaron* there is a FP hosting Silent A-Topics and Edge Linkers found below ForceP.

(21)   [FrameP [ForceP XP finite verb [FP [<Null A-Topic/Edge Linkers>] [Topic° ~~finite verb~~ [TP *pro* ~~finite verb~~k]]]]]

Cognola & Walkden (2019) show that third person null subjects are excluded from *wh*-interrogative clauses and only found in yes/no interrogatives (see also § 4.3.2). This indicates that the licensing of third person *pro* is blocked by the fronting of a *wh*-element. We propose that this takes place because a fronted *wh*- element moves through all Spec positions on its way to ForceP, blocking the possibility of having a silent topic (due to the same mechanism ruling the co-occurrence of a *wh*-element and a topic in the left periphery in present-day German). Since the position for the silent A-Topic is not available, the only possibility is having agreement with a C-Edge Linker, i.e. with the 1st and 2nd persons.

(22)   [Force *wh*-elementj finite verbk [FP ~~wh-element finite verb~~ [TP *pro* ~~finite verb~~ [VP ~~finite verb~~]]]]

In yes-no interrogative clauses, in which no *wh*-element is moved to the left periphery, null subjects are possible in all persons because nothing saturates the TopicP in the left periphery and an agree relation can be established between the null A-topic and *pro*.

        According to the analysis proposed, the fact that third person null subjects are absent in *wh*-interrogative clauses follows from the V2 nature of OHG and from the ungrammaticality of having two XPs potentially able to satisfy the EPP feature on Force° in the left periphery, and not from rich verb agreement.

5.5.4. On the diachrony of null subjects

5.5.4.1 Typology of V2 asymmetric *pro*-drop languages

A straightforward result arrived at in this paper is that asymmetric *pro*-drop languages feature slightly different systems of licensing of null subjects which represent all variants of null subject licensing mechanism proposed by Frascarelli (2007, 2018). A first set of languages, including Old Norse-Icelandic, Old English and Old Saxon, feature null subjects in main declarative clauses (Kinn, Rusten & Walkden 2016, Walkden 2014), but not in interrogative clauses.

We assume that these languages are Force-V2 languages in which Null A-Topics and Edge Linkers on the one hand, and interrogative operators/*wh*-elements on the other hand, must all show up in Spec-ForceP. This implies that operators and A-Topics/Edge Linkers are in complementary distribution in the left periphery of the analysed languages. We therefore assume that their co-occurrence is excluded from a strict version (Rizzi 1990) version of RM (also instantiated by in present-day German) i.e. any XP able to satisfy the EPP feature on Force° counts as an intervener for other A-chains irrespectively of the featural class it belongs to.

This hypothesis is sketched in (23). We assume that Null-A-Topics and Edge Linkers are hosted in a FP below ForceP and that when they are present, they have to move up to Spec-ForceP for EPP reasons.

(23) [FrameP [ForceP Null A-Topic/Edge Linkers finite verb [FP Null A-Topic/Edge Linkers ~~finite verb~~ [TP *pro* ~~finite verb~~]]]]

In interrogative clauses, the co-occurrence of an operator and the Null A-Topic and the Edge Linkers is excluded because an operator in Spec-ForceP counts as an intervener for the Topic-chain, i.e. the operator and the topic chain block each other as expected within the earlier version of RM (Rizzi 1990).

(24)

[FrameP [ForceP Op/wh-element finite verbk [FP Null A-Topic/Edge Linkers [TP **pro** ~~finite verb~~]]]]

These languages, in particular Old Norse-Icelandic (a non-null-subject language in *wh*-interrogative clauses despite its rich morphology), indicate that the licensing of null subjects is not primarily connected with rich verb morphology: the most important constraint for the licensing of *pro* is connected with the structure of the left periphery and with the nature of movement in the V2 languages.

A second type of languages is instantiated by OSp *Conde Lucanor* and Gothic, in which null subjects are possible in both main declarative clauses (cf. Wolfe 2015 for Spanish and § 4.2) and in interrogative clauses. According to the proposed account this system follows from the availability of the latest version of Rizzi's RM according to which two A'-chains instantiated by constituents belonging to two different featural classes do not give rise to RM effects. Therefore, the topic chain needed to license *pro* in AgrSP can be established in the presence of other constituents in the left periphery satisfying the EPP feature responsible for V2.

A third type of language is represented by the OHG and OI *Diatessaron,* and possibly the OI *Novellino* and the OSp *General Estoria* in which null subjects are possible in both main clauses (Cognola & Walkden 2019) and in interrogative clauses, though with different frequencies. As shown by Cognola & Walkden (2019: 108), null subjects are found in around 90% of sentences in the OHGand OI *Diatessaron* and conversely in around 30% of interrogatives in the same texts. This indicates that interrogatives do not block *pro*-drop in these languages, unlike in Old

English, Old Saxon and Old Norse-Icelandic, but surely disfavour it. In these languages there exists a correlation between the distribution of null subjects and person on the one hand and interrogative type on the other. In the OHG *Diatessaron* third person null subjects are only possible in yes-no interrogative clauses, which we account for through the idea that a fronted *wh*-element blocks the TopicP able to host the silent A-Topic but leaving available the possibility of having an Edge-Linking element. Therefore, null subjects are grammatical in all interrogative clauses with all persons, and only possible with the third person when no *wh*-element blocks the use of the low TopicP. As proposed above for Old Norse-Icelandic, we suggest that the distribution of null subjects is fed primarily by structural constraints (unavailability of TopicP in the left periphery), but also reflects itself in the morphology. In OHG *Diatessaron* the first and second persons are, in fact, those exhibiting the richest morphological paradigm. It cannot be chance that precisely the second person is the only person which is compatible with null subjects in Isidor and Notker (and more generally in the history of the German language until present-day dialects; see work by Weiß & Volodina 2018).

For the OI *Diatessaron* in which null subjects are found in all persons in both clauses we have proposed that the licensing of null subjects is favoured in sentences featuring a high (in Rizzi's 2001 sense) *wh*-element. We have tentatively proposed that higher *wh*-elements favour the licensing of *pro* because they are followed by a TopicP through which a Topic chain headed by the silent A-Topic sitting in Spec-ShiftP can be established. Low *wh*-elements, on the contrary, are not followed by any TopicP, which blocks the creation of the chain.

We propose that this analysis can be applied to the *Novellino* and the *Decameron*. In these two texts, in fact, null subjects are most frequently (*Novellino*)

or exclusively possible (*Decameron*) in interrogative clauses featuring high *wh*-elements. This we take as evidence in favour of the fact that these *wh*-elements, for the reasons described in the paper, represent the structural environment for the licensing of *pro*. It has to be stressed that these structural conditions represent a potentiality: in the *Decameron* (and in the *Fiore de Rettorica* possibly for different reasons) null subjects are rare, i.e. for stylistical or other reasons the licensing of null subjects cannot take place.

5.5.4.2 On the systems within and across language families

The last question to be addressed is to what extent our study contributes to the understanding of language change within language families and single languages. With the exception of Gothic, the early Germanic languages we considered clearly witness a system characterized by a clear dichotomy between main and interrogative clauses in the distribution of null subjects. While all languages considered allow for null subjects in main clauses, in interrogative clauses null subjects are either ruled out (Old English, Old Saxon, Old Norse-Icelandic) or present in a reduced form (OHG *Diatessaron*, Isidor, Notker). We have proposed that this follows primarily from structural properties of the early Germanic languages as Force-V2 languages in which the co-occurrence of two XPs potentially able to satisfy the EPP feature is blocked by a strict version of RM (Rizzi 1990) blocking the co-occurrence of all A'-chains (Old English, Old Saxon, Old Norse-Icelandic) or is restricted when an interrogative *wh*-element is fronted (OHG *Diatessaron*).

It is hard to tell whether the empirical facts we documented could be taken as evidence in favour of a development from a null-subject system fed by the absence of RM effects between Operator and Topic chains (Gothic) towards a more restricted system characterised by the presence of RM effects between Operator and Topic chain blocking the structural conditions vital for the licensing of *pro* leading thus to a non-null-subject system. According to Weiss & Volodina (2018:278), the presence of null subjects in *that*-embedded clauses in OHG should be taken as a relic from Indo-European, since in this environment the distribution of null subjects does not appear to be fed by person, unlike in present-day German dialects, but also by clause structure. The idea that a relatively unrestricted availability of null subjects in OHG is to be taken as a relic from Indo-European indicates that null subjects are a

conservative trait of grammar, which should therefore be found in the oldest languages (cf. Walkden 2014: 230–231). This intuition appears to be confirmed by our Gothic data, which might be taken to exemplify an older system characterized by the presence the latest version of RM according to which Operator and Topic chains do not interfere with each other, whereas the other languages exemplify systems which are becoming gradually more restricted. As for OHG, we clearly see that; in the oldest text we considered, Isidor (800), null subjects are rare in interrogative clauses (data are also scarce), in the same way they are rare in the latest text: Notker (980). If it seems plausible to assume that Notker represents a language stage characterized by a non-null-subject system, this assumption might be too tentative for Isidor – our results might simply be due to other factors such as text type. Crucially, in both texts, the only contexts in which null subjects involve the second person, which we think is not a matter of chance. What is clear is that the *Diatessaron* witnesses a language stage, or a language variety, closer to Gothic than to the other two OHG texts, in which *pro*-drop was possibly more widely, even though the key factors ruling out *pro*-drop in present-day V2 varieties (interference between fronted *wh*-elements and possibility of having a silent Topic) also appear to start to play a role in this text. These same factors have been shown to be at play in Old Saxon, Old English and Old Norse-Icelandic, which allow for null subjects in main declarative clauses but not in interrogatives and therefore instantiate the most restrictive system among the Germanic languages considered.

Based on this we can draw the following scale of the Germanic languages considered starting from the oldest, Gothic, which we take to instantiate the most conservative system (*pro*-drop nearly unrestricted) to the most innovative systems of

Old Saxon, Old English and Old Norse-Icelandic in which *pro*-drop is restricted to main declarative clauses.

(25)

[*pro*-drop]   [non *pro*-drop]

Gothic > Tatian > Isidor > Notker > Old Saxon > Old English > Old Norse-Icelandic

Let us move now to Romance languages. The data discussed in the paper only focus on OI and OSp, but allow us to already reach some generalizations. Our Old Romance data clearly indicate that the Old Romance group appears to be more coherent than the early Germanic, since in no Romance language are null subjects ruled out from interrogative clauses. This implies that in no Romance languages are null subjects restricted to main declarative clauses, i.e., according to the proposed analysis; in no Old Romance language do we find the strict version of RM blocking two A'-chains involving XPs belonging to two different featural classes. However, null subjects are less frequently found in interrogative clauses than in main clauses in the considered Old Romance texts, which we took as evidence for the existence of a grammar more sensitive to RM effects, which possibly instantiated an in-between system between the strict version of RM and the latest version of RM found in present-day Italian.

For OSp, we showed that the oldest text, *General Estoria,* exhibits a more reduced distribution of null subjects absent in the later text *El Conde Lucanor*. This change in the grammar between the two texts parallels with the different years in which the two texts were written. Therefore, the differences between the two texts might correspond to a shift in the grammar, possibly fed by a change in the restrictions of RM.

In the case of OI, we considered three texts written between 1260 and 1370. The realization of subjects varies across these texts in an unexpected way. We know that OI was an asymmetric *pro*-drop language, whereas present-day Italian is a consistent *pro*-drop language (Rizzi 1982). In the texts we analysed, we see that null subjects are nearly absent from interrogative clauses in the earliest text, *Rettorica* (1260), while they are found in around 40% of interrogative clauses in *Novellino* (1280) and *Diatessaron* (1373). They are rare in the *Decameron* (1370).

We suggest that the distribution of null subjects across these texts should be captured in the following way: The fact that null subjects are virtually absent in the earliest text (*Rettorica* 10% with 2 examples) is an epiphenomenon, i.e. it is not due to the abstract properties of an OI grammar lacking null subjects, but it follows from the rhetorical strategies adopted in the text in which interrogative clauses are used to introduce A-Topics. Since A-Topics cannot remain silent, null subjects will always be ruled out in a text structured like this. On the other hand, we suggest that the fact that null subjects are also rare in a late text like the *Decameron* should be understood as an indication of the abstract rules of grammar. As pointed out by Paola Benincà (p.c.) *Decameron* is a very special text within OI texts, because it is rather late, and because it witnesses a different syntax from the other OI texts, whose specific traits are however poorly understood. We suggest that our data show that the high rate of overt subjects in interrogative clauses in this text should be understood as an innovation specific to *Decameron* which should not be taken as evidence in favour of the idea that the language is moving towards a non-null-subject system, but it is moving to a null-subject system featuring subject clitics. As is well-known (Vanelli, Renzi, Benincà 1986, Poletto 2000), interrogative clauses are the prototypical environment in which subject enclitic pronouns show up and in which the series of forms is complete

for all persons. We propose that the presence of an overt subject pronoun with all persons in interrogative clauses is an indication of a system which is moving towards the development of subject clitic pronouns.

As for *Novellino* (1280) and for *Diatessaron* (1373) we put forth that these texts represent a phase of the OI language characterized by a very similar asymmetric *pro*-drop system. The fact that the two texts belong to different periods can be accounted by assuming that i) the asymmetric *pro*-drop phase was not over in 1373, or ii) the 1373 manuscript of the *Diatessaron* is based on an older, more conservative text (something which is hinted in Vaccari & Vatasso's 1938 introduction to the text's critical edition). We do not have a solution for this problem. What our data could clearly show is that these four texts do not give an indication of the diachronic path of Italian from an asymmetric *pro*-drop language to a consistent *pro*-drop language, since text type and properties of a single variety play a more important role than dating. Moreover, we were also able to document and analyze theoretically a pretty coherent language stage of Old Italian characterized by the presence of asymmetric *pro*-drop. How this system was lost is a question we could not answer on the basis of our data.

5.6. Conclusion

In the literature, many of the early Romance and Germanic texts have been characterized in a similar way as 'asymmetric' *pro*-drop languages. In our investigation of interrogatives across a variety of texts, although we have shown that clause type is undoubtedly important, we have also shown that there is substantial variation within and across languages. Some varieties (Gothic, following Greek, and

the OSp *Conde Lucanor*) seem to allow null subjects in all interrogatives. Other varieties (e.g. OE) do not seem to allow null subjects in interrogatives at all.

In our analysis we focused on the 'mixed' systems. Here we identified two factors that play a role: interrogative type (including type of *wh*-element) and person. In the Old Romance mixed varieties, both factors are at play; in the OHG *Diatessaron*, the only Old Germanic mixed text, only person plays a role. We took these facts to necessitate analyses in which both the strength of specific morphological forms and the agreement relations with left-peripheral operators are crucial, and interact.

Interrogatives are underinvestigated with regard to null subjects, and we have not been able to do justice to all of the data we have presented here. Furthermore, we have said little about how null subject licensing in interrogatives relates to the better-studied mechanisms of null subject licensing in declaratives. Nevertheless, we hope that this contribution represents a useful starting point for future work to build upon.

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