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A second thought on *Emarginazione*: Destressing vs. "Right Dislocation"*

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Italian exhibits both VSO and VOS word orders, with different prosodic properties.

When the sentence-final element is focused (here indicated by bold), only VOS is possible, while VSO is impossible:

(1) a.   *   Ha comprato Gianni **il giornale**.   *VSO

                    has bought Gianni the newspaper

     b.   Ha comprato il giornale **Gianni**.   VOS

VSO sequences may however arise in the format exemplified in (2)a, whose VOS counterpart is (2)b. What is now focused is the constituent closer to the verb, the subject and the object respectively. The sentence-final argument, which is presupposed, has a low pitch intonation contour and can be separated from the clause by an intonational break (here indicated by the comma):[1]

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[1] Interrogative sentences display the same pattern as (1) and (2):

(i) a. *   Ha comprato Gianni **il giornale**?   *VSO

     b.   Ha comprato il giornale **Gianni**?   VOS

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(2) a.   Ha comprato **Gianni**, il giornale.   VSO

     b.   Ha comprato **il giornale**, Gianni.   VOS

Antinucci and Cinque (1977) call the process in (2) "*emarginazione*". They suggest that the object in VSO and the subject in VOS is marginalized at the end of the clause, and that *emarginazione* differs from Right Dislocation. In the former construction, the constituent at the end of the clause is not anticipated by a pronominal copy. Compare (2) with (3):[2]

(3) a.   Lo ha comprato **Gianni**, il giornale.   clVS,O

                 it has bought Gianni, the newspaper

     b.   pro ha comprato **il giornale**, Gianni.   proVO,S

                 [he] has bought the newspaper, Gianni

In this paper, I concentrate on (2). In particular, I show that in spite of the apparently similar prosodic and pragmatic properties exhibited by these two sentences, there are many differences between VSO and VOS. This suggests that *emarginazione* does not correspond to a uniform syntactic process, and that the two sentences in (2) instantiate different constructions. In (2)a, the object is destressed *in situ*; in (2)b, the subject is right-dislocated, i.e. (2)b corresponds to (3b). (I keep the traditional term "Right Dislocation" without however implying rightward movement or base generation in a rightward position.) As will become clear below, the different analysis of VSO and VOS is exactly what is expected under the antisymmetric approach of Kayne (1994).[3]

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     c.   Ha comprato **Gianni**, il giornale?   VSO

     d.   Ha comprato **il giornale**, Gianni?   VOS

[2] In (3)b the pronominal copy is the null category *pro*. Although it is not audible, its presence is assumed in analogy to (3)a, where the copy is realized by the accusative clitic pronoun *lo*.

[3] The differences between VSO and VOS also indicate that *emarginazione* is not a PF phenomenon, since it is sensitive to the syntactic function of the marginalized element. For the analysis of

The paper is organized as follows. In section 1, the analysis of VSO is undertaken. I first show that (2)a is not an instance of Right Dislocation of the object, as sometimes claimed. Secondly, it is proposed that both the subject and the object are *in situ*. Hence, focused constituents need not move to specFocusP before Spell-Out. An aside on the distribution of the weak negative quantifier *niente* 'nothing' ends this section. Section 2 is devoted to the discussion of VOS. Here too, the focused constituent, i.e., the object, is taken to occur in its base position inside VP. In section 3, VOS is compared to VOS, i.e. (1)b, which is analysed in terms of leftward scrambling of the object, following work by Ordóñez (1997, 1998) on Spanish (In this paper, (1)a is not analysed). In section 4, some data concerning verb-subject agreement in a Central Italian variety will be used to corroborate the analysis. Section 5 finally discusses those constructions in which it is the subject which is destressed.

1. *THE ANALYSIS OF VSO*

We start with the observation that in VSO, the object is not right-dislocated. I follow the original intuition by Antinucci and Cinque (1977), according to which (2)a is structurally different from (3)a, and depart from the proposal, sometimes made, that (2)a is structurally identical to (3)a, the only difference being that an anticipatory clitic pronoun is not present or not pronounced in the former. In other words, that proposal takes the pronominal copy to be optional in Right Dislocation (whereas it is obligatory in Left Dislocation, see Cinque 1990:§2.3.5). As far as I know, however, nothing seems to independently support this conclusion, and the data rather seem to speak to the

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emarginazione as a PF-movement rule, see Calabrese (1982, 1992). According to this analysis, *emarginazione* applies in order to guarantee the required adjacency between the focused argument and the verb, which must form an intonational group.

Notice that if (2)b is to be analysed as (3b), I should refer to VOS as proVO,S. For ease of exposition, in the rest of the paper I keep using VOS.

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contrary. Consider first the contrast between (4) and (5). Quantified objects cannot be right-dislocated,[4] but they can follow a focused subject in VSO:

(4) a.   *   Non l'ha invitato **Gianni**, nessuno.   *clVS,O
               not him has invited Gianni, anybody

    b.   *   L'hanno incontrato **i rappresentanti**, ogni studente. *clVS,O
               him have met the delegates, every student

(5) a.   A: Ho sentito che Maria non ha invitato nessuno.
                  [I] have heard that Maria not has invited anybody
               B: No, non ha invitato **Gianni**, nessuno.   VSO
                  no, not has invited Gianni, anybody

    b.   A: Il preside ha incontrato ogni studente.
                  the dean has met every student
               B: No, hanno incontrato **i rappresentanti**, ogni studente. VSO
                  no, have met the delegates, every student

VSO can be distinguished from Right Dislocation also on the basis of the following data: whereas in colloquial Italian a right-dislocated [+human] object (proper name or personal pronoun) can be preceded by the preposition *a*, the object in VSO cannot (see Cardinaletti 1988):

(6) a.   L'abbiamo invitato **noi**, a Gianni.   clVS, *a* O
               him have invited we, to Gianni

    b.   Vi abbiamo promosso, a voi, anche se non lo meritavate.
                                                            pro cl V, *a* O
               [we] you have passed, to you, even if [you] not it deserved

(7) a.   *   Abbiamo invitato **noi**, a Gianni.   *VS *a* O

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[4] See Calabrese (1992:93ff). Object quantifiers cannot be left-dislocated either:

(i)   *   Nessuno, Gianni non l'ha invitato.
            anybody, Gianni not him has invited

b.   *   Ho promosso **io**, a voi, anche se non lo meritavate. *VS *a* O
                 have passed I, to you, even if [you] not it deserved

Furthermore, whereas the order of right-dislocated arguments is free, (8), the order of the objects following the subject in VSO is the same as the unmarked order of arguments, (9) (see Zubizarreta 1998:156ff for the same contrasts in Spanish):[5]

(8) a.   Ce l'ha nascosto **il bambino**, il libro, sotto il letto. clVS,O
                      there it has hidden the child, the book, under the bed
    b.   Ce l'ha nascosto **il bambino**, sotto il letto, il libro. clVS,O

(9) a.   Ha nascosto **il bambino**, il libro, sotto il letto.   VSO
    b.*   Ha nascosto **il bambino**, sotto il letto, il libro.   *VSO
    c.   Il bambino ha nascosto il libro sotto il letto.
    d.   *   Il bambino ha nascosto sotto il letto il libro.
                           (with unmarked intonation)

As shown in (9)d, a direct object cannot follow a PP in the unmarked order. This is also true in VSO, (9)b. However, a direct object can appear after a PP if it is heavy, (10)b. Again, VSO behaves like subject-initial sentences, (10)a (thanks to Francisco Ordóñez for having drawn my attention to this case):

(10) a.   Ha nascosto **il bambino**, sotto il letto, [il libro che abbiamo
   comprato ieri].   VSO
    b.   Il bambino ha nascosto sotto il letto [il libro che abbiamo
            comprato ieri].

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[5] Interestingly, Calabrese (1992:97) only gives examples parallel to (9)a:

(i)   a.   Ha guardato **Piero**, le montagne, con il binocolo.   VSO
           has looked Piero, at the mountains, with the binoculars
      b.   Ha messo **Sandro**, il libro, nel cassetto.   VSO
           has put Sandro, the book, in the drawer

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the child has hidden under the bed the book that [we] have
bought yesterday

These data not only show that in VSO the object is not right-dislocated, but they also suggest the analysis of VSO. The arguments are all inside VP. The subject is in specVP (and is stressed *in situ*); the object occupies the complement position of the verb (and is destressed *in situ*) (see section 1.1 below). The structural representation of (the relevant portion of) (2)a is as in (11) (for an analysis of past participle movement to an aspectual head, see Cinque 1997):

(11)
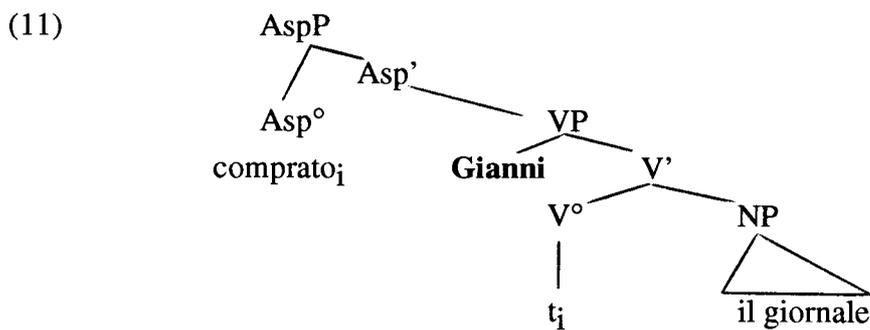
That the subject is in VP is confirmed by the fact that it follows very low adverbs such as *bene* 'well': *Ha risolto bene Gianni, il problema* 'has solved well Gianni, the problem'.

Given that the object stays inside VP, it becomes possible to understand why the sentences in (5) are grammatical. Negative quantifiers are c-commanded by the negative marker *non*, as required; universally quantified constituents occur in a position from where they can raise to the relevant LF-position to get interpreted.[6]

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[6] Antinucci and Cinque (1977:145) claim that the following sentence is ungrammatical because the marginalized constituent *il formaggio* is not in the scope of the negative marker *non*:

(i)   Non hanno mangiato **i bambini**, il formaggio (*ma il dolce).

        not have eaten the children, the cheese (but the cake)

If the negative marker c-commands the marginalized constituent, as is suggested here, the ungrammaticality of (i) should be due to a different reason. It is straightforward to assume that negation

As expected if the marginalized object is in its base position, (7) patterns with simple sentences where the object is not preceded by *a*: *Abbiamo invitato (*a) Gianni*, *Ho promosso (*a) voi*.

As for (9) and (10), the order of the destressed objects is the one provided by the syntax, as shown in (9)c and (10)b, whereas there is no such constraint on the order of right-dislocated arguments. Consider a similar contrast between Right Dislocation and *emarginazione*, discussed in Calabrese (1982). If the direct object *Mario* is right-dislocated, as in (12), it can be far away from the verb *convinto* by which it is selected and can follow the infinitival complement of *convinto*. If *Mario* is not anticipated by a clitic pronoun, as in (13)a, the result is ungrammatical; in other words, *Mario* cannot be marginalized after the infinitival clause because this is not its base position. Its base position is immediately after the verb *convinto*, as in (13)b:

(12)		Che cosa l'hai convinto [a fare], Mario?
		what [you] him have convinced to do, Mario?
(13)a.	*	Che cosa hai convinto [a fare], Mario?
		what [you] have convinced to do, Mario?
b.		Che cosa hai convinto Mario [a fare]?

The fact that in (2)a the subject is in specVP and the object is in complement position implies that the subject c-commands the object (see Kayne 1994:150, fn.15). This is confirmed by (14). In (14)a, the quantifier *ogni* binds the pronoun contained in the destressed object, and the bound reading of the pronoun is obtained. In (14)b, the subject *Gianni* binds the anaphor in the destressed object. In (14)c, the subject pronoun *lui* c-commands the R-expression *Gianni* contained in the destressed object, and ungrammaticality is produced. In (14)d, the anaphor *propri* is not bound by *Gianni*, which causes the ungrammaticality of the sentence. In (14)e, in spite of the fact that the

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interacts with focus, and that only something which is focused can be contrasted. The grammatical counterpart, where the focused element is contrasted, is (ii) (Antinucci and Cinque 1977:145):

(ii)   Non hanno mangiato **i bambini**, il formaggio, ma i topi.

            not have eaten the children the cheese, but the mice

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quantifier *ogni* does not c-command it, the pronoun *sua* can have a bound reading. The quantifier can always have scope over the subject if this is focused; consider *Sua$_i$ madre ha visitato ogni$_i$ ragazzo* ('his mother has visited every boy') (see Zubizarreta 1998:11-15 for discussion):

(14)a.		Ha visitato **ogni$_i$ ragazzo**, sua$_i$ madre.	VSO
		has visited every boy, his mother	
b.		Ha visitato **Gianni$_j$**, i propri$_j$ genitori.	VSO
		has visited Gianni, the his parents	
c.	*	Ha visitato **lui$_j$**, la madre di Gianni$_j$.	*VSO
		has visited he, the mother of Gianni	
d.	*	Hanno visitato **i propri$_j$ genitori**, Gianni$_j$.	*VSO
		have visited the his parents, Gianni	
e.		Ha visitato **sua$_i$ madre**, ogni$_i$ ragazzo.	VSO
		has visited his mother, every boy	

Finally consider the following sentences, which, according to Calabrese (1992:100; 102,fn.14), show that the post-verbal main subject c-commands the subject of the embedded clause. This is coherent with the analysis proposed in (11):

(15)a.	Ha detto **Mario$_j$**, di PRO$_i$ essere stato in America.	VSO
	has said Mario, of having been in America	
b.	Ha detto **Mario$_j$**, che pro$_i$ avrebbe fatto queste cose.	VSO
	has said Mario, that [he] would-have done these things	

1.1. *ON THE FOCUS PROPERTIES OF VSO*

I am assuming here that focused constituents can stay in their VP-internal position and need not move overtly to specFocusP (see Rizzi 1997). In the latter analysis, the derivation of e.g. (2)a should proceed as follows: the object (*il giornale*) is "scrambled" to some position to the left, the focused subject (*Gianni*) is moved overtly to

specFocusP, and the rest of the sentence (*ha comprato*) is moved to a position preceding it, presumably specTopicP: *[TopicP [t_j ha comprato t_i]_k [FocusP [Gianni]_j [IP ... [il giornale]_i [XP t_k]]]]*. In sentences such as (16), this analysis would produce a configuration in which the post-verbal subject is not c-commanded by the negative marker *non*, (16)a, and by a clitic pronoun adjoined to I°, (16)b. Ungrammaticality and grammaticality, respectively, would be expected, contrary to fact:

(16)a.		Non ha parlato **nessuno**, a Gianni.	VSO
		not has spoken anybody, to Gianni	
b.	*	Lo_i presenterà **la madre di Gianni**_i, a Maria.	*VSO
		him will-introduce the mother of Gianni, to Maria	

Another piece of evidence for VP-internal focus is the fact that multiple foci are possible *in situ*, (17)a, while they are impossible in sentence-initial position, (17)b:

(17)a.	(?)	Ha letto **Gianni le riviste** (e **Mario i libri**).
		has read Gianni the magazines (and Mario the books)
b.	*	**Gianni le riviste** ha letto (e **Mario i libri**).

(17) can be accounted for if sentence-initial focus is movement to specFocusP, a unique position, while there is no such restriction on *in situ* focus. Notice that multiple foci make the order VSO possible in Italian (while it is ungrammatical with focus on only the object, i.e. *VSO, cf. (1)a).[7]

In VSO, the subject is necessarily an instance of contrastive focus, (18)a, and is marginal as a noncontrastive focus, i.e., as an answer to a *wh*-question, (18)b (for the discussion of the two types of focus, see Zubizarreta 1998:1-7 and the references quoted there):

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[7] Multiple foci give rise to the typical linked or paired focus reading also found with multiple *wh*-. The sentence in (17)a can be used as an answer to a question such as (i), in a context in which it is not clear who read what:

(i)	Insomma, chi ha letto cosa?
	well, who has read what?

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(18)a.   A: Posso guidare io durante il viaggio?

                can drive I during the trip?

        B: No, non mi piace come guidi: porterà **Mara**, la macchina.

                           VSO (Frascarelli 1996:80)

           no, [I] not like how [you] drive: will-drive Mara, the car

   b.   A: Chi porterà la macchina?

                who will-drive the car?

    ??   B: Porterà **Mara**, la macchina.   ??VSO

Contrastive focus seems to be the most natural reading of the following sentence as well (taken from Frascarelli 1996:275), although the context is not provided:

(19)   Dovrebbe avere **lui** la distinta.   VSO

                should have he the slip

The fact that in VSO the subject is not the most embedded constituent in the clause prevents that it is assigned phrasal prominence by the Nuclear Stress Rule; the only way to stress the subject in VSO is via the Emphatic/Contrastive Stress Rule (see Zubizarreta 1998:44-45 and the references quoted there). The presupposed object, which follows the stressed subject, is destressed, as usual.

Interestingly, if the object is right-dislocated, the subject can be an instance of noncontrastive focus, i.e., it counts as the lowest constituent in the clause (which suggests that it must have a structure parallel to (29)b below):

(20)   A: Chi porterà la macchina?

           B: La porterà **Mara**, la macchina.   clVS,O

              it will-drive Mara, the car

The contrast between (18)b and (20) can be seen as a further argument against analysing the object in VSO as right-dislocated.

1.2. *AN ASIDE ON* NIENTE

(5)a above contrasts with the following:

(21)   A: Maria non ha fatto niente.
                 Maria not has done anything
        *   B: No, non ha fatto **Gianni**, niente.   *VSO
                 no, not has done Gianni, anything

The ungrammaticality of the Spanish counterpart of (21)B is attributed by
Zubizarreta (1994:44) to the fact that negative elements such as *nada* 'nothing' may not
be destressed:

(22)   *   No probó **Juan** nada.   *VSO
                not tried Juan anything

Since *nessuno* in (5)a is possible, a difference should be assumed between *nessuno*
and *niente* in this respect. There is however a more plausible analysis. The
ungrammaticality of (21)B is due to the fact that Italian unstressed *niente* (and
presumably Spanish *nada* in (22)) is a weak element (in the sense of Cardinaletti and
Starke 1994) which cannot remain in the base position, but must be moved outside VP
before Spell-out. The overt movement of weak *niente* necessarily puts it in a position
which precedes a post-verbal subject, (23)a vs. a', while other negative objects are free
to follow or precede the subject, (23)b,b'.[8] Weak *niente* can also end up to the left of

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[8] (23)b is sensibly better than (1)a. The fact that the VSO order improves in the case of negative
elements can be due to the fact that here negative elements behave like multiple foci (see (17)a above). In
this perspective, (23)b should be analysed as a VSO structure.

weak adverbs such as *bene*, (23)c, c', while other negative objects necessarily follow *bene*, (23)d vs. d':[9]

(23)a.   *   Non ha fatto nessuno niente.

                        not has done anybody anything

a'.   Non ha fatto niente$_i$ nessuno t$_j$.

                        not has done anything anybody

b.   ?   Non ha fatto nessuno [nessuna cosa].

                        not has done anybody any thing

b'.   Non ha fatto [nessuna cosa]$_i$ nessuno t$_j$.

                        not has done any thing anybody

c.   Non ha fatto bene niente$_i$ t$_j$.

                        [he] not has done well anything

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[9] Modified *niente*, a strong element in Cardinaletti and Starke's (1994) typology, differs from weak *niente* (and behaves like the DP *nessuna cosa* in (23)b,b',d,d') in that it can either follow or precede the subject, (i)a,a', and can only appear after *bene*, (i)b vs. (i)b' (for similar differences in the leftward movement of French weak and strong *rien*, see Obenauer 1998):

(i)   a.   ?   Non ha fatto nessuno [quasi niente].

                        not has done anybody almost anything

      a'.   Non ha fatto [quasi niente]$_i$ nessuno t$_j$.

                        not has done almost anything anybody

      b.   Non ha fatto bene [quasi niente].

                        [he] not has done well almost anything

      b'.   *   Non ha fatto [quasi niente]$_i$ bene t$_j$.

                        [he] not has done almost anything well

Notice that a sentence like (ii) can only have the interpretation in (iii)a, parallel to (23)c', where *niente* is an object. *Niente* in (ii) cannot be a post-verbal subject, i.e., (ii) cannot mean (iii)b:

(ii)   Non chiude niente bene.

                   not closes anything well

(iii) a.   He does not close anything well.

      b.   Nothing closes well.

c'.	Non ha fatto niente$_i$ bene t$_j$ t$_i$.
	[he] not has done anything well
d.	Non ha fatto bene [nessuna cosa].
	[he] not has done well any thing
d'. *	Non ha fatto [nessuna cosa]$_i$ bene t$_i$.
	[he] not has done any thing well

Compare *niente* with the French counterpart *rien*, whose weak status is clearly manifested by the fact that it must precede the past participle, while objects follow it:

(24) a.	*	Je n'ai fait rien.
b.		Je n'ai rien fait.
		I not have anything done
c.		Je n'ai fait aucune chose / J'ai fait beaucoup de choses.
		I not have done any thing / I have done many things

2. THE ANALYSIS OF VOS

The analysis of (2)b is radically different from the analysis of (2)a proposed above. VOS does not show the basic word order. Whereas the object occurs in its base position inside VP, the subject does not. Since there is no post-object position for the subject (see Kayne 1994, who excludes the existence of a rightward specVP), the subject must be outside VP. The only possible analysis is that the subject is right-dislocated. This means that in (2)b the subject is anticipated by *pro*, as in (3)b. In other words, (2)b is always to be analysed as (3)b.

That in VOS, the subject is right-dislocated can be shown on the basis of the following observation. Take a VOS sentence such as (25) where the object is represented by a clause, and where an object of the embedded verb follows the matrix subject (adapted from Antinucci and Cinque 1977:142). As the contrast between (25)a

and (25)b shows, the object *la macchina* is necessarily anticipated by a clitic pronoun, which means that it is right-dislocated:

(25)a.   *   Quando ha detto [che potrò ritirare], Giorgio, la macchina?

                                                               *VOS

     b.   Quando ha detto [che la potrò ritirare], Giorgio, la macchina?

                                                                 VOS

          when [he] has said that [I] (it) will-be-able [to] go-and-take, Giorgio, the car?

Notice now that the clitic pronoun is not necessary in (26):

(26)   Quando potrà ritirare, Giorgio, la macchina?   VSO

          when will-be-able [to] go-and-take, Giorgio, the car?

I take the contrast between (25)a and (26) to mean that in the former the subject is right-dislocated (which forces *la macchina* to be right-dislocated as well), whereas in the latter both the subject and the object are destressed *in situ* (see section 5).

If the subject in VOS is right-dislocated, we expect that it cannot be a quantified constituent. The expectation is borne out. The sentences in (28) are parallel to (27), where the subject *nessuno* is clearly right-dislocated since it follows the right-dislocated object *Maria*:[10]

(27)   *   Non l'ha invitata, Maria, nessuno.   *pro cl V,O,S

          [he] not her has invited, Maria, anybody

(28)a.   A: Che cosa non ha fatto nessuno?

          what not has done anybody?

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[10] See Calabrese (1992:93ff). Subject quantifiers cannot be left-dislocated either:

(i)   *   Nessuno, Maria, (non) l'ha invitata.

         anybody, Maria, [he] (not) her has invited

Notice that (28)b is marginally possible if the quantified subject has partitive reading.

*		B: Non ha fatto **questo**, nessuno.	*VOS
		[he] not has done this, anybody	
b.		A: Chi ha incontrato, ogni studente?	
		whom has met, every student?	
		"Who has every student met?"	
*		B: Ha incontrato **il preside**, ogni studente.	*VOS
		[he] has met the dean, every student	

For the structural representation of (2)b, I adopt Kayne's (1994:78) analysis of English right- dislocated subjects. Given his antisymmetric approach, right-dislocated subjects must be structurally lower than what precedes them. This is obtained by generating the right-dislocated item as the complement of a functional projection whose specifier hosts the whole clause. (29)a is Kayne's (1994:78) example (42), (29)b is the parallel representation of (2)b:

(29) a.   [[he's real smart] X° [John]]

b.   [[pro ha comprato il giornale] X° [Gianni]]

Given the structure (29)b, the ungrammaticality of (27) and (28) reduces to the fact that the quantified constituents cannot be adequately interpreted: in (27) and (28)a the negative quantifier is not c-commanded by the negative marker *non*; in (28)b the quantified constituent cannot raise to the relevant specifier position to get its interpretation at LF. In both cases, a violation of Full Interpretation arises. (If, as suggested by (20), (29)b is also the representation of right-dislocated objects, (4) is excluded as a violation of Full Interpretation as well.)

Given the structure (29)b, the object does not c-command the subject. This explains why the judgements of the following sentences are the reverse of those in (14) above (notice that (30)e,e' are ungrammatical not because of the lack of c-command, but, on a par with the VOS sentences in (28), because the subject is quantified; on (30)e' also see fn. 10):

(30) a.   *   pro ha visitato **ogni$_i$ ragazzo**, sua$_i$ madre.   *VOS
                              [she] has visited every boy, his mother

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b.	*	pro hanno visitato **Gianni$_i$**, i propri$_j$ genitori.	*VOS
		[they] have visited Gianni, the his parents	
c.		pro ha visitato **lui$_i$**, la madre di Gianni$_i$.	VOS
		[she] has visited him, the mother of Gianni	
d.		pro ha visitato **i propri$_j$ genitori**, Gianni$_i$.	VOS
		[he] has visited the his parents, Gianni	
e.	*	pro non ha visitato **sua$_j$ madre**, nessuno$_i$.	*VOS
		[he] not has visited his mother, anybody	
e'.	*	pro ha visitato **sua$_j$ madre**, ogni$_i$ ragazzo.	*VOS
		[he] has visited his mother, every boy	

Sentence (30)a is ungrammatical because the quantifier does not c-command the pronoun inside the right-dislocated subject, and no bound reading of the pronoun can arise. Similarly, the right-dislocated subject in (30)b contains an anaphor not bound by its antecedent. Sentences (30)c and (30)d are grammatical because the object does not c-command the subject, and there is no violation of binding principles. In (30)d, the anaphor *propri* is bound by the pre-verbal null subject. As is the case for *he* and *John* in English (29)a, a coreference relationship is established in (30)c and (30)d between *pro* and the right-dislocated subject.

Finally, notice that the object in **VOS** differs from the subject in **VSO** in that it can be noncontrastive focus. Compare (31) with (18)b above:

(31)	A: Cosa ha portato, Gianni?	
	what has brought, Gianni?	
	B: Ha portato **il dolce**, Gianni.	VOS
	[he] has brought the dessert, Gianni	

In **VOS**, stress on the object, which is the most embedded constituent in the clause, can be provided by the Nuclear Stress Rule (see Cinque 1993, Zubizarreta 1998:17-19 and the references quoted there), and the noncontrastive focus reading of the object can arise. (See the end of section 1.1 for the parallel clVS,O case in which the object is right-dislocated, and the post-verbal subject ends up being the lowest constituent in the clause, stressed via the Nuclear Stress Rule.) As for the right-dislocated subject, it gets

destressed. Whether the prosodic properties of a right-dislocated constituent are the same as those of an *in situ* destressed constituent (as in VSO) or not remains an open question (see Zubizarreta 1998:151-158 for some observations on Spanish).

3. *VOS IS DIFFERENT FROM VOS*

Let's now compare **VOS** with **VOS**, where the subject is focused. Although the linear order is the same, the different semantic and phonological properties reflect a different syntactic structure.

Whereas, as seen above, **VOS** is produced by the right-dislocation of the subject, **VOS** arises by moving ("scrambling") the presupposed object to the left past the subject, as in (32) (see Ordóñez 1997, 1998 for Spanish; for the movement of the verb to Asp°, see (11) above):[11]

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[11] Since moved objects follow low adverbs such as *bene*, their landing site must be very low (see (23)d,d' and fn. 9 for the same effect found with the movement of negative DPs and strong *niente*, respectively):

(i) a.   Ha risolto bene il problema$_i$ **Gianni** t$_i$.   VOS
          has solved well the problem Gianni

    b.   *Ha risolto il problema$_i$ bene **Gianni** t$_i$.   *VOS

Notice that object movement to the left is more natural with light objects. Compare (1)b with (ii) (cf. Guasti and Nespor (1996) and Zubizarreta (1998:22-23) for the discussion of heaviness effects):

(ii) a.   ?Ha comprato il giornale del mattino **Gianni**.   ?VOS
           has bought the newspaper of-the morning Gianni

(32)

```
            AspP
           ╱‾‾‾‾‾
               Asp'
      Asp° ‾‾‾‾‾‾‾‾‾‾ XP
      comprato_i   il giornale_k  ╱‾‾‾‾
                                 X'
                           X° ‾‾‾‾‾‾‾ VP
                             Gianni   ╱‾‾ V'
                                      ┌‾‾‾‾‾‾‾
                                     V°        NP
                                     │          │
                                     t_i        t_k
```
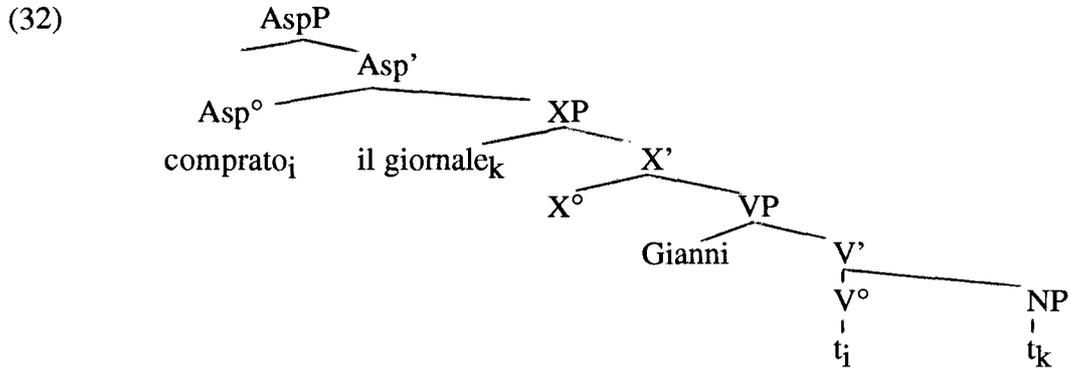
As I did for **VSO** above, I assume that in **VOS** the subject is an *in situ* focus. As the following sentences show, the post-verbal subject is c-commanded by $I°$-adjoined negative marker and clitic pronouns. If the focused subject were moved overtly to SpecFocusP and the rest of the clause were moved to specTopicP,[12] the judgements of (33) should be the reverse (see section 1.1):

(33)a.	Non stima Gianni **nessuno**.	**VOS**

b.	??Ha comprato un bel mazzo di fiori gialli **Gianni**.	??VOS
	has bought a nice bunch of yellow flowers Gianni	

No such heaviness effects are found in VSO and VOS, which confirms that in these cases the subject and the object, respectively, are *in situ* (see sections 1 and 2):

(iii) a.	Ha comprato **la madre di Gianni**, il giornale.	VSO
	has bought the mother of Gianni, the newspaper	
b.	Ha comprato **il ragazzo che ho visto ieri**, il giornale.	VSO
	has bought the boy that [I] saw yesterday, the newspaper	
(iv) a.	Ha comprato **il libro di Gianni**, Maria.	VOS
	[she] has bought the book by Gianni, Maria	
b.	Ha comprato **il libro che è uscito ieri**, Maria.	VOS
	[she] has bought the book that has appeared yesterday, Maria	

[12] This analysis has been proposed by Ordóñez (1997) and Zubizarreta (1998) for Italian VOS.

not esteems Gianni anybody

b.   *   Lo$_j$ presenterà a Maria **la madre di Gianni$_i$**.   *VOS

him will-introduce to Maria the mother of Gianni

If in VOS the subject occurs in specVP, we expect that there is no restriction on quantified subjects. The sentences in (34) contrast with (28) above:

(34)a.   Non ha fatto questo **nessuno**.   VOS

not has done this anybody

b.   Ha incontrato il preside **ogni studente**.   VOS

has met the dean every student

The analysis in (32) implies that in VOS the object c-commands the subject, and accounts for (35). In (35)a and (35)b, the moved object c-commands and binds the pronoun contained in the subject. In (35)c, the moved object pronoun c-commands the R-expression, and there is a violation of principle C:[13]

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[13] In (35)b (adapted from Cecchetto 1997:6), the anaphoric possessive *proprio* has been embedded. The simple DP gives ungrammatical results:

(i)   *   Hanno visitato Gianni$_i$ **i propri$_i$ genitori**.   *VOS

have visited Gianni the his parents

Notice also that (35)c differs from (30)c in that the object pronoun is modified by *anche*. In a sentence such as (ii), the strong pronoun is necessarily focused. As shown in (iii), it is generally so: if the presence of a strong pronoun is not motivated by focalization, a clitic pronoun is used instead:

(ii)   *   Ha visitato **lui$_j$ la madre di Gianni$_i$**.   *VOS

has visited him the mother of Gianni

(iii)a.   La madre di Gianni$_i$ ha visitato **lui$_j$**.

b.   La madre di Gianni$_i$ lo$_j$ ha visitato.

In order to avoid a sentence such as (ii), which is ungrammatical for independent reasons (because a focused DP is scrambled), in (35)c I have chosen another way of licensing a strong pronoun, namely modification by *anche*.

(35) a.   Ha visitato ogni$_i$ ragazzo **sua$_i$ madre**.   VOS

                           has visited every boy his mother

      b.   Ha visitato Gianni$_i$ **un collega della propria$_i$ moglie**. VOS

                           has visited Gianni a colleague of-the his wife

      c.   *   Ha visitato anche lui$_i$ **la madre di Gianni$_i$**.   *VOS

                           has visited also him the mother of Gianni

As (35) shows, object movement affects LF-related phenomena such as binding relations. I take this to mean that object movement takes place before Spell-Out.

As in other instances of "scrambling", in VOS reconstruction effects are found:

(36) a.   Ha visitato i propri$_i$ genitori **Gianni$_i$**.   VOS

                           has visited the his parents Gianni

      b.   Ha visitato sua$_i$ madre **ogni$_i$ ragazzo**.   VOS

                           has visited his mother every boy

In both (36)a and (36)b, the binder is the subject. The generalization seems to be that when the binder is the subject, reconstruction effects are obtained. They can be accounted for by assuming that the c-command relationship and the binding one are established in the base position and cannot be changed by movement operations (see Ordóñez 1997:48-52, 1998 for discussion).[14]

In VOS, differently from VSO, the subject can be a noncontrastive focus (compare (37) with (18)b). Being the most embedded constituent in the clause, the Nuclear Stress Rule can apply to it:

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[14] (36) might also be derived by scrambling the verb and the object together: *Ha [visitato i propri$_i$ genitori]$_k$ Gianni$_i$ t$_k$, Ha [visitato sua$_i$ madre]$_k$ ogni$_i$ ragazzo t$_k$*. We will not try to decide between the two analyses for Italian. We only notice that reconstruction is needed in the parallel cases of scrambling in German, for which an analysis in terms of [V O] scrambling is unavailable:

  (i)   Ich glaube, daß [seinem$_i$ Vater]$_k$ jeder$_i$ t$_k$ die Bilder gezeigt hat   (Ordóñez 1997:48)

         I think that to-his father everyone the pictures shown has

(37)   A: Chi porterà la macchina?
                 who will-drive the car?

                 B: Porterà la macchina **Mara**.   VOS
                 will-drive the car Mara

Notice finally that the analysis proposed for VOS cannot be extended to VOS, i.e., VOS cannot be analysed as containing a leftward moved object and an *in situ* destressed subject. In section 2, we have seen many reasons to argue against such an analysis: (i) the subject cannot be quantified, (ii) the object does not c-command the subject, (iii) the object can be a noncontrastive focus. As for the latter property, if the object and the subject were in one and the same clause, the object could not be stressed via the Nuclear Stress Rule because it would not be the most embedded constituent. A contrastive focus reading would necessarily arise, contrary to fact.

4. VERB-SUBJECT AGREEMENT

The different derivation of VSO and VOS (and of VOS and VOS) is confirmed by the following data concerning verb-subject agreement.

In the Central Italian variety spoken in the area of Ancona, the verb may fail to agree in number with a post-verbal subject, (38). Agreement is instead obligatory if the subject is right-dislocated, as in (39), where the subject follows a right-dislocated object:

(38)a.   Questo disegno l'ha fatto **quei bambini lì**.   VS
                 this drawing it has done those children there

     b.   Ha fatto il disegno **quei bambini lì**.   VOS
                 has done the drawing those children there

(39)a.   *   L'ha fatto **ieri**, il disegno, quei bambini lì.   *pro cl V **adv**,O,S
                 [they] it has done yesterday, this drawing, those children there

     b.   L'hanno fatto **ieri**, il disegno, quei bambini lì.

                                                            pro cl V **adv**,O,S

[they] it have done yesterday, this drawing, those children
there

Whatever the reason for the lack of verb agreement with post-verbal subjects, the necessary agreement in (39) depends on the presence of pre-verbal *pro* (40) and on the fact that agreement is obligatory with pre-verbal subjects, (41) (see Cardinaletti 1997:§2.3):

(40)   pro l'hanno fatto **ieri**, il disegno, quei bambini lì.

(41)a.   *   Quei bambini ha fatto questo disegno.
                 those children has done this drawing
       b.   Quei bambini hanno fatto questo disegno.
                 those children have done this drawing

With this in mind, consider the subject in **VSO** and **VOS**. The former behaves like post-verbal subjects in that agreement may fail, (42)a. The latter instead patterns with right-dislocated subjects, in that it obligatorily agrees with the verb, (42)b vs. (42)c. This supports our interpretation of VOS as a right-dislocated structure:

(42)a.   ?   Ha fatto **i bambini**, il disegno (non la maestra).   VSO
                 has done the children, the drawing (not the teacher)
       b.   *   Ha fatto **questo disegno**, i bambini.   *VOS
                 [they] has done this drawing, the children
       c.   Hanno fatto **questo disegno**, i bambini.   VOS
                 [they] have done this drawing, the children

The same paradigm is found in interrogative sentences:

(43)a.   Ha fatto **i bambini**, il disegno?   VSO
       b.   *   Ha fatto **questo disegno**, i bambini?   *VOS
       c.   Hanno fatto **questo disegno**, i bambini?   VOS

Anna Cardinaletti

5. *SUBJECT DESTRESSING*

We have seen so far that a destressed subject is necessarily right-dislocated when it follows an object. However, when it is the only post-verbal argument or when it is followed by a destressed object, nothing excludes that the subject itself be destressed *in situ*. We exemplify here with declarative (44)-(45), interrogative (46)-(47) and exclamative (48) sentences with main stress on the verb:[15]

(44)a.	Può già **andare**, Gianni.	VS
	can already go, Gianni	
b.	Può già **ritirare**, Gianni, la macchina.	VSO
	can already go-and-take, Gianni, the car	

(45)   A: Non sento Chiara da molto tempo ormai ... sono un po'
          preoccupato.

---

[15] For unknown reasons, the sentences are very marginal if the constituent following the destressed subject is a predicative AP or DP (thanks to Richie Kayne for asking about predicative elements):

(i) a. ?? Potrebbe **diventare**, Gianni, malato / mio consulente / il mio avvocato.   VSPred

could become, Gianni, sick / my adviser / the my lawyer

b. ?? Quando è **stata**, Maria, malata / (la) tua segretaria?   VSPred

when has been, Maria, sick / (the) your secretary?

This cannot be due to the impossibility of destressing a predicative AP or DP, since the following sentences are grammatical:

(ii) a. Potrebbe diventare **Gianni**, malato / mio consulente / il mio avvocato.

VSPred

b. È stata **Maria**, malata / (la) tua segretaria?   VSPred

c. Sembra **Gianni**, intelligente.   VSPred

seems Gianni, intelligent

d. Si sono sentiti **i soldati**, scoperti.   VSPred

themselves have felt the soldiers, discovered

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A second thought on Emarginazione: Destressing vs. "Right Dislocation"

[I] not hear from Chiara for a while now ... [I] am a bit
worried

B: Ma dai ... vedrai che stasera **telefonerà**, Chiara!   VS

(Frascarelli 1996:115)

no worry ... [you] will-see that tonight will-call, Chiara

(46) a.   Quando è **partito**, Gianni?   VS

when has left, Gianni?

b.   Quando è **andato**, Gianni, in montagna?   VSO

when has gone, Gianni, to the mountains?

(47)a.   È **partito**, Gianni?   VS

has left, Gianni?

b.   Ha **finito**, Gianni, il lavoro?   VSO

has finished, Gianni, the work?

(48)a.   Che bella casa ha **comprato**, Gianni!   VS

what a nice house has bought, Gianni!

b.   Che bella casa ha **comprato**, Gianni, a Maria!   VSO

what a nice house has bought, Gianni, to Maria!

Since they are destressed *in situ*, quantified subjects are now possible, as expected:

(49)a.   Può già **andare**, ogni ragazzo.   VS

can already go, every boy

b.   Può già **ritirare**, ogni ragazzo, la (sua) macchina. VSO

can already go-and-take, every boy, the (his) car

(50)a.   Quando è **partito**, ogni ragazzo?   VS

when has left, every boy?

b.   Quando è **andato**, ogni ragazzo, in montagna?   VSO

when has gone, every boy, to the mountains

(51) a.   È **partito**, ogni ragazzo?   VS

         has left, every boy?

    b.   Ha **finito**, ogni ragazzo, il lavoro?   VSO

         has finished, every boy, the work?

(52) a.   Che bella casa ha **comprato**, ogni tuo parente!   VS

         what a nice house has bought, every your relative!

    b.   Che bella casa ha **comprato**, ogni tuo parente, ai propri

genitori!   VSO

         what a nice house has bought, every your relative, to-the his

parents!

Binding facts corroborate the above hypothesis. The data in (53) are parallel to (14) above (notice that (53)e differs from (14)e because the subject is not focused in the former; compare (53)e with *Sua_i madre ha già visitato $ogni_i$ ragazzo* 'his mother has already visited every boy'):

(53) a.   Ha già **visitato**, $ogni_i$ ragazzo, sua_i madre.   VSO

    b.   Ha già **visitato**, $Gianni_i$, i $propri_i$ genitori.   VSO

    c.   *   Ha già **visitato**, lui_i, la madre di $Gianni_i$.   *VSO

    d.   *   Hanno già **visitato**, i $propri_i$ genitori, $Gianni_i$.   *VSO

    e.   *   Ha già **visitato**, sua_i madre, $ogni_i$ ragazzo.   *VSO

Finally in Anconetano, VS(O) subjects pattern with post-verbal subjects in optionally triggering agreement, as expected (see Cardinaletti 1997:§2.3):

(54) a.   Ha già **mangiato**, i bambini?   VS

         has already eaten, the children?

    b.   Ha già **finito**, i bambini, i compiti?   VSO

         has already finished, the children, the homeworks?

(55) a.   Cosa ha **fatto**, i bambini?   VS

         what has done, the children?

b.   Cosa ha **fatto**, i bambini, a scuola?   VSO
               what has done, the children, at school?

CONCLUSION

On the basis of the distribution of quantified constituents, of binding phenomena, and of agreement patterns, I have shown that the so-called *emarginazione* construction corresponds to two different structures depending on the syntactic function of the marginalized constituent. In VSO, the object is destressed in its base position; in VOS, the subject is "right-dislocated" (i.e. base-generated in a position structurally lower than the clause, see (29)b). This is exactly what is expected under the antisymmetric approach of Kayne (1994), where there is no post-object position for the subject (i.e., no rightward specVP). The analysis is confirmed by the semantic and prosodic properties of the two constructions: In VSO the subject is contrastively focused, and is assigned stress by the Emphatic/Contrastive Stress Rule; in VO S the object can be noncontrastively focused, and is assigned stress by the Nuclear Stress Rule. Nothing, of course, prevents the subject from being destressed. Section 5 has shown that this is the case in sentences where the verb is focused.

The distinction between destressing and Right Dislocation has an important implication. It supports the proposal that post-verbal focused constituents occur in their base-position inside VP. An alternative proposal, which involves a rightward focus position above VP to which focused elements are moved (see Samek-Lodovici 1994, Belletti and Shlonsky 1995), would be forced to analyse all material following the focused constituent as right-dislocated, thus failing to capture the asymmetries pointed out above.

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THE INTERACTION OF PASSIVE, CAUSATIVE, AND 'RESTRUCTURING' IN ROMANCE [1]

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In what follows, I want to show how the hierarchy of functional projections investigated in Cinque (1997) provides an unforeseen solution to a puzzle of Romance syntax: the selective application of passive to verbs triggering "Restructuring" (or "Clause Reduction"). [2]

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[1] I am indebted to Manuela Ambar, Paola Beninca', Anna Cardinaletti, Giuliana Giusti, Lluïsa Gràcia, Cecilia Poletto and Eduardo Raposo for comments and judgements; especially to Paola, for suggesting to me an ingenious solution to an ordering paradox involving the inceptive aspect head.

[2] Although cast in different frameworks, Rizzi's (1976,1978) "Restructuring" hypothesis and Aissen and Perlmutter's (1976,1983) "Clause Reduction/Union" hypothesis share the idea that modal, aspectual and motion verbs in Romance, when followed by a sentential complement, may be affected by a process which turns the biclausal structure into a monoclausal one. For present concerns, I will consider the two hypotheses as identical. Alternative analyses such as Kayne's (1989), and others mentioned there, are also equivalent, as far as I can see, with respect to the problem addressed here.

The Interaction of Passive, Causative and "Restructuring" in Romance

1. As Aissen and Perlmutter (1983,390ff) observed, in "Clause Reduction" contexts the object of the embedded verb should quite generally become the subject of the matrix verb when the latter is passivized.

This is indeed the case, in Spanish, with such verbs as *terminar* and *acabar* 'finish' (cf. (1) and (2), their (P32) and (P33)), but is, unexpectedly, not possible with the majority of "Clause Reduction" triggers (see, for example, (3) and (4), their (P36) and (P37)):

(1) a   Los obreros están terminando de pintar estas paredes

           'The workers are finishing painting these walls'

      b   Estas paredes están siendo terminadas de pintar (por los obreros)

           (Lit.: 'These walls are being finished to paint (by the workers).')

(2) a   Los obreros acabaron de pintar las casas ayer

           'The workers finished painting the houses yesterday'

      b   Las casas fueron acabadas de pintar (por los obreros) ayer

           (Lit.: 'The houses were finished to paint (by the workers) yesterday')

(3) a   Trataron de pintar las paredes ayer

           'They tried to paint the walls yesterday'

      b *Las paredes fueron tratadas de pintar ayer

           (Lit.: The walls were tried to paint yesterday.)

(4) a   Quieren cortar esta madera

           'They want to cut this wood'

      b   *Esta madera es querida cortar

           (Lit.: This wood is wanted to cut.)

This is all the more surprising as the embedded object has no difficulty in becoming the matrix subject in the corresponding "*se*-passives". See (5):

(5) a   Las paredes se trataron de pintar ayer

(Lit.) the walls *se* tried to paint yesterday 'the walls were tried to paint'

b   Esta madera se quiere cortar

(Lit.) This wood *se* wants to cut 'this wood is wanted to cut'

Aissen and Perlmutter (1983) further observe that "[t]he subclass of Clause Union triggers that allow passives like [(1)b] and [(2)b] seems to be roughly the class that specifies the end point of an action. We have no explanation for this, which we assume to be a language-particular fact that needs to be stated in the grammar of Spanish. Thus we assume that there are languages in which Passive in Clause Union structures is not limited to a small subclass of Clause Union triggers."(p.391f)

This limitation to verbs marking the end point of a process (and to few other verb classes, as we shall see) is however not a quirk of Spanish syntax, but holds in Italian, Portuguese, Catalan, and various Northeastern Italian dialects (I conjecture, in fact, throughout Romance).

Its general character thus calls for a principled explanation, and I want to suggest that this resides in the position that the Voice head occupies in the hierarchy of functional projections relative to the modal and the different aspectual heads. [3]

Before getting to that, consider the situation of Italian (and, more briefly, that of other Romance varieties).

As shown in (6), indeed very few "Restructuring" verb classes in Italian allow for the 'long passive' seen in (1) and (2): [4]

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[3] If correct, the account to be proposed must be valid beyond Romance, to which my discussion here is confined.

[4] In Rizzi (1976,31) it is stated that "the output of Verb Raising but not that of Restructuring can undergo the passive transformation" [my translation], *cominciare* 'begin' being a partial exception (cf. his fn.21) in that it can be passivized (marginally) in certain contexts (?*Questa chiesa fu cominciata a costruire nel 1525* '(Lit.) This church was begun to build in 1525'), though not in others (**Questo articolo sarà cominciato a leggere domani* '(Lit.) This article will be begun to read tomorrow').

(6) a   *Mi è stato voluto dare (da Gianni)   (cf. Rizzi 1976,31)

          (Lit.) It was wanted to give to me (by G.)

          (cf. Gianni me lo ha voluto dare 'G. it wanted to give to me')

     b   *E' stata dovuta riscrivere   (cf.Burzio 1986,374)

          (Lit.) It was had to rewrite

          (cf. L'ha dovuta riscrivere 'He it had to rewrite')

     c   *Non fu più potuto rivedere   (cf. Burzio 1986,374)

          (Lit.) It was no longer been able to see again

          (cf. Non lo potè più rivedere 'He it could no longer see')

     d   *Era desiderato conoscere da tutti

          (Lit.) It was desired to meet by everybody

          (cf. Tutti lo desideravano conoscere 'Everybody him desired to meet')

     e   *Non era usato dire da nessuno

          (Lit.) It was not used to say by anybody

Also according to Burzio "matrix passives with restructuring are at best unsystematic" (1981,689); "impossible with exceptions with restructuring" (1986,382). He suggests that the impossibility of such cases as (6)a is due, in his analysis (pro$_i$ mi è stato voluto [$_{VP}$dare t$_i$] [$_S$PRO ___]), to the fact that PRO lacks an antecedent; but he says he has "no precise answer" as to why the case with *cominciare* "differ[s] from the *volere* case [...] with respect to the possibility of interpreting the embedded subject PRO" (1986,378).

In addition to *cominciare* 'begin', mentioned in Rizzi (1976,fn.21), Burzio takes *continuare* 'continue' to marginally allow passivization (?*Il palazzo fu continuato a costruire per ordine del principe* '(Lit.) the palace was continued to build at the order of the prince' -1981,591; ?(?)*L'affitto fu continuato a pagare fino alla fine dell'anno* '(Lit.) The rent was continued to pay till the end of the year' - 1986,376). I find such cases somewhat harder than those with *cominciare*.

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(cf. Nessuno lo usava dire 'Nobody it used to say')

f   *Fu cercato/tentato di aggiustare (da Gianni)

        (Lit.) It was tried to mend (by G.)

        (cf. Lo cercò/tentò di aggiustare Gianni 'It tried to mend G.')

g   *Fu provato ad aggiustare (da Gianni)

        (Lit.) It was tried to mend (by G.)

        (cf. Lo provò ad aggiustare Gianni 'It tried to mend G.')

h   *Non era osato fare da nessuno

        (Lit.) It was not dared to do by anybody

        (cf. Nessuno lo osava fare 'Nobody it dared to do')

i   *Non fu saputo tradurre da nessuno

        (Lit.) It wasn't known to translate by anybody

        (cf. Nessuno lo seppe tradurre 'Nobody it could translate')

l   *Non fu saputo come fare (da nessuno)

        (Lit.) It wasn't known how to do (by anybody)

        (cf. (?)Non lo sapeva come fare 'It he didn't know how to do')

m   *Era teso a fare da tutti

        (Lit.) It was tended to do by everybody

        (cf. (?)Tutti lo tendevano a fare 'Everybody it tended to do')

n   *Fu smesso/cessato di vedere

        (Lit.) It was stopped/quit seeing

        (cf. Lo smisero/(??)cessarono di vedere 'It they stopped/quit seeing')

o   *Non fu riuscito a vedere da nessuno

        (Lit.) It wasn't managed to see by anybody

(cf. Nessuno lo riuscì a vedere 'Nobody him managed to see')

p   *Era stato comprando

(Lit.) It had been buying

(cf. Lo stavano comprando'They it were buying')

q   *Era stato per comprare

(Lit.) It had been about to buy

(cf. Lo stavano per comprare 'They it were about to buy'

r   *Fu ripreso a fare da tutti

(Lit.) It was resumed to do by everybody

(cf. Lo ripresero a fare tutti 'Everybody it resumed to do')

s   *Fu finito per accettare da tutti

(Lit.) It was ended up accepting by everybody

(cf. Lo finì per accettare 'He it ended up accepting')

t   ??Fu continuato/seguitato a fare nonostante la loro opposizione

(Lit.) It was continued/kept on doing thier opposition notwithstanding

(cf. Lo continuarono/seguitarono a fare.. 'They continued/kept on doing..)

u   La casa fu finita di costruire il mese scorso

                           (= (116b) of Van Tiel Di Maio 1978,97)

(Lit.) The house was finished to build the last month

(cf. La finì di costruire il mese scorso 'He it finished to build..')

v   Quelle case furono iniziate/?cominciate a costruire negli anni '20

(Lit.) Those houses were started to build in the '20's

(cf. Le iniziarono/cominciarono a costruire negli anni '20 'They them started to build in the '20's')

z Sarete passati a prendere più tardi [5]

(Lit.) You (pl.) will be passed to fetch later

(cf. Vi passeremo a prendere più tardi 'We you will pass to fetch later')

w Furono mandati a prendere a casa [6]

(Lit.) They were sent to fetch at home

(cf. Li mandarono a prendere 'They them sent to fetch')

Comparable data are found in Portuguese. *Acabar* 'finish', *começar* 'begin' and *mandar* 'send' can be passivized in restructuring contexts (cf. (7)a-c), but neither modals, nor other aspectual verbs can (cf. (8)a-d):[7]

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[5] The "restructuring" use of this motion verb is very restricted. It is only possible (in either the active or passive form) with *prendere* 'fetch', *salutare* 'greet', and perhaps a couple of other verbs. Nonetheless, to the extent that it is possible in the active it appears to be possible in the corresponding 'long passive'.

Similar remarks hold for *mandare* (cf. (6)w), the causative of *andare* 'go'. As to *andare* itself in its "restructuring" use, although considered ungrammatical in Burzio (1986,374), it appears (marginally) possible in certain contexts (for some speakers): (?)*I libri saranno andati a prendere entro domani* 'The books will be gone to fetch by tomorrow'; ?*I malati furono andati a prendere a casa* '(Lit.) The ill were gone to fetch at home'). Also see (13)d and fn.16 below.

[6] *Mandare* 'send' also enters a 'Complement Object Deletion' construction (Lasnik and Fiengo (1974): *Mandarono la macchina a riparare* '(Lit.) they sent the car to fix'. Cliticization or passivization of the object (*La mandarono a riparare* 'They it sent to fix'; *Fu mandata a riparare* 'It was sent to fix') yields a word order identical to that formed by 'Clitic Climbing' or 'Long Passive' with the "restructuring" use of *mandare* (cf. (6)w, for which no 'Complement Object Deletion' interpretation is possible: **Mandarono i bambini a prendere a casa* 'They sent the children to fetch home').

[7] I thank Manuela Ambar, Manuel Gonçalves Simões, and Eduardo Raposo for sharing with me their intuitions, which were remarkably consistent.

(7) a   As casas foram acabadas de construir em 1950

        The houses were finished to build in 1950

    b   ?As casas foram começadas a construir em 1950

        The houses were begun to build in 1950

    c   As crianças foram mandadas alcançar à estação

        The children were sent to fetch at the station

(8) a   *As casas foram podidas/devidas/queridas demolir só recentemente

        The houses were could/should/wanted to pull down only recently

    b   ???As casas foram continuadas a construir durante essa epoca

        The houses were continued to build during this period

    c   *As casas foram tentadas demolir muitas vezes

        The houses were tried to pull down many times

    d   *As casas foram finalmente tratadas demolir

        The houses were finally managed to pull down

Similarly, in Catalan, "restructuring" FINISH and BEGIN verbs can be passivized (*Aquestes parets han estat acabades de pintar pels obrers* 'these walls have been finished to paint by the workers'; *Aquestes cases van ser començades a construir el 1950* 'these houses were begun to build in 1950'), but neither modals (**Els documents van ser poguts aprovar* 'the documents were been able to approve'), nor other aspectual verbs can (Lluïsa Gràcia, p.c.). [8]

Analogous facts hold in Paduan (Paola Beninca', p.c.) and Venetian (Cecilia Poletto, p.c.).

2. Why should only *finire* 'finish', *iniziare* 'start' and (some of) the motion verbs be passivizable, all other "restructuring" verbs resisting passivization? What do the former verbs have in common which distinguishes them from the latter?

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[8] For her, however, motion verbs are very hard to passivize.

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An answer to these questions appears to come from the relative position of the distinct clausal functional heads in the hierarchy proposed in Cinque (1997), at least if we accept the idea that the "restructuring" use of a verb is nothing other than its generation in the semantically corresponding functional head (rather than in a lexical VP). [9]

Modal functional heads, and the majority of aspectual functional heads appear to be higher than the (Active/Passive) Voice head (cf. Cinque (1997, chapter 4 and the appendix to chapter 3 for a cross-linguistic survey). (One instance of) Completive aspect ('terminate a process at its natural ending point', 'finish') is, however, crucially lower than Voice (cf. the discussion in Cinque 1997, §4.27, and fn.10 below)

If, following current assumptions, we assume that for a verb to be passivized it must raise to Voice°, either overtly or covertly, to pick up passive morphology (alternatively, to check the features of its passive morphology), it follows that only those verbs which are generated lower than Voice° will be passivizable. In other words, only the lexical verb, head of VP, and "restructuring" FINISH verbs, which can be licensed in the completive aspect head lower than Voice°, will be able to be passivized. All 'functional' verbs which are licensed in heads higher than Voice° (such as the modals and the majority of aspectual verbs in their "restructuring" use) will be unable to bear passive morphology, as lowering is excluded. [10]

This almost accounts for the pattern in (6). What is left out is the possibility of passivizing motion verbs and BEGIN verbs. The latter case is particularly problematic as Inceptive aspect ('begin doing something') appears to be higher than (heads higher than) Voice° in several languages documented in Cinque (1997, Appendix to chapter 3): for

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[9] This means that only verbs whose meaning closely corresponds to the functional meaning of a certain functional head can have the "restructuring" option. I refer to Cinque (in preparation) for arguments in favor of this interpretation of "Restructuring".

[10] That the cause of the ungrammaticality of (6)a-s is in the passive morphology rather than in the DP-movement component of the construction is confirmed by the fact, noted above, that the corresponding '*si*-passives' (which involve the DP-movement component of Passive, but no passive morphology) are all grammatical.

example, in the Niger-Congo language Kako, in the Eskimo language Aleut, in the Papuan language Tauya, and in the Amerind language Ika.

The position of Inceptive aspect (and that of Conative and 'Success' (or Frustative) aspects), as well as the position of the functional head corresponding to motion verbs, were not systematically investigated in Cinque (1997).

At least for the case of motion verbs, there is some evidence that the functional head in which their "restructuring" use is licensed is lower than Voice°.

A number of (Australian and African) languages possess a verbal affix (rendered as 'go and..', sometimes called 'andative' or 'distantive'), which signals that "a distance is traversed before the action is done" (Fagerli 1994,35). Cf. also Evans (1995,311), and Dixon (1977,219ff, where these affixes are called "coming/going aspectual affixes"). The West African language Fulfulde offers direct evidence that the functional head corresponding to this affix is lower than Voice°. The 'distantive' suffix in this language is a derivational suffix, closer to the verb stem than the suffix expressing Voice, which is a portemanteau inflectional suffix also marking aspect and polarity distinctions (Fagerli 1994,35): [11]

(9)   Bingel soof-oy-i
        child wet-DIST-Voice/Aspect/Polarity
        'The child went and urinated'

Extrapolating from Fulfulde, motion verbs (in their "restructuring" use) are thus compatible with passivization.

This leaves us with BEGIN-type verbs, which also allow passivization ((6)v) although they shouldn't, as the available evidence appears to show that Inceptive aspect is higher than Voice.

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[11] Incidentally, Completive aspect, in Fula/Fulfulde, is also a derivational suffix closer to the verb stem than both the Andative and Voice suffixes. Cf. Fagerli (1994, 53). Fula/Fulfulde thus gives evidence for the (partial) relative order of heads shown in (i):

(i)   .. Voice° .. >.. Andative° ..>.. Asp$_{completive}$.. (V)

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Here, I would like to follow a suggestion of Paola Beninca's (p.c.), which seems to offer a principled solution to the problem.

She notes that parallel to the pair of Terminative aspect (which marks the termination of an unbounded, or bounded, process at an arbitrary point: 'stop'/'quit'/'cease') and Completive aspect (which marks the termination of a bounded process at its natural end point: 'finish'), one could posit the existence of two distinct Inceptive aspects. One marking the beginning of an unbounded, or bounded, process at an arbitrary point (e.g. *begin to shiver* or *begin to sing the aria* (from some arbitrary point)); the other marking the beginning of a bounded process at its natural starting point (e.g. *start building the house*).

Now, just as Terminative aspect is higher than Voice, and (one type of) Completive aspect is lower than Voice, so one could hypothesize that the former Inceptive aspect is higher, and the latter lower, than Voice.

This implies that the BEGIN-type verbs which can be passivized should only be of the bounded/natural-starting-point kind (as only this kind of Inceptive aspect is lower than Voice).

Indeed, there is some evidence bearing out this prediction, and thus supporting Beninca's conjecture. While passivization of *iniziare/cominciare* is possible in (6)v, or (10)a below, which constitute bounded processes (with a natural starting point), it becomes impossible if the process is turned into an unbounded one, say, by having a bare plural DP subject, as in (10)b: [12]

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[12] Positing an Inceptive aspect for unbounded processes (higher than Voice) distinct from an Inceptive aspect for bounded ones (lower than Voice) may also make sense of the preference for *iniziare* 'initiate' vs. *cominciare* 'begin' in the passivization cases. Although both are possible with either Inceptive aspect, *iniziare* is slightly more natural for marking the natural starting point of a bounded process (something which has an *inizio* 'a proper starting point'). So, for example, while *ha cominciato a cantare l'aria* 'he started to sing the aria' is equally appropriate whether someone started singing the aria from the beginning or from the middle, the preferred interpretation of *ha iniziato a cantare l'aria* is definitely the former situation.

(10) a   Furono iniziate/?cominciate a costruire solo due case

             '(Lit.) Were started to build only two houses

    b   *Furono iniziate/cominciate a costruire case

             '(Lit.) Were started to build houses'

Conversely, (given this line of analysis) we expect that all the "restructuring" verbs which *cannot* passivize (as they are in heads higher than Voice°) should be able to embed a passive, whereas the "restructuring" verbs which *can* passivize (as they are located lower than Voice°) should not be able to embed a passive.

These predictions too appear to be largely confirmed. The verbs in (6)a-s indeed can embed a passive (see (11)a-s), whereas those in (6)t-w cannot, except for *continuare, finire* and *iniziare/cominciare*, to which I return:

(11) a   Gianni gli voleva essere presentato

             G. to-him wanted to be introduced

    b   Gianni gli doveva essere presentato

             G. to-him had to be introduced

    c   G. non gli poteva esser presentato

             G. not to-him could be introduced

    d   Gianni ne desiderava essere informato

             G. of-it desired to be informed

    e   Non gli solevano essere presentati

             (They) not to-him used to be introduced

    f   ?Gli cercò/tentò di esser presentato

             To-him (he) tried to be introduced

    g   Gli provò ad esser presentato

             To-him (he) tried to be introduced

    h   Non gli osava essere presentato

             Not to-him (she) dared to be introduced

    i   Ne sapeva essere affascinato

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From-it (he) was able to be fascinated

l   Non gli sapeva come essere presentato

From-it (she) was able to be fascinated

Not to-him (he) knew how to be introduced

m   Ne tendeva ad essere affascinato

From-it (she) tended to be fascinated

n   Gli smise di essere indicato come la persona più adatta

To-him (he) stopped being indicated as the most suitable person

o   Ne riuscì ad essere informata prima di noi

Of-it (she) managed to be informed before us

p   ?Ne stava venendo ottenebrato anche lui

From-it was being clouded over even him

q   Gli stava per essere presentata

To-him (she) was about to be introduced

r   Vi riprese ad esser ammesso

There he resumed to be admitted

s   Gli finiranno per essere concessi tutti i prestiti

To-him will end up being granted all the loans

t   Ne continuò/seguitò ad essere affascinato

From-it (he) continued/kept on being fascinated

u   Gli finirono di essere concessi prestiti

To-him finished to be granted loans

v   Gli cominciarono/?iniziarono ad esser inflitte delle punizioni

To-him began to be inflicted punishments

z   *Gli passò ad esser presentato uno straniero [13]

To-him passed to be introduced a foreigner

w   *Gli mandarono ad esser presentato uno straniero

---

[13] Burzio (1981,611f) also notes the "difficulty" with cases such as *Gianni gli andrà ad esser presentato* 'G. to-him will go to be introduced', for which he has "no precise account".

To-him they sent to be introduced a foreigner

The problem raised by the well-formedness of (11)t-v disappears if we consider the fact that a Continuative, an Inceptive, and a Completive aspect head is also present to the left of Voice° (cf. Cinque 1997, chapter 4). [14]

3. Along similar lines, the fact that causative verbs in Italian can be passivized (cf. *Gli fu fatto leggere* (Lit.) To-him it was made read), but cannot embed a passive (*Farò essere invitati tutti* '(Lit.) I will make to be invited all' - cf. Rizzi 1976,31f; Radford 1977,226; Burzio 1986,280f, among others) can now be seen as a consequence of the fact that the Causative functional head is lower than the Voice head. [15]

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[14] *Finire* 'finish', in Italian, can apparently also be licensed in the head of Terminative aspect (which signals termination of a process at an arbitrary, rather than at the natural, end point); a usage which is not available to *finish* in English, as Richard Kayne pointed out to me (p.c.). Cf. *Finì di piovere* vs. **It finished raining*. On the marginal acceptability of *finish* in the quasi-accomplishment interpretation of activities (*?John finished working for the day*), see Binnick (1991,176).

[15] As Italian, French and Spanish do not allow causatives to embed passives (Kayne 1975,251ff; Zubizarreta 1985,282: **Pierre a fait être lu(s) ces passages*; **Pedro hizo ser leido(s) esos pasajes* '(Lit.) P. made be read these passages'); which suggests that in these languages too the causative head is lower than Voice. However, the fact that (contrary to Italian) their causatives cannot be passivized either (Kayne 1975, 244ff; Zubizarreta 1985,268: **La maison a été faite construire; *La casa fue hecha construir* '(Lit.) the house was made to build') remains to be understood.

Note that there is no semantic ban on having passive under the scope of a causative verb, as shown by such sentences as *Ho fatto sì che fosse invitato* 'I made it so that he be invited', or by the *faire-par* construction in Romance (Kayne 1975). The only ban is on the embedded verb bearing passive morphology (ultimately, a consequence, in the present analysis, of the unavailability of lowering).

Perception verbs can also enter the causative construction, but , to judge from the contrast in (i), they appear to correspond to a head higher than Causative° as they can embed , but cannot be embedded under, causatives (note that *vedere*, qua lexical verb, can embed under *fare*: *gliel'ho fatta vedere* 'I made him see it'):

(i)   a   Gliel'ho vista far cadere 'I saw him make it fall'

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This is confirmed by the fixed order of causative and passive suffixes (V-CAUS-PASS) in those languages which have, like the Romance languages, Baker's type 1 causatives (namely, those which change the subject of an embedded transitive verb into an oblique object, rather than a direct object - cf. Baker 1988,162ff).

If so, it is also to be expected that those "restructuring" verbs which are licensed in heads higher than Voice° will, a fortiori, be unable to embed under a causative verb (as this is lower than Voice). This expectation is also fulfilled. See (12) (cf. also Burzio 1981,587):

(12) a   *La feci voler leggere a tutti

It (I) made want to read to everybody

'I made everybody want to read it'

b   *Lo faranno dover ammettere anche a Gianni

It (they) will make have to admit to G. too

'They will make G. too have to admit it'

c   *Lo farò poter leggere a tutti

It (I) will make be able to read to everybody

'I will make everybody be able to read it'

d   *La farà desiderare di incontrare a tutti

Her (he) will make desire to meet to everybody

'He will make everybody desire to meet her'

e   *Lo faceva sempre usar fare alle sue amiche

It (she) made always use to do to her friends

'She always made her friends use to do it'

f   *La farò cercare/tentare di incontrare a Gianni

Her I will make try to meet to G.

---

b   *Gliel'ho fatta veder cadere 'I made him see it fall'

The contrast in (ii) suggests that this head is still lower than Voice°:

(ii) a   Gli fu vista cadere addosso 'She was seen to fall on him'

b   *Gliel'ho vista esser presentata 'I saw her be introduced to him'

'I will have G. try to meet her'

g   *La farò provare ad incontrare a Gianni

Her I will make try to meet to G.

'I will have G. try to meet her'

i   *Glielo faremo saper tradurre

To-him it (we) will make be able to translate

'We will have him be able to translate it'

l   *Glielo farò saper come fare

To-him it (I) will make know how to do

'I will make him know how to do it'

m   *Lo facevano tendere a fare a tutti

It (they) made tend to do to everybody

'They used to have everybody tend to do it'

n   *Fallo smettere di importunare anche a Gianni

Make him stop pestering to G. too

'Make G. too stop pestering him'

o   *La fecero riuscire ad aggiustare anche a Maria

It (they) made manage to fix even to M.

'They made even M. manage to fix it'

p   *Lo faremo star facendo anche a Gianni

It (we) will make be doing even to G.

'We will have even G. be doing it'

q   *Glielo feci star per comprare

To-him it (I) made be about to buy

'I had him be about to buy it'

r   *La fecero riprendere a interpretare a Gianni

It (they) made resume to interpret to G.

'They had G. resume interpreting it'

s   *Lo faranno finire per comprare anche a Gianni

It (they) will make end up buying even to G.

'They will have even G. end up buying it'

t   (?)?Glielo fece continuare a costruire   (cf. Burzio 1981,591)

To-him it (he) made continue building

'He had him continue building it'

While (12)t is somewhat intermediate (possibly suggesting the presence of some type of Continuative aspect head below Causative°, and Voice° - cf. also fn.4 above on the marginal possibility of passivizing *continuare*, noted by Burzio), the embedding under *fare* of *finire/terminare, iniziare/cominciare, passare/mandare/andare* in their "restructuring" use, are perfectly grammatical (cf. (13)). This suggests that the corresponding functional heads are also lower than Causative°; not only lower than Voice°. [16]

(13) a   La fecero finire/terminare di costruire a Gianni

        It (they) made finish/terminate to build to G.

        'They had G. finish/terminate building it'

    b   Gliela fecero iniziare/cominciare a costruire

        To-him it (they) made initiate/begin to build

        'They had him begin to build it'

    c   Gliela fecero passare a prendere alle cinque

        To-him it (they) made pass to fetch at 5 o'clock

        'They made him pass and fetch it at 5 o'clock'

---

[16] Interestingly, in Aissen's (1977) investigation of Clause Reduction under causatives in Spanish all the examples are with *empezar* 'begin', except one with *tratar* 'try':

(i)   Al niño le dejaron tratar de hacer los deberes solo

       'They let the boy try to do his homework alone'.

While the Italian analogue of *empezar, cominciare* can also embed under causatives, as seen above, *cercare, tentare, provare* 'try' cannot. Should (i) really turn out to be possible in Spanish, an interference could be involved with Exceptional Case Marking (admitted by *dejar* 'let'), perhaps with *leismo* (as in *Le hice correr* 'I made him run').

d   Ce lo fecero andare a prendere subito [17]

To-us it (they) made go to fetch immediately

'They made us go and fetch it immediately'

e   Glielo fecero mandare a prendere subito

To-him it (they) made send to fetch immediately

'They made him send to fetch immediately'

Conversely, causatives should be possibile under the "restructuring" verbs in (12), but not under those in (13), as the former are higher and the latter lower than the causative head. The first prediction is correct (see (14)). As to the second prediction, it cannot be tested with *finire/terminare* and *iniziare/cominciare*, which can also be licensed in heads higher than Causative°, as we have seen, but it can be tested with motion verbs, and it appears confirmed. See (15):

(14) a   Gliela volevo far vedere

To-him it (I) wanted to make see

'I wanted to have him see it'

b   Gliela dovevo far vedere

To-him it (I) had to make see

'I had to make him see it'

c   Non gliela potrò far vedere

Not to-him it (I) will be able to make see

'I will not be able to have him see it'

d   Gliela desideravo far conoscere

---

[17] Although, as noted, the passive of *andare* in its "restructuring" use (?*Furono andati a prendere a casa* 'they were gone to fetch at home') is somewhat marginal, and is judged impossible by Burzio, he nonetheless cites as only slightly marginal a sentence like (i); which gives evidence for the location of the corresponding functional head below Causative° and Voice° even in his Italian:

(i)   ?Il libro fu fatto andare a prendere a Giovanni   (Burzio 1981,580)

The book was made go to fetch to G.

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<div style="margin-left:2em">

To-him her I desired to make meet

'I desired to have him meet her'

</div>

e   Gliela usavano far guidare d'estate

<div style="margin-left:2em">

To-him it (they) used to make drive in the summer

'They used to have him drive it in the summer'

</div>

f   Gliela cercarono/tentarono di far guidare

<div style="margin-left:2em">

To-him it (they) tried to make drive

'They tried to have him drive it'

</div>

g   Gliela provarono a far guidare

<div style="margin-left:2em">

To-him it (they) tried to make drive

'They tried to have him drive it'

</div>

i   Gliela sapremo far tradurre

<div style="margin-left:2em">

To-him it (we) will be able to make translate

'We will be able to have him translate it'

</div>

l   Gliela sapremo come far tradurre

<div style="margin-left:2em">

To-him it (we) will know how to make translate

'We will know how to have him translate it'

</div>

m   Gliela tenderebbero a far portare sempre

<div style="margin-left:2em">

To-him it (they) would tend to make carry always

'Theywould tende to have him always carry'

</div>

n   Glielo smise di far leggere

<div style="margin-left:2em">

To-him it (he) stopped to make read

'He stopped to have him read it'

</div>

o   Glielo riuscii a far vedere

<div style="margin-left:2em">

To-him it (I) managed to make see

'I managed to have him see it'

</div>

p   Gliela stava facendo firmare

<div style="margin-left:2em">

To-him it (he) was making sign

'He was having him sign it'

</div>

q   Gliela stava per far firmare

<div style="margin-left:2em">

To-him it (he) was about to make sign

</div>

'He was about to make him sign it'

r   Gliela riprese a far vedere

To-him it (he) resumed to make see

'He resumed to make him see it'

s   Gliela finì per far comprare

To-him it (he) ended up making buy

'He ended up making/letting him buy it'

t   Glielo continuò a far vedere

To-him it (he) continued to make see

'He continued to let him see it'

(15) a   *La sono passata a far firmare a Gianni

(Cf. Sono passato a farla firmare a G.)

It (I) have passed to make sign to G.

'I have passed and make G. sign it'

b   *Gli siamo andati a far firmare la lettera

(Cf. Siamo andati a fargli firmare la lettera)

To-him (we) went to make sign the letter

'We went and make him sign the letter'

c   *Mandaglielo a far prendere (Cf. ?Manda a farglielo prendere)

Send to-him it to make fetch

'Send to make him fetch it'

The order of functional heads for which evidence was discussed here is thus the following: [18]

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[18] The evidence for locating the Andative head below the Inceptive(II) and Continuative(II) aspect heads comes from the following contrasts:

(i) a   Lo comincio ad andare a vedere domani

It I begin to go and see tomorrow

b   *Lo vado a cominciare a vedere domani

It I go and begin to see tomorrow

(16)   .....Voice° > Perception° > Causative° > Asp$_{inceptive(II)}$/ (Asp$_{continuative(II)}$) >
Andative° > Asp$_{completive(II)}$

The dots are meant to cover such aspects as Predispositional ('tend to'), Terminative, Conative, Success/Frustative ('(not) manage to'), Continuative(I), Inceptive(I), Completive(I), Progressive, Prospective ('to be about to'), etc. (cf. Cinque 1997), whose relative order remains in part to be determined. [19]

(ii) a   Lo continuò ad andare a vedere tutti i giorni

It he continued to go and see every day

b   *Lo andò a continuare a vedere l'anno scorso

It he went and continued to see last year

The well-formedness of both (iii)a and b suggests, instead, that the Andative head is higher than the lower Completive aspect head and lower than the higher one:

(iii) a   Lo finisco di andare a leggere domani

It I finish to go and read tomorrow

b   Lo vado a finire di leggere domani

It I go and finish reading tomorrow

---

[19] Perhaps, grammatical function changing heads such as Causative should not be completely assimilated to 'grammatical' functional heads of the mood, modality, tense and aspect kind. The former, but not the latter, besides operating on the lexical verb's arguments, can apparently freely iterate (cf. (i))

(i) a   Taroo ga Ziroo ni Itiroo o aruk-ase-sase-ta   (Japanese - Shibatani 1976,244)

T. NOM Z. DAT I. ACC walk-CAUS-CAUS-PAST

'T.had J. make I. walk'

b   A daay-n-in-i Yero bingel e wuro na   (Fulfulde - Fagerli 1994,42)

You far-CAUS-CAUS-Voice/Asp/Pol Y. child from town Q

'Did you make Y. take the child out of town?'

c   Gliela faremo far riparare   (Italian)

To-him it (we) will make make fix

'We will make him have it fixed'

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and appear to be able to enter partially different orderings within and across languages. For example, the causative suffix is inside the distantive suffix in Fulfulde (cf. Fagerli 1994,53); which suggests that the Causative head is lower than the Andative head in this language, differently from Italian.

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The Rise of A Functional Category
From Latin ILLE to the Romance article and personal pronoun.[1]

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The goal of this paper is to provide a formal account of the development of the Latin demonstrative ILLE into two different categories, namely the definite article and the personal pronoun of third person singular.

With respect to the corpus of data and their interpretation, it will follow recent work by Renzi (1997) and previous work quoted there. It will show how Renzi's proposal, which captures the correlation among many observable facts found across Romance languages, can be straightforwardly represented in the recent minimalist framework developed by Chomsky (1992, 1995).

Section 1. reviews and slightly revises Renzi's (1997: 1-11) proposal of analysing the three categories of *demonstrative, personal pronoun*, and *article* as a bundle of semantic and syntactic features. The partial diffence in features to be found among the three categories is the reason for the different structural positions occupied by the three elements. Section 2. follows Renzi (1997:12-15) in taking the developement of ILLE as an example of a more general process of "grammaticalization" (in the sense of Meillet (1912) and recently Lehman (1982) and following work). This process is supposed to turn a lexical element into a functional one. It will be shown that "grammaticalization" in

generative terms reduces to the reanalysis of a constituent in a functional Specifier as being the filler of the adjacent functional head.

1.   Three different categories

Renzi (1997:7-8) analyses the demonstrative into the features given in (1a) below. (i-iv) are semantic, (v-vi) are syntactic features. Some of them are in an inclusion relation and this is represented by ">". In particular: (i) *deictic* is included in (ii) *definite*, which is included in (iii) *anaphoric*. Some of them are in complementary distribution. This is represented by "/". In particular: (iii) *anaphoric* is in complementary distribution with *ostensive* which is placed under the same heading; while (v) the adjectival status is in complementary distribution with (vi) the pronominal status. The pronoun (1b) and the article (1c) are analysed in terms of the same features:

(1)   Renzi (1997:8)

    a.   *Demonstrative*

        i   deictic >

        ii   definite >

        iii   anaphoric / ostensive

        iv   III person

        v   Adjective /

        vi   Pronoun

    b.   *Pronoun*

        ii.   definite >

        iii.   anaphoric / ostensive

        iv.   III person

        vi.   pronoun

c.   *Definite Article*

    ii.   definite >

    iii.   anaphoric / ostensive

    v.   adjective

According to Renzi, the different syntactic behaviour of the three categories can be derived by the different features present in the three elements. I will follow this line of reasoning and suggest minor improvements.

First of all, I propose to consider deictic as an independent feature. The feature *deictic* is found associated with non-nominal categories such as adverbs (cf. *here / there*) and verbs (*come / go, take / bring*) and in this latter case it cannot be implied in definiteness. The presence vs. absence of the feature *deictic* differentiates the demonstrative on the one hand from the pronoun and the definite article on the other. It is the presence of the feature *definite* in all the three elements what unites them synchronically and what has allowed the development of one into either of the other two.

Second, I suggest dropping the features *pronoun* and *adjective* since they refer to the categorial status of the element, which can be derived from independent properties of these elements. Consider that the property of being a pronoun cannot be a primitive in the grammar. In fact, any element that can appear in place of and/or in absence of a noun can be considered a pronoun. As a matter of fact an adjective may do so too. Notice furthermore that an article cannot be considered like an adjective from other points of view. For eample, it cannot cooccur with other articles, while it does cooccur with adjectives.

The demonstrative and the pronoun project a full structure (DemP, and DP_{pron} respectively), while the article is a functional head (D) in the nominal extended projection, which I call DP here, following the seminal work by Abney (1987):

(2)
```
              DP
          ___/    \____
      Spec            D'
       |          __/    \___
      DemP       D          ......
       |         |
      DP_pron   art
```
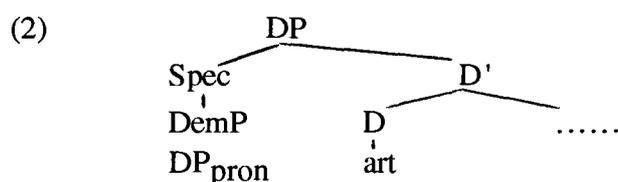
(2) merely shows the final position in which we usually find DemP and DP$_{pron}$. There are strong reasons to believe that at least demonstratives originate in a lower position.[2]

Template (2) predicts that demonstratives and pronouns cannot cooccur. As is the case in (3):

(3) a. It.: *noi questi ragazzi
    b. Fr.: *nous ces garÇon-ci
    c. Rum.: *noi acesti bàieti / *noi bàietii acestia
            we these boys

(2) also predicts that demonstratives and pronouns can coocur with articles. This is not often the case in Romance languages. However, some sporadic cases are found. These will be the topic of discussion in the rest of this section.

1.1. Pronouns

Although pronouns rarely appear with nouns due to both their anaphoric feature and their overt person features, their cooccurrence with nouns is not excluded:

(4) a. [noi [(*le] [ragazze]] siamo state preminate
        we the girls have been praized
    b. volevo dire questo a [voi [(*i)] [bambini]]
        I wanted to tell that to you the children

(4) shows that in Italian, the article cannot appear when a pronoun introduces a noun phrase. However, if we look at a different Romance language such as Rumanian, we can observe that pronouns may cooccur with articles:[3]

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2. Cf. Giusti (1993 ch. 2) and Brugè (1996, 1997).

3. The examples in (5) are taken from Lombard (1974:96).

(5) a.   Dumneavoastrà profesorii credeti cà e usor, dar dupà noi elevii este greu.

you professors-the believe that [it] is easy, but for us students-the [it] is difficult

b.   Nouà bàrbatilor ne place sà fumàm.

we.dat men-the.dat CL pleases to smoke

The contrast between Italian and Rumanian can be explained in a minimal framework by assuming that in Italian the pronoun in SpecDP realizes all the features present in that projection and makes the insertion of the article in D unnecessary and therefore impossible. In Rumanian, on the contrary, the article is part of the nominal inflection and it is inserted as a morpheme of N. As a consequence of this, the N must move to D to check the features of the article. The D position is perfectly available since the pronoun is in SpecDP.

The presence of the pronoun is presumably the overt representation of person features in the noun phrase. If no feature is specified, the understood feature is 3rd person. Given that noun phrases are underspecified for 3rd person, it is unnecessary and, on minimalist assumptions, impossible to realize it overtly. This is why the presence of a 3rd person pronoun is ungrammatical, as noticed by Cardinaletti (1994):[4]

(6) a.   *Ho parlato a loro studenti

I spoke to them students

b.   *Lei insegnante non è contenta.

She teacher is unhappy

---

4.   Cardinaletti argues that the data in (3)-(5) are predication structures rather than simple DPs. There is very little evidence that supports one approach over the other and this is not the place to set the matter in depth. However the Rumanian data appear to support the present approach, given the obligatory presence of the definite article in cooccurrence of a pronoun and the absence of the article when the noun phrase is used predicatevely, e.g. *e inginer* ("[he] is [an] engineer").

Another piece of data which favours my approach over Cardinaletti's is the cooccurrence of pronouns with noun phrases that are specified by adjectives or adjectival quantifiers but not with quantifiers proper: cf. *noi poveri/molti studenti* ("we poor/many students") with **noi alcuni studenti* ("we some students"). Cf. Giusti (1991) for the different behaviour of adjetival quantifiers which include *many* and quantifiers propers such as *alcuni*. Notice that the string *alcuni studenti* ("some students") can appear as a predicate in: *siamo alcuni studenti* ("[we] are some students"). I will not pursue the issue any further here.

From the synchronic point of view, the underspecification of person unifies demonstratives and definite articles and differentiates them from personal pronouns. From the diachronic point of view, it is quite straightforward that the only pronoun a demonstrative could develop into is the III person pronouns because a demonstrative is straightforwardly compatible with these person features for which it is underspecified.

1.2. Demonstratives

Demonstratives too can cooccur with articles in Rumanian, but only when they are in postnominal position. Cf. (7a) and (7b):

(7) a.   bàiatul acesta frumos
          boy-the this-A nice

   b.   acest bàiat frumos
          this boy nice

In Giusti (1997) and previous work quoted there, I have extensively argued that (7a) is derived from (7b), which is parallel to the Italian word order. In (7a) the noun goes one step further whereby acquiring the definite article. I have also argued there that the data in (7) strongly supports the XP status of the demonstrative. The demonstrative can be crossed by the head noun, while is cannot be crossed by an adjective which should be considered as a maximal projection, since it pied pipes a modifier:

(8) a.   bàiatul acesta [foarte frumos]
          boy-the this-A very nice

   b.   foarte frumosul (*acesta) bàiat
          very nice-the (this) boy

Spanish shows a different position for the postnominal demonstrative. Brugè (1996) shows that the basic position is the lowest functional specifier, only preceding the possessive:

(9) a.   el libro (*este) viejo (este) suyo (*este) de sintaxis

          the book (this) old (this) his (this) of syntax

    b.   este libro viejo suyo de sintaxis

          "this old book of his about syntax"

In Brugè and Giusti (1996), we proposed a parametric theory of demonstratives in cross linguistic perspective which take the position of the demonstrative in (9b) as the basic, the position of the demonstrative in Rumanian (7/8a) as a derived position due to an intermediate movement, and the final position found in (7b) in Rumanian and (9a) in Spanish as SpecDP and the position in which the demonstrative is found in other languages such as Italian and French. When the demonstrative is in SpecDP the presence of the article is unnecessary to check any features of the DP. However, when the demonstrative procrastinates its movement to SpecDP, the article is necessary to make the DP visible before SPELLOUT. I refer to that work for a detailed analysis.

1.3. *The definite article*

The definite article is certainly a functional head. From the phonological point of view it is a proclitic in Italian and other Romance languages, except in Roumanian, where it is enclitic. The presence of the definite article in Italian is required by the principles that apply to the licencing of the extended projection of the noun. An article is required when the noun is present (10a) and cannot appear when the noun is missing, as in (10b), instead a pronominal demonstrative must be used (10c):

(10) a.   Il ragazzo biondo è già arrivato,

          The blond boy has already come

    b.   *il castano non si è ancora farsi vivo.

          the brown-haired hasn't shown up yet.

    c.   quello castano deve ancora farsi vivo.

          the brown-haired one hasn't shown up yet.

The contrasts in (10) show that the article is a functional head in the nominal projection and that it cannot appear in the adjectival projection in Italian.

This is not the case in Rumanian. The Rumanian article is a morpheme and as such it represents a further step towards "grammaticalization", as Renzi (1997) observes. This morpheme can appear either on the noun or on the adjective:

(11) a.   bàiatul

             boy-the

    b.   frumosul bàiat

             nice-the boy

Given the data in (11), it must be established whether the article on the adjective is a word that encliticizes onto the first word of the noun phrase, or a real morpheme that is part of the inflectional pattern of the root it appears on. I will claim for the latter hypothesis.

We have already noticed above that the enlcitic article appears on the first noun/adjective and not on any element which can be an adverbial, as in (8b) above or a quantifier as in (12):

(12) a.   am vàzut pe *totii bàieti

    b.   am vàzut pe toti(*i) bàietii

    c.   am vàzut pe bàietii toti(*i)

    d.   am vàzut pe toti(*i)

           "I saw all (the boys)"

The article never appears on the quantifier *toti* either in prenominal position (12a,b) or in postnominal position (12c) or with a pronominal function (12d). I propose this has a lexical explanation: simply, the quantifier *toti* does not have that kind of inflection in its paradigm.

The form of the masculine singular article depends on the form of the root it attaches on. If it is a noun/adjective in -*u* the form is *ul*, if the noun/adjective is in -*e*, the form is -*le*:

15

(13) a.　　fratele bun

　　 b.　　bunul frate

　　 c.　　poetul mare

　　 d.　　marele poet

Following Chitoran (1997) I assume that the basic form of the article is *-lV* where V is the slot for an underspecified vowel that is spread from the preceding sillable. A further assumption needed is that word final *-u* but not *-e* delete.[5] In this way we obtain the underlying forms *frate+l+V > fratele*, *mare+l+V > marele*, *bunu+l+V > bunulu > bunul*, *poetu+l+V > poetulu > poetul*.

The presence of the underspecified vowel differentiates the clitic pronoun *(i)l* from the enclitic pronoun *l+V*. Both derive from the same element ILLE. I take the morphological different form to be evidence for the analysis of the enclitic article in terms of inflectional morphology while encliticization of pronouns is a morphosyntactic phenomenon. In other words the enclitic article in Rumanian has reached the apex of grammaticalization and is now part of word internal morphology of adjectives and nouns.

I have already argued elsewhere (cf. Giusti 1993) that the article in general and in particular in Rumanian has lost most (possibly all) its semantic features and that its presence is ruled by syntactic principles rather than by lexical semantic concerns.

Rumanian offers a striking case of this phenomenon, when a noun phrase is embedded in a PP. If the noun phrase contains a bare noun (10a) it cannot display the definite article just when its interpretation is definite, as in (14a), although it must contain the indefinite article when it is interpreted as indefinite, as in (14b). But as soon as a modifier is present, the definite article must reappear, as in (14c):

(14) a.　　pentru vecin(*ul)

　　　　　 for neighbour(*-the)

　　　　　 "for the neighbour"

　　 b.　　pentru un vecin

　　　　　 for a neighbour

5.　　This rule does no apply when *-u* is preceded by C+l or C+r. This sequence of consonant does not form a proper rhyme in Roumanian. This is a good reason for the non-applicability of *-u*-deletion, e.g. in *socru* ("father-in-law"), *cioclu* ("grave-digger").

c.   pentru vecin*(ul) meu / acesta /insusi / simpatic

for neighbour*(-the) my / this / himself / nice

"for my n. / this n. / the n. himself / the nice n."

I propose that in (15a) no Specifier is present by minimal structure, since no modifier is projected. Case on the noun is made visible at the SPELLOUT level by the presence of the preposition. On the contrary, in (15b), an AgrP is projected with its Spec in order to project the modifier in SpecAgrP. This modifier must be in Spec-Head Agreement with a visible head. Agr is not lexical and can be visible at the SPELLOUT level only if it is in chain with a lexical item. N-to-D movement is required before SPELLOUT in order to build this chain:[6]

(15) a.

```
                PP
        P _____ DP
        |          D_____NP
        |          |      |
        |          |      N
        |          |      |
     pentru     [Case]  vecin
```

b.

```
                PP
        P _____ DP
        |          D_____AgrP
        |          |   Spec_____Agr'
        |          |    |      Agr____NP
        |          |    |      |      |
        |          |    |      |      N
        |          |    |      |      |
  pentru vecinᵢ_ ul    acesta  t'ᵢ    tᵢ
```

Finally, to support the proposal that the article and only the article among the three elements considered here is a functional head, let me remind the reader of the well known observation, also reported by Renzi (1997:10), that only the article among the three elements is missing in a considerable number of languages and notably in the "mother" language Latin. Given the general assumption that morphological differences are

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6.   I do not take position whether N moves to D at LF in (15a). This matter is irrelevant to this fragment of analysis and would require a more in depth argument.

ultimately the only reasons of crosslinguistic variation, the proposal that the presence vs absence of the article in a language is to be reduced to the functional/morphological nature of this element.

1.4. Summary

I have proposed that the demonstrative and the pronoun are maximal projections which originate in some Spec position inside the extended noun phrase structure and end up in SpecDP. This is the highest functional projection in the noun phrase, and the locus where the interpretation of the noun phrase is done at LF.[7] In (16) I give the revised inventory of the lexical semantic features relevant for the elements under investigation:

(16) a.   *Demonstrative*

  i.   definite

  ii.   deictic / anaphoric / ostensive

  iii.   III / VI person

  [iv.   It projects an extended projection]

  b.   *Pronoun*

  i.   definite

  ii.   anaphoric / ostensive

  iii.   I / II / III / IV / V / VI person

  [iv.   It projects an extended projection]

  c.   *Article*

  i.   Ødefinite

  ii.   Øanaphoric

  iii.   Øperson

  [iv.   It is inserted in a functional head]

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7. For a much detailed question on where the demonstrative originates and where it is further displaced cf. Brugè (1996, 1997) and Brugè and Giusti (1996).

In (16c) the article is unspecified for all the relevant features. I propose that "Elsewhere" conditions assign the proper values to the Specifier of a head D filled by a definite article.

Demonstratives and pronouns are intrinsically marked for the feature (i) *definite*. The article is underspecified for this feature and it is compatible with any choice for it. An Elsewhere condition inserts an empty operator in SpecDP when the definite article is present. This derives the definite interpretation which is generally obtained when a definite article is present.

The features *deictic / anaphoric / ostensive* in (ii) are in complementary distribution. They express the possibility for the given element to refer to an object in the world (deixis and ostension) or of the discourse (anaphoric reference). The three elements are included one into the other with respect to this feature: The definite article can be anaphoric, namely it can only refer to a noun phrase in the discourse. The pronoun can either be ostensive to an object in the world or anaphoric to a noun phrase in the discourse. Finally, the demonstrative can do either or it can also refer in a deixis. The features in (ii) relate the richness in morphological features to the richness in semantic features: the demonstrative being richer than the pronoun which is richer than the article. We will see in next section that change of the richest element into either of the other two is related to morphological impoverishment.

In (iii) person features are expressed. The article is unmarked for person features. This is why it is compatible with any person. The unmarked case is when no person is specified and an Elsewhere condition inserts III person specification in singular noun phrases and VI person specification in plural noun phrases. The demonstrative is the most marked since it is overtly specified for III and VI. The pronoun be marked for any person. Person features are present both in demonstratives and in pronouns. This accounts for the fact that demonstratives and pronouns never cooccur (cf. **noi questi ragazzi*, "we these children").

(iv) is not a feature but it is a state of affairs derived by from the other properties. An underspecified element such as the article is semantically void and can only be a functional head. The demonstrative and the pronoun project a full extended projection due to their semantic content.

According to this framework, the structural position for the three elements is given in (17), in which the demonstrative and the pronoun start in a low position and end up in SpecDP. The article, on the contrary, is directly generated in D:

(17)

DP
Spec   D'
        D   AgrP
                .....
                    AgrP
                Spec   Agr'
                    Agr   NP
Demonstr.$_i$ ...... t_i ....
Pronoun$_i$ ...... t_i ....
Article
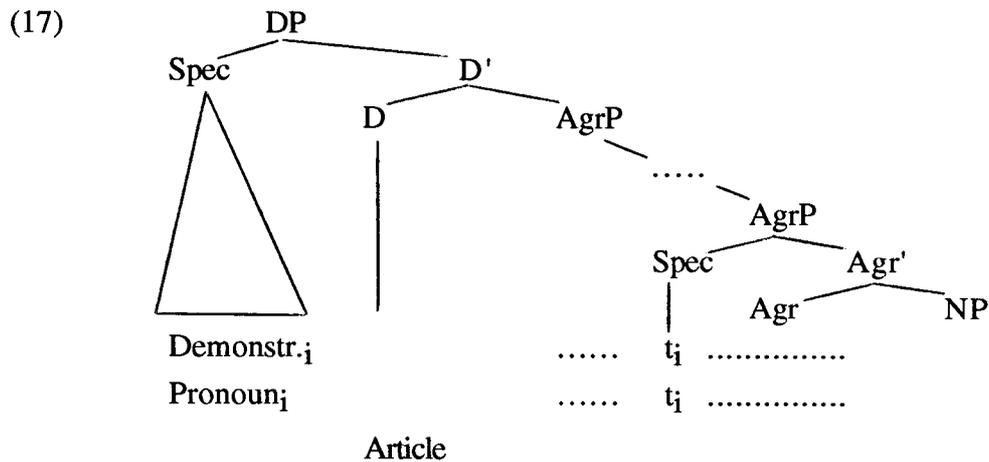
2.   A diachronic analysis

Renzi analyses the development of the demonstrative into the pronoun and the definite article as a loss of semantic features.

2.1. The development of the definite article

I would like to complement Renzi's arguments with the structural analysis for the development of the demonstrative into the definite article. The L1atin element ILLE generally found in SpecDP loses its first sillable (cf. Vanelli 1998 and other work quoted there) and is reinterpred as an element in D.

(18) a.
```
              DP                    b.            DP
     DemP           D'      =>          Spec           D'
     (IL)LE      D    ....                        D         ....
                                                  (IL)LE
```
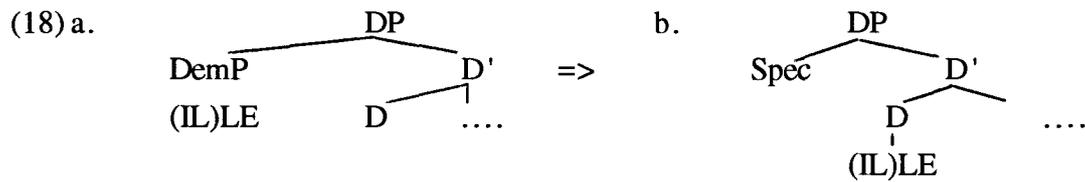
Given the absence of lexical material in D in (18a), and in SpecDP in (18b) the two structures may have coexisted in the language for several generations. By the time the first syllable had completely disappeared, (18a) had also disappeared in favour of (18b). It is reasonable to suppose that the trigger for the "new" analysis was the phonological weakening of (IL)LE. On the other hand, the existence of the "new" analysis may have quickened the loss of the first syllable.

It is reasonable to assume that functional heads are generally (possibly unexceptionally) monosillabic, and also devoid of lexical semantic features. In (16c) I proposed that the article is underspecified for the features *definite*, and *anaphoric*. These features are covertly present in SpecDP when D is filled by the definite article.

The head of DP is not filled in order to realize any semantic feature but for syntactic reasons, namely in order to make DP visible at the relevant interface levels (PF and LF). In Latin, in which no article was present, this function was fulfilled by case features on the head N.

Following Renzi's (1987) suggestion, in Giusti (1995), I propose to unify Case and article in one and the same category, namely D renamed F to include Case and possibly other functional features which mark the noun phrase as an argument. The noun phrase structure proposed is (19), in which FP is the same node as DP in the examples above:

(19)
```
                   FP
        Spec              F'
                  F            AgrP
                       Spec            Agr'
                                Agr            ...
                                               NP
                                      Spec           N'
                                                      N
```
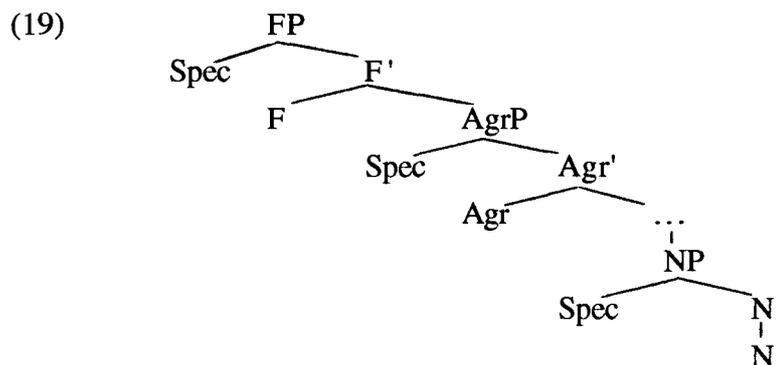
In (19), N is a lexical head that projects its functional structure with a recursive Agr and a topping F. Only FPs can be arguments, because FP checks argument features, among which case. The Spec-Head agreement configuration for modifiers is necessary given that modifiers are unmarked for a series of nominal features which must be fixed, namely gender, number, case, etc. depending on the language under consideration. For this reason, AgrPs are projected recursively, one for each modifier of the noun which is inserted in SpecAgrP, in order to be in Spec-Head agreement with an Agr which shares the features of the N-to-F chain.

Let us make the case of a language with morphological case and no article, such as Latin. The head noun carries case features which are checked by N-to-D movement at LF. Movement can be procrastinated until LF, case features being independently visible at previous levels by virtue of their being phonologically visible. The same holds for the modifiers which

carry overt morphological affixes. This makes the Spec-Head agreement visible prior SPELLOUT and allows for the noun to procrastinate its movement. In (20) we see some examples of noun phrases, all taken from the first sections of Seneca's *Ad Marciam de consolatione*:

(20) a.   vir ille fortissimus 1.7
           man.MAS.S.NOM that.MAS.S.NOM very-strong.MAS.S.NOM
     b.   ultimam illam faciem rerum 5.4
     last.FEM.S.ACC that.FEM.S.ACC aspectFEM.S.ACC thing.FEM.PL.GEN
     c.   ultima filii oscula 3.2
           lastNEUT.PL.ACC son.MAS.S.GEN kiss.NEUT.PL.ACC

(20a) shows the noun in initial position, (20b) shows a noun following its modifiers but preceding a genitive complement, while (20c) shows the noun in final position preceding the genitive.

From a brief review of (20), we observe that the noun starts very low and can remain in that position (20c), can raise in intermediate position (20b), or can raise very high (20c) for stylistic reasons. Raising, therefore, is possible but not obligatory. I propose that the optionality only regards the level of the representation in which N-to-D movement applies:

either before SPELLOUT or in its way to LF. The rich morphology on the noun makes the N-chain visible prior SPELLOUT even if N has not moved at that level.

The loss of such morphology is coexistent with the reanalysis of the demonstrative in (18) above. In such situation, the new element in D allows for the chain to be visible without changes in the word order. In other words, although case morphology is not rich enough to make the N-chain visible prior to N-movement, the presence of the newly formed article complies with the same function. This has the result of keeping the relatively free word order noticed above, which is typical of Romance languages.

2.2. The development of the pronoun

In template (2) above, I assumed that demonstratives and pronouns both check their features in the same position, namely SpecDP. The reanalysis of demonstrative ILLE into a strong pronoun does not imply any syntactic process but just a morphological reanalysis of an element with features (16a) into an element with features (16b).

A reanalysis of a pronoun in SpecDP into a head in D, similar to (18) proposed for the development of the article, is responsible for the further development of the strong pronoun into the clitic pronoun. From the structural point of view, the article and the clitic pronoun are in the same position.

The crucial difference between these two elements relies on the presence in the former and absence in the latter of a lexical head in the noun phrase. In the case of the article the head noun is necessary to licence the functional element in D. The pronoun, by definition, excludes the presence of the lexical noun. Being in need of a lexical head to check its features, the functional head must move out of the noun phrase and be licenced by verbal features.

2.3. A "new" demonstrative

In the processes of reanalysis dealt with above, the element ILLE loses some of the semantic properties, namely *deictic / anaphoric*. At this reconstructed stage, the category

represented in (16a) is no more realized by ILLE. A new lexical item was formed with a "reinforcer", the ostensive ECCUM.

I propose a parallelism with another "reinforcer" of the demonstrative present in several Romance languages until today: the deictic adverbial (*"here / there"*) extensively studied by Brugè (1997):

(21) a.   ECCUM ISTE / ECCUM ILLE   reconstructed form
     b.   ce-ci / ce-la   French
     c.   questo qui / quello la   Italian
     d.   este de aquí / ese de allí   Spanish

Brugè (1997) argues that the demonstrative and the reinforcer build a constituent in (21b-d).[8] I propose that this is the case for the reconstructed form in (21a). The specular word order which we find in the reconstructed form with respect to modern Romance language could either be reduced to another general difference between Latin and Romance languages, Latin being predominantly OV, Romance being predominantly VO; or to the different nature of ECCUM which is ostensive and contrasts with the deictic nature of *qui / lì* and their counterparts.

I propose to analyse the reconstructed forms in (21a) as costituents. The reconstruction must have taken place in at least two stages: At first, ECCUM was inserted in the SpecDemP, as in (22a). A phonological cliticization of the head in Dem which had lost its stress further led to a second stage of reanalysis of the resulting phonological word into a syntactic word in the position of Dem, as in (22b):

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8.   Notice that in French the prensence of the adverb is obligatory when the demonstrative is used as a pronoun. Notice also that in Italian and Spanish the adverb and the demonstrative must agree for a feature that we may call [proximity], so that the combination of a [+proximate] demonstrative and a [-proximate] adverb is not allowed and vice versa: cf. It. *questo lì* (this there), *quello qui* (that here). This observation is brought about by Brugè (1994) to reinforce her proposal that the two elements form a constituent.

(22) a.　　DemP　　　　　　　b.　　　　　DemP

　　　　　Spec　Dem'　　　　　　　Spec　　　　Dem'
　　　　　　　　│　　　　　　　　　　　　　　　　│
　　　　　　　　Dem　　　　　　　　　　　　　　Dem
　　　　　　　　│　　　　　　　　　　　　　　　　│
　　　　ECCUM (I)STE　　　　　　　(EC)CU-E-STE
　　　　ECCUM (I)LLE　　　　　　　(EC)CU-E-LLE
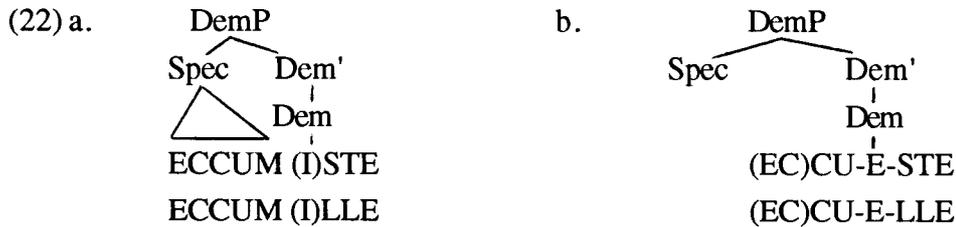
The possibility which arouse in later stages of adding a deictic adverbial in modern times, suggests on the one hand that in modern times the loss in semantic features by the head is going further in the same direction. On the other hand, the features grouped under each heading of (16) are attributable to the whole projection and not to a single head.

The linguistic changes dealt with up to now all have a common feature: they do not involve a change in the word order but consist in a reanalysis of the string.[9] In all cases the change regards a lexical category in a Spec which is reanalysed as being in the adjacent head. If this happens to be a functional head, the reanalysed element loses its lexical status and becomes a functional element, as is the case of the Italian, French, etc. article, studied in 2.1 and of the clitic pronoun studied in 2.2.

If the adjacent head is lexical and the reanalysed element precedes it, it is reanalysed as a prefix and then as part of the word. This is the case of the reinforcer ECCU, studied in (22).

If the adjacent head is preceding it is analysed as a suffix, and then as checked in a (higher) functional head. This is the case of the Rumanian article, which is enclitic.

Renzi (1997:16) notices that the new demonstrative formed from ECCUM-ILLE is currently undergoing a further realysis as a personal pronoun in some Italian dialects such as Piedmontese *chiel/chila* (Turin, cf. Rohlf 437, Berruto 1974) the new demonstrative is formed with the locative reinforcer which is optional in Italian: *cul là* (Turin, cf. Lombardi Vallauri (1995)). We are in the middle of a never ending process of language change.

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9. The only exception to this observation is apparently the case of the clitic pronoun which is in a different position with respect to the verb than its strong counterpart. A hypothesis yet to be verified is that at the stage in which the proposed reanalysis has taken place bot the OV and the VO orders were possible and that the former allowed for the reanalysis while the latter did not. At the later stage in which VO was already established in Italian, the OV order was only analysed as head movement of the clitic to V (or to a functional verbal projection).

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SUBJUNCTIVE COMPLEMENTS, NULL SUBJECTS AND CASE CHECKING IN BULGARIAN*

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1   Subjunctive complements in Bulgarian

Like the rest of the Balkan languages (Modern Greek, Romanian, Albanian) Bulgarian lacks subjunctive morphology but features a specific type of complementation with a subjunctive-like interpretation. In constructions of this type, the embedded verb has indicative morphology and is fully inflected for person/number agreement, although there are some tense restrictions which will be discussed in greater detail further in the text. The only mark for the "subjunctive"[1] appears to be the particle *da* which immediately precedes the finite verb, as illustrated in the examples (1) and (2) below:

(1)   Ivan iska   [e] da dojda/[e] da dojde.
      Ivan wants   DA come-1sg/DA come-3sg
      "Ivan wants [for] me to come"/"Ivan wants to come"
(2)   Ivan se opita [e] da razbere   v≤prosa.

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[1]   Although the term *subjunctive* is rather controversial in Bulgarian linguistics (cf. e.g. Maslov 1982), I will be using it as a cover term for all embedded clauses introduced by the special particle *da* and associated with a subjunctive (or subjunctive-like) interpretation.

Ivan tried   DA understand-3sg question-the
"Ivan tried to understand the question"

As far as the referential properties of the embedded subject are concerned, (1) and (2) present a curious asymmetry in terms of binding relations. In complements to verbs like *want* the null subject can but need not be coreferential with the matrix subject, while in complements to verbs like *try* the null subject is necessarily anaphoric upon the matrix subject and is therefore controlled by it.

In the present paper, I will argue that subjunctive clauses in Bulgarian are not structurally identical as regards the category of their null subject. Rather, the set divides between subjunctives like in (1) above which take a pro subject and those like in (2) which take a PRO subject. Following previous work (cf. Krapova 1997, to appear) I label the two subsets of subjunctives in Bulgarian Type I and Type II S(ubjunctives) respectively.[2] My aim is to show that the distribution of pro and PRO in Bulgarian can be derived on the basis of a correlation with the morphological content of subjunctive Tense. The analysis will lead to the conclusion that the control relation in clauses with Type II Ss, such as (2) above, does not result from properties intrinsic to PRO, but rather follows from lack of embedded Tense features and provides a configuration where Null Case can be checked successfully.[3]

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[2] Typically, a Type I S is selected by epistemic verbs (e.g. *nadjavam se* 'hope', *vjarvam* 'believe', *trjabva* 'must', etc.) and volitionals/desideratives (e.g. *iskam* 'want', °*elaja* 'wish', etc.), while a Type II S is selected by control verbs (e.g. *znaja* 'know how', the root modal *moga* 'can', *opitvam se* 'try', *zabravjam* 'forget', *uspjavam* 'succeed', etc.) and possibly aspectual verbs (e.g. *zaponvam* 'begin', *prod≤l°avam* 'continue', *spiram* 'stop', etc.). Within this semantically defined categorization, the term *control verb* can be correlated with the semantic property of control in its broadest sense, i.e. as referring to verbs which take in any non-freely interpreted empty category (Joseph 1992). Also, it is worth noting that the class of verbs which select a Type II S appears to be a mixed one and some of its representatives show certain ambiguities in their behavior as raising rather than control predicates, but I will leave open for further investigation the attempt to establish class membership in a more precise way.

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[3] Typologically, in all Balkan languages there is a subset of subjunctive-selecting predicates which induce an obligatory internal construal of the embedded null subject, regardless of the presence/absence of infinitives in these languages and/or of an additional subjunctive complementizer (cf. Iatridou 1993, Terzi

2 Null subjects in Bulgarian subjunctives

There is abundant evidence that the empty subject in cases like (1) vs. (2) is associated with an array of properties which uniquely identify them as pro and PRO, respectively. More concretely, in Type I Ss like (1) the null subject may alternate with a lexical DP or an overt pronoun, it may function as an expletive, it may take split antecedents, it permits both sloppy and strict identity readings, it is compatible with arbitrary effects and is not thematically constrained. On other hand, the null subject in Type II Ss like (2) is to be associated with anaphoric PRO since it instantiates none of the above properties. These differences are summarized in the table below (see Krapova 1997 for a detailed discussion):

	Type I S	*Type II S*
	pro	PRO
reference	+pron	+anaph
alternation with a lexical DP	yes	no
expletive	yes	no
split antecedents	yes	no
covariant interpretation	yes	no
arbitrary effects	yes	no
thematic constraints	no	yes

1992, 1998, Roussou 1999 for Modern Greek; Turano 1993 for Albanian; Dobrovie-Sorin 1994 for Rumanian). The problem however is whether this type of coreference can be shown cross-linguistically to instantiate a control relation, and if it can, whether it indicates the presence of a category PRO in these languages, all of which have either lost completely the morphological category of the infinitive, or have limited its use considerably. The availability of PRO in languages with finite-only complements has been questioned or even denied in a number of works within the GB model on the basis of the governing properties of finite INFL (cf Philippaki-Warburton 1987, for Modern Greek, Dobrovie-Sorin 1994, to appear, for Rumanian and Bulgarian). It has been argued that subjunctives with anaphoric subjects are only apparent control cases and that the empty subject position should rather be occupied by pro. Various mechanisms have been proposed in order to capture the control facts. In the GB version these mechanisms reduce to possible ways of defining a GC for the embedded subject in the above mentioned languages, in order to account for its ambiguous behavior as a pronominal or as a bound variable (cf. Rivero 1987, Dobrovie-Sorin 1994, etc.).

Consider for example the pair in (3):

(3) a. Ivan$_i$ iska_e   toj$_{i/j}$/pro$_{i/j}$ da ostane pri nego.
     Ivan wanted-3sg he   DA stay-3sg with him
     "Ivan wanted (him) to stay with him."

     b. Ivan uspja PRO/*brat mu   da ostane   pri   nego.[4]
     Ivan managed-3sg brother his DA stay-3sg with him

(3a) shows that only in Type I Ss the null subject can alternate with an overt one. The subject pronoun may be coreferent with the matrix subject, or refer to some salient DP from the context.[5] In Type II Ss, on the other hand, which correspond to (3b), alternation with a lexical DP/pronoun is blocked and the understood subject has to be obligatorily controlled. Under the current proposal, the anaphoric relation exemplified in (3b) is to be attributed to the presence of a syntactic element, namely PRO, despite the fact that the embedded verb is finite (see Terzi 1998 for arguments from Modern Greek on compatibility between PRO and finiteness).

It could be argued (along the lines of Borer's 1989 proposal) that the control relation in Type II Ss derives from the anaphoric properties of embedded AGR. However, person/number morphology does not change with the choice of complement clause type, but it is only (3b) which exhibits the standard control effect. It could also be argued that if control is an instantiation of an anaphoric *relation* rather than an indication for the presence of a particular linguistic element, namely PRO, the identity of matrix and embedded agreement features in (3b) is determined by the s-selectional properties of the matrix predicate, i.e. certain verbs in Bulgarian like *try, manage*, but not *want*, or *hope*, will impose such an anaphoric relation/interpretation. However, although it is clear that

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[4] In the text examples PRO and pro will always be given to the left of *da* which is meant to mark the presence of the respective null subject in the subjunctive complement. The actual structural positions will be discussed in section 4.

[5] It should be pointed out, however, that when the subject pronoun is overt, each reading is associated with a different interpretation - focused in the coreferent reading and topicalized in the non-coreferent reading. Pending the discussion in section 4., and assuming that focus and topic phrases are situated in the left periphery of the clause (following Rizzi's 1997 proposal), this contrast indicates that overt subjects in *da*-complements of Type I may not surface in one and the same position inside the embedded clause.

such a distinction in lexical properties indeed exists, I will show that the null embedded subjects in (3a) vs. (3b) have a different syntactic behavior which cannot be otherwise accounted for unless one postulates that they belong to different categories.

First, locality effects obtain only with Type II Ss, i.e. in subjunctives which take PRO subjects, since this is a property characteristic of obligatory control. The contrast in (4) is thus expected, given that (4a) is a control structure, while (4b) is not:

(4) a. [Na Ivan]$_i$ [majka mu]$_j$ mo°e [PRO da SE$_{j/*i}$ izmie.
    of Ivan   mother his is able   DA self wash
    "Ivan's mother can wash herself"
  b. [Na Ivan]$_i$ [majka mu]$_j$ se nadjava [pro$_{i/j}$ da SE$_{j/i}$ izmie.
    of Ivan   mother his hopes   DA self wash
        "Ivan's mother hopes to wash herself.", or
        "Ivan's mother hopes that he will wash himself "
(5)   John's mother hopes PRO to wash herself/*himself.

The PRO subject in (4a) can only be controlled by a local c-commanding antecedent, thus precluding a non-local construal of the embedded anaphor *se* ('self') with *Ivan*, similarly to the corresponding English example in (5). In (4b), on the other hand, which contains a pro subject, the reflexive can be construed with an antecedent (*Ivan*), which need not be local.

Further, the ungrammaticality of (6a) below which contains the impersonal modal *trjabva* 'must' in the intermediate subjunctive clause shows that PRO is prevented from picking up the semantically appropriate controller because of the intervention of the expletive which is a closer (yet unsuitable) antecedent. Thus, similar to the English case in (7), (6a) is ruled out as a locality violation, despite the fact that the intended interpretation is the one with PRO being controlled by *Ivan*. Unlike (6a), (6b) contains the root modal *moga* 'can' which agrees in phi-features with its subject *Peter*. Since locality conditions are respected, control of PRO by *Peter* in the intermediate clause yields a grammatical result:

(6) a.*Ivan ne smjata [proex da trjabva [PRO da zamine vednaga]]
      Ivan not thinks   DA must   DA leaves immediately
   b. Ivan ne smjata [Pet≤r da mo°e [PRO da zamine vednaga]]
      Ivan not thinks Peter DA is able DA leaves immediately.
      "Ivan doesn't consider Peter capable of leaving immediately"
(7)   *John thinks that it is expected PRO to leave.

If in the above examples (2), (3b), (4a), (6b) I have the subject-oriented anaphor PRO, then I predict that it should be sensitive to the referential properties of its local antecedent. Following Higginbotham's generalization (Higginbotham 1992), PRO may receive a pronominal interpretation, in case it has a local pronominal controller. This situation is exemplified in (8) which presents a combination of a Type I and a Type II S. PRO in the most embedded clause can be interpreted as referring either to the superordinate subject *Ivan*, or to some discourse-salient participant. These referential differences, however, are not to be attributed to properties of a presumed pro subject, but rather to the fact that PRO is controlled by the null/overt pronoun in the intermediate clause. Thus, binding is local, rather than long-distance:

(8) Ivan$_i$ ne si predstavja [pro$_{i/j}$/toj$_{i/j}$ da mo°e [PRO$_{i/j}$ da zamine]]
    Ivan not imagines   he   DA is able   DA leaves
    "Ivan does not imagine that he will be able to leave"

Consider next the interpretation of the reflexive/impersonal pronoun *se* 'self' in the two types of subjunctive clauses that I have postulated. First, as the examples in (9a&b) show, a Type I S permits all interpretations which are available to *se*: passive, reciprocal, reflexive, null object, and impersonal:

(9) a. Ivan iska decata   da SE bijat
       Ivan wants children-the DA self spank
       "Ivan wants the children to be spanked"/
       "Ivan wants the children to spank each other"/
       "Ivan wants the children to spank themselves"/
       "Ivan wants the children to spank someone"
    b. Ivan iska da SE raboti i   v nedelja[6]
       Ivan wants DA SE works and on Sunday
       "Ivan wants [for] people to work on Sundays as well"

Following Progovac (1998), I will consider *se* an expletive element whose presence is imposed by the fact that one of the arguments is not expressed. According to Progovac, *se* may check either the Accusative Case feature on the verb, thereby deriving a passive structure with a Nominative theme like the one in (9a), or the Nominative Case feature of

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[6] In the text examples only the impersonal *se* is glossed with "SE", while all the other usages of *se* are glossed with "self"

the verb, thereby deriving the impersonal structure like the one in (9b). Reflexive/ reciprocal/null object structures differ from passive ones in that the external argument, rather than the internal one raises to the Nominative position.

(9a) and (9b) contrast in grammaticality with (10a) and (10b) which contain Type II Ss:

(10) a. *Ivan otkazva [da   SE bijat   decata.
       Ivan refuses   DA self   spank children-the
       [Intended interpretation]: Ivan refuses for the children to be spanked/to spank
       each other/to spank someone
     b. *Ivan otkazva [da   SE   zamine.
        Ivan refuses   DA SE leave
(11)   Decata   otkazvat [PRO da SE bijat.
        children-the   refuse   DA self spank
        "The children refuse to spank each other/themselves/ someone"

The above examples show that the presence of PRO blocks the passive and the impersonal interpretations of *se* and allows only the reflexive/reciprocal/ null object one. Moreover, the fact that an arbitrary null subject is impossible in impersonal structures like (10b) shows that a subset of subjunctive complements in Bulgarian do not provide a Nominative Case checking environment, assuming with Progovac that in impersonal structures *se* checks Nominative Case.[7]

It has been noted for English (Lasnik 1992: 240) that "for a wide range of obligatory control constructions, the predicate of the complement must be an intentional action, that is one either fully, or partially within the intentional control of the subject". Lasnik's observation holds for Bulgarian as well and apparently, PRO does not admit a non-agentive interpretation on a general basis, as the ungrammaticality of (12b) illustrates:

(12) a. Ivan _te se opita [PRO da pomaga na Anton
        Ivan will try   DA helps   to Anton
        "Ivan will try to help Anton"
     b.*Ivan _te se opita [PRO da napodobjava na Anton
        Ivan will try   DA resembles   to Anton

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[7] Note that the present conclusion is also compatible with the standard analysis of *se*, according to which *se* is not involved in Case checking but rather absorbs an internal or an external argument, depending on interpretation. I will not go into comparing the alternative hypotheses.

As expected, no thematic constraints are imposed on pro subjects, cf. (13). Thus, with verbs which permit either pro, or a lexical DP as the subject of their subjunctive complement, a full range of theta-roles is available to that subject:[8]

(13) a. Ivan se nadjava [pro da pomaga Pet≤r
      Ivan hopes   DA helps Peter
   b. Ivan se nadjava [pro da napodobjava na Pet≤r
      Ivan hopes   DA resembles to Peter

3   *Subjunctives and Tense features*

Having provided evidence as to the existence of PRO in Bulgarian Type II Ss, let us see what are the factors that stand behind the distinction between the two types of null subjects in Bulgarian subjunctive clauses. I will claim that the relevant factor is the referential (and the morphological) content of embedded Tense. I will assume that Tense comes in two varieties - T_{nom} and T_{null}. The former corresponds to a [+T] specification and checks Nominative Case, while the latter corresponds to [-T], to indicate lack of temporal specification, and checks Null Case. In the next section I will try to motivate how the right type of Case is checked in each relevant configuration. What I would like to argue is that the control relation in Type II Ss is not imposed by the anaphoric properties of PRO, but follows from, or at least correlates with the specific temporal reference of the clause in which it is licensed.

Although it is generally true that subjunctive tense is defective and dependent on matrix Tense for interpretation, Type I and Type II Ss differ considerably with respect to

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[8] This situation finds a parallel in English, for verbs like *want*, which may take a lexical DP, as well as PRO, i.e. they do not require an obligatorily controlled PRO, as Williams (1980) and Lasnik (1992) have observed:

(i) a. John wanted [Sue/PRO to visit Bill]   = Lasnik's (38) and (41)

   b. John wanted [Sue/PRO to resemble Bill]

Lasnik (1992: 241) notes that "these thematic constraints on Control tend to obtain only in configurations where PRO is demanded (rather than simply allowed)".

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their Tense specification. More precisely, in terms of Tense features the former type has a more rich semantic content than the latter.

Turning now to the data, the following generalization obtains: Type I Ss may not appear in the whole range of indicative tenses,[9] but they nevertheless exhibit fewer tense restrictions than Type II Ss.

Since Type I Ss appear as complements to epistemic and volitional predicates, they have a 'possible future' interpretation (Bresnan 1972), i.e. they describe a hypothetical or an unrealized event. All Bulgarian subjunctives are incompatible with the morphological past (aorist) tense and with the future tense, implicating that the [±Past] features of embedded Tense do not have an independent status. As a consequence, the aorist is excluded (cf. (14) below) since, in contrast to the imperfect, it has to be directly linked to the utterance time and cannot rely on any other reference point for its interpretation. Besides, the aorist is incompatible with a hypothetical/irrealis interpretation and also with the fact that subjunctives cannot be assigned a truth-value, as far as the speaker is concerned (Farkas 1992):

(14) *Ivan se nadjava_e/mo°e_e da napisa   pismoto.
     Ivan hoped/could   DA write-aor letter-the

With respect to other tense restrictions, however, Type I and Type II Ss behave differently. Type I Ss permit all of the indicative tenses, except for the future and the aorist: present (the unmarked case), imperfect, present perfect and past perfect. Consider first present tense subjunctives in complements to volitional and epistemic predicates:

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[9] It has been noted (e.g. Picallo 1984, Stowell 1982, Borer 1989, etc.) that 1. tense in subjunctives is defective (or degenerate) in comparison to indicative clauses and 2. it is anaphoric upon the tense of the matrix clause. To account for the latter fact, it could be argued that subjunctives lack a TP altogether (cf. Tsimpli 1990). However, as noted by Dobrovie-Sorin (1994: 105), when it comes to temporal reference, anaphoricity does not imply lack of Tense, but should rather be interpreted in terms of a referential dependency of the embedded Tense features upon the matrix Tense features. Thus, properties 1. and 2. are not independent but should rather be taken to correlate.

(15) a. Iskam   da dojde_.
       want-1sg DA come-2sg
       "I want you to come"
    b. Mislex   da dojde_.
       thought-1sg DA come-2sg
       "I thought you would come"

The time reference of a present tense subjunctive, embedded under a present tense verb, as in (15a), is evaluated at the utterance time and yields a future tense reading. When the matrix verb is in the past, as in (15b), the time reference of present tense subjunctives is evaluated with respect to the matrix event time and has a 'future-relative-to-past' value. Such state of affairs argues against the claim that subjunctive Tense is strictly anaphoric. This is confirmed by the possibility of having different temporal adverbs in the higher and the lower clauses, as illustrated in (16):

(16) *Včera*   re_ix   [*utre* da ne pu_a   povete]
     yesterday decided tomorrow DA not smoke-1sg anymore
     "Yesterday I decided that tomorrow I would give up smoking."

(16) shows that the future-oriented adverb *utre* 'tomorrow' has narrow scope and does not conflict with the higher past tense, nor with the past-oriented adverb *včera* 'yesterday' which modifies the higher clause. Such facts seem to show that Type I S clauses may denote an independent event and have a distinct time frame, although a specific temporal interpretation is imposed by the Tense of the matrix predicate. More precisely, there exists a (head) dependency between embedded T and matrix T, in order for the temporal evaluation to be achieved. Thus, embedded Tense gets anchored through linking of the embedded T features to the matrix T features (cf. Enç 1987, Roussou 1999, a.o.).

Note that these meaningful tense distinctions are hard to reconcile with the proposal that subjunctive T is necessarily anaphoric and should be specified with [-T], like its infinitival counterparts in other languages. Therefore, I will suggest that T in type I Ss is uniformly specified as [+T]. Since in these complements tense is typically interpreted as shifted "future", i.e. posterior to the matrix event time (Kempchinky 1986), it lacks [± Past] features, but it contains other Tense (or Tense-related) features, such as e.g. [± Anteriority] which are anchored to matrix T through the embedded C.

Consider now Type II Ss. First, compare (16) with the ungrammatical (17) which has the matrix control verb *zabravjam* 'forget':

(17) *Vчera   zabravix [da zamina   utre]
yesterday forgot-1sg DA leave-1sg tomorrow

(17) shows that an embedded temporal adverb is ungrammatical if it conflicts with matrix tense and/or a temporal adverbial. This conclusion is confirmed by (18) where the control root modal *moga* 'be able' in the past (aorist) tense requires that the event in the embedded clause be necessarily interpreted as past, i.e. simultaneous with the matrix event, hence precluding the occurrence of a non-past time indicator:

(18) Ne mo°ax   da kupja   knigata vчera/*utre
not could-1sg DA buy-1sg book-the yesterday/tomorrow
"I could not buy the book yesterday"

The wide scope interpretation of the temporal adverbials in Type II Ss is expected, given that, depending on the semantic properties of the selecting predicate, a Type II S may denote an event which is either simultaneous with the matrix event (as in (17)), or one which is aspectually non-distinct from it (as in (18), cf. also Varlakosta and Hornstein 1993 for similar facts from Modern Greek). Similarly, in (19) the adverbial *do utre* 'until tomorrow' can only be interpreted with a future time reference, as imposed by the future tense of the matrix verb:

(19) _te uspeja   da proчeta tazi kniga *do utre*
will manage-1sg DA read-1sg this book by tomorrow
"I will manage to read this book by tomorrow"

It could be argued that the embedded present tense in (18) and (19) is pleonastic in that it has no semantic function other than signaling lack of independent tense, or yielding a simultaneous construal.

Finally, it is worth noting that Type II Ss in Bulgarian can appear only in the present tense, irrespective of the tense in the matrix clause. All other tenses are excluded, as the ungrammaticality of the examples in (20a&b) shows:

(20) a. *Ivan mo°e da napi_e_e   pismoto
Ivan is able DA write-impf-3sg letter-the
b. *Ivan mo°e_e da napi_e_e/be_e napisal pismoto
Ivan could   DA read-impf-3sg/had-3sg written letter-the

I conclude therefore, that control complements in Bulgarian do not possess Tense features at all. In the grammatical examples (19)/(20) the present tense is Tense zero, so I will generalize that Tense in Type II S is specified with [-T].[10] This specification will allow us to capture the strict anaphoric relation which exists between matrix and embedded Tense.

4 Subjunctives, Case checking and V movement

In this section, I will offer an account of how Nominative and Null Case are checked in the respective Tense feature contexts within the subjunctive clause.

First, I will suggest that the base position of the subjunctive particle *da* is in C (cf. also Penчev 1998, Dobrovie-Sorin 1994, a.o.), rather than in some Mood projection inside the IP domain, as is currently maintained (in Rudin 1985, 1988, Rivero 1994,

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[10]   The contrast between the two subjunctive types in terms of the pro/PRO distinction is reminiscent of the well-known contrast in (i), which illustrates that Control structures prohibit an overt subject, while ECM structures require one:

(i) a. John tries PRO/*Mary to finish his thesis

b. John believes *PRO/Mary to be pregnant.

Martin (1992) following Stowell (1982), proposes that this property correlates with Tense: Control Tense is specified for [+T], while ECM Tense is specified for [-T], hence ECM complements do not have an independent temporal interpretation. In terms of Tense specification, it seems that Type I Ss pattern with English Control Tense, while Type II Ss (the control subjunctives) pattern with English ECM Tense. I do not have an explanation for these "mirror-image" effects. Note however, that I do not accept that anaphoric tense dependencies (at least in Bulgarian) amount to lack of Tense altogether (see also footnote 4). Instead, I suggest that control subjunctives have a Tense node which is specified as [-T]. The assumption that [-T] specification should replace lack of Tense will be shown to have important consequences for the minimalist account of Null Case checking of PRO.

a.o.). I will assume (with Chomsky 1995) that C selects TP and that agreement features are checked in a Spec,head relation within TP, as indicated in the structure below:

(21)   [$_{CP}$ C da [$_{TP}$ T [$_{VP}$ SU [$_{V'}$ V OB   ]]]]

Since the verb is selected from the lexicon with tense and agreement on it, the V feature of Tense will check the Tense on the verb while its D feature will check the Case of the subject DP that raises to its Spec position. The DP carries along its phi-features which will be checked against the Agr features of V in the Spec,head relation established within TP.

Recall that above I have suggested that Tense comes in two varieties, T_{nom} and T_{null}, each having a Case feature which has to be checked by V movement. Suppose T_{nom} has an -Interpretable Nominative Case feature which corresponds to its [+T] specification. The situation is similar with *that*-complements in which Tense is also specified with [+T]. Since pro and lexical DPs check Nominative Case, either one can merge, whenever T_{nom} is selected. V-to-T is overt, because the -Interpretable feature T_{nom} will attract V's T feature by pied-piping the entire verb, assuming (with Chomsky 1995) that only -Interpretable features attract and get subsequently deleted. The derivation is shown in (22):

(22)   V..... [$_{CP}$ da [$_{TP}$ pro/lexical DP [$_{T'}$ V+T [$_{VP}$ t$_{SU}$ t$_V$]]]]

Overt V-to-T will ensure that pro/the lexical DP will move from Spec,VP to Spec,TP for checking of both Nominative Case and the strong EPP feature. Since there is no other trigger for movement, pro/the lexical DP will stay in Spec,TP.

As for PRO, I will crucially adopt the Case-theoretic account of its distribution proposed by Chomsky and Lasnik (1993) which argue that PRO is the minimal Case-marked DP which checks Null Case against a minimal Infl. Suppose now that T_{null} has a weak Interpretable Tense feature which can only check Null Case because it corresponds to a [-T] specification. Since there are no infinitives in Bulgarian, [-T +Agr] is the minimal finite specification that has to be marked on each verb. Thus, PRO will merge, whenever T_{null} is selected, or else the derivation will crash. The weak Interpretable feature of T will attract only V's T features, to check T_{null} (obeying Procrastinate), while PRO will move from Spec,VP to Spec,TP for checking of both Null Case and EPP against the raised Tense features of V, in compliance with Last Resort, cf. (23):

(23)   V.... [$_{CP}$ da [$_{TP}$ PRO [$_{T'}$ T [$_{VP}$ t$_{PRO}$ V   ]]]]

The opposite choice, namely the one by which PRO instead of pro moves to Spec,TP in (22)/(23), will be barred because T_{nom} will not have satisfied its Nominative Case feature and the derivation will crash. Alternatively, if pro rather than PRO raises to Spec,TP for Null Case checking, the derivation will crash again, since in this case T_{null} will not have satisfied its Null Case feature.

Unfortunately, this explanation predicts that a lexical DP in Spec,TP should be able to intervene between *da* in C and the verb in T, contrary to fact, as the contrast in (24) shows:

(24) a.*Iskam   da *decata/vsi∏ki*   ostanat
      want-1sg DA children-the/all stay-3pl
   b. Iskam   da ostanat. *decata/vsi∏ki*
      want-1sg DA stay-3pl children-the/all
      "I want the children to stay"/"I want them all to stay"

I propose that in (24b) in which the subjunctive subject appears postverbally, the embedded verb has adjoined to the particle in C, leaving the subject behind in Spec,TP.[11] The reason for this movement is in the feature specification of embedded C. Recall that Type I Ss appear as complements to epistemic and volitional predicates and describe a possible, hypothetical or unrealized event. Therefore, it seems plausible to assume that C has an –Interpretable Mood feature which attracts the embedded verb into the CP domain and can be checked by overt V+T-to-C. Moreover, the respective verbs which select for a Type I S also have modal or modal-like properties and thus require that their complement realize a Mood feature which is expressed on the embedded C.[12, 13]

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[11]   This proposal relies on right adjunction and although not in the spirit of Kayne (1994), it is potentially compatible with Chomsky (1995).

[12]   Interestingly, this latter class of verbs (which includes volitionals, epistemics and desideratives) almost perfectly corresponds to the class of verbs which would normally require a subjunctive in languages which mark this mood morphologically.

[13]   According to traditional Bulgarian grammars, (cf. also Kempchinsky 1986 on this issue) *da* in these complements is a subordinating conjunction which functions like a modal operator with the effect of

Beside accounting for the strict adjacency between *da* and the following verb, overt T-to-C across the subject is also responsible for linking of the embedded T features to matrix Tense. Recall that I claimed above that Type I S clauses may denote an independent event and have a distinct time frame, although a specific temporal interpretation is imposed by the Tense of the matrix predicate. In view of this fact, T-to-C raising in Type I Ss will have the additional effect of anchoring embedded T, in the sense of Enç (1987), thereby achieving the temporal evaluation of the subjunctive clause. Under Enç's approach, T-anchoring proceeds indirectly, i.e. through the embedded C, which is selected by the matrix V, in satisfaction of the locality conditions. More precisely, as argued by Roberts and Roussou (1996) and Roussou (1998) there exists a (head) C-T dependency which is overtly manifested in the V2 Germanic languages where T also moves to C. Furthermore, by the same operation (T-to-C raising) the embedded verb checks off its categorial feature against the V feature of the particle, since *da* is compatible only with finite verbs, it cannot cooccur with participles, or gerunds.[14]

Turning now to Type II Ss, recall that their present tense morphology is not related to the utterance time, but is interpreted as simultaneous with the tense in the matrix clause. In view of this tense dependency, I would like to suggest that CP in Type II Ss is specified for a weak Mood feature. At LF, the latter attracts the subjunctive verb to C (obeying Procrastinate). Through this movement, an anaphoric relation is established between matrix and embedded Tense.[15] The subjunctive verb also checks off its categorial feature against the V-feature of the particle in C.

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switching the time-reference of the subjunctive and deriving the above-mentioned past-shifted and future-shifted construals.

[14] Note that the categorial feature of the raised V in (22) in the text is still accessible to the computation and remains visible at LF, in virtue of being Interpretable (Chomsky 1995, ch. 4), although it has been checked by T as a free rider (via the adjunction operation).

[15] Note that this proposal allows us to account for the tense dependencies exhibited in subjunctive clauses, making it irrelevant to posit different types of projections (CP or IP) for the various subjunctive complements based on cooccurrence with complementizers and wh-words (as in Varlakosta and Hornstein's 1993 analysis of Modern Greek subjunctives).

As noted above, the current approach runs contrary to the common view that the particle *da* has no complementizer properties. This view is grounded on word order facts: *da* has to be strictly adjacent to the inflected verb or auxiliary, unlike "genuine" complementizers such as *če* "that", which need not be:

> (26) Ivan se nadjava če Pet≤r e   zaminal veče
>   Ivan hopes   that Peter be-3sg left   already
>   "Ivan hopes that Peter has already left"

On a general basis, choice of a complement type is lexically determined, i.e. some verbs license a *če*-clause, while others license a *da*-clause. A limited class of verbs, though, among which the verb *nadjavam se* "hope",[16] are equally compatible with both clause types:

> (27) Ivan se nadjava Pet≤r **da** e zaminal veče
>   Ivan hopes   Peter DA be-3sg left already
>   same as (26)[17]

The comparison between (24b) and (27) shows that overt subjunctive subjects can appear preverbally, i.e. to the left of *da*, as well as postverbally. On the other hand, the word order distinctions between (26) and (27) indicate that *če* and *da* occur at two different sides of the overt preverbal subject: *če* appears before the subject, while *da* follows it. Fronted constituents such as topic and focus phrases obey the same ordering constraint, i.e. they follow *če* and precede *da:*

> (28) Iskam   knigata IVAN **da** mi ja dade.
>   want-1sg book-the Ivan   DA me it give-3sg
>   "I want Ivan to give me the book"
> (29) Nadjavam se *če* knigata   IVAN _te mi ja dade.

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[16]   All verbs seem to belong to the class of *belief* verbs, such as *vjarvam* 'believe', *mislja* 'think', *predpolagam* 'assume', etc.

[17]   There is a difference in interpretation, however. The subjunctive in (26) expresses the speaker's commitment to the truth and the factual status of the embedded proposition, while in (27) it expresses the speaker's belief in the possible realization of the embedded event.

hope-1sg   that book-the Ivan will me it give-3sg
"I hope that Ivan will give me the book"

The above examples show that *če* is higher than *da* in the embedded structure. Rizzi (1997) proposes that the left periphery of the clause (the CP domain) has a finer structure which has to be split into several projections, as exemplified in (30). This proposal allows us to locate the various elements within the CP domain and makes it possible to assume that there are two complementizer positions in Bulgarian.

(30) [$_{ForceP}$ Force [$_{TopP}$ Top [$_{FocusP}$ Focus [$_{TopP}$ Top [$_{FinitenessP}$ Finiteness]]]]]

The FinitenessP contains information which "faces the inside, the content of the IP embedded under it" (Rizzi 1997: 283) and its head, Finiteness, differentiates between finite and non-finite clauses. I would like to tentatively suggest that this is the position occupied by *da*. Since *če* is always higher than *da* and they show on opposite sides of Topic and Focus, it could be argued that *če* occupies the head of ForceP, i.e. the projection which contains information about the type of the clause (declarative, exclamative, relative, etc.).

In view of this suggestion, whenever the subjunctive subject is situated to the left of *da*, it can either stay in Spec,FinitenessP, or be topicalized, or focused and surface in Spec,TopP or Spec,FocP, respectively. The structure in (30) predicts that combinations between several topics and a focus should also be possible. (31) shows that this is indeed the case in Bulgarian:

(31) a. Nadjavam se [knigata [UTRE [Ivan da ja donese]]]]
        hope-1sg   book-the tomorrow Ivan DA it bring-3sg
     b. Nadjavam se IVAN utre   knigata   [t da ja donese]]]]
        hope-1sg   Ivan tomorrow book-the   DA it bring-3sg
        "I hope that Ivan will bring the book tomorrow."

5   Conclusion

In this paper, I have examined the syntactic behavior of the null subjects in finite subjunctive clauses in Bulgarian, a language without infinitives. I have provided

additional arguments which help identify the postulation of two types of subjunctives based on a correlation between their distinct temporal specifications. The results can be summarized with the following descriptive generalizations:

•Bulgarian has two types of *subjunctive* complements, one which licenses pro and another one which licenses PRO. Complements with a pro subject (Type I Subjunctives) show some tense restrictions but nevertheless their Tense features may not be anaphoric upon the matrix Tense. Complements with a PRO subject (Type II Subjunctives) show very strict tense restrictions. Their Tense features are anaphoric and (present) Tense is pleonastic, or $T_{null.}$

•Control relations in Type II Ss do not result from properties intrinsic to PRO, but rather follow from the fact that the negatively specified T in the embedded clause provides a configuration where (Null) Case can be checked successfully.

•Embedded Tense with its respective specification regulates the distribution of pro/PRO subjects, in compliance with Minimalist Principles and the s-selectional properties of matrix predicates.

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Uneven Trochees in Latin: Evidence from Romance Dialects

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Abstract

The structure of the metrical foot in quantity-sensitive trochaic systems, and specifically the parsing of a heavy-light sequence of syllables, is a hotly debated issue in the phonological literature. According to the "moraic trochee" analysis, these syllables are parsed as a monosyllabic (H) foot followed by a single light syllable. According to the "uneven trochee" analyses, these syllables together form a single foot: (HL).

Data from the dialects of the Emilia-Romagna region of northern Italy provide support for the hypothesis that Latin had an uneven trochee. Latin's disyllabic (uneven) trochaic foot survived in these dialects as a tempate which is part of the input and which is satisfied by epenthesizing a vowel post-tonically.

The stress assignment patterns in the dialects of Emilia-Romagna suggest that the uneven trochee is to be posited for these contemporary neo-Latin languages as well. Furthermore, in some dialects we find constraints that apply to heterosyllabic adjacent consonants within the same foot which is, by definition, an uneven trochee since the first syllable of the foot contains a coda consonant.

§1 Introduction

There has been much discussion in the recent literature as to the exact nature of the metrical foot in quantity-sensitive trochaic systems. Some argue that this type of foot consists of two moras ("moraic trochee") which may be part of a single heavy syllable

or a sequence of two light syllables. In a different approach, this foot consists of two syllables ("uneven trochee") of which the first may be heavy or light and the second syllable is light, or it consists of a single heavy syllable. The two types of feet characterize the sets of syllables in (1).[1]

1. moraic trochee: (H), (LL)
   uneven trochee: (H), (LL), (HL)

Both models predict the same footing of a heavy syllable, (H), and of a sequence of two light syllables, (LL). The controversy involves a heavy-light sequence of syllables. According to the moraic trochee analysis, these syllables are parsed as a monosyllabic (H) foot followed by a single light syllable (since Strict Binarity and rhythmic patters rule out a trimoraic (HL) foot). According to the uneven trochee analyses, these syllables together form a single foot: (HL).

We would expect that the different models would make different predictions about the metrical patterns in a language with quantity-sensitive trochaic feet. To see which model can best account for the metrical processes in such a language many scholars have examined Latin data, and specifically Latin stress patterns, since Latin is a paradigm case of a language with quantity-sensitive trochaic feet.

The Latin stress rule is basically the following: the final syllable in a polysyllabic word is not stressed; the penult is stressed if it is heavy (or in disyllabic words); otherwise the antepenult is stressed, regardless of its weight.

Within a derivational model, we assume that the final syllable is extrametrical. According to both the moraic trochee analysis and the uneven trochee analysis a heavy penult forms a (H) foot and is stressed. If the antepenultimate and penultimate syllables are both light, the two trochaic models predict a (LL) foot, but if the antepenultimate syllable is heavy and the penult is light, they make different predictions. According to the moraic trochee analysis the heavy antepenult forms a (H) foot; according to the uneven trochee analysis the heavy antepenult and the light penult form a (HL) foot.

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[1]   Most recent studies acknowledge the existence of all foot structures, although some are considered "less harmonic". For example, Prince (1992) sets up the following scale: (H), (LL) >> (HL) >> (L), refined by Piggott (1995: 317) as (H) > (LL) > (HL) > (L).

2. amīcum 'friend'   moraic/uneven trochee: a ('mi:) <kum>
    salicem 'willow'   moraic/uneven trochee: ('sa.li) <kem>
    arborem 'tree (acc)' moraic trochee: ('ar) bo <rem>
                         uneven trochee: ('ar.bo) <rem>

The Latin stress rule has been recast in OT through a series of constraints ranked in a particular order (Prince and Smolensky 1993).

3. Foot Binarity FtBin: Feet are binary at some level of analysis (μ, σ); we will use this constraint to apply to the main foot only (page 47)

    Nonfinality NonFin: No head of prosodic word is final in prosodic word; this constraint applies to both the syllable and the foot (page 52)

    Edgemost Edge('σ, R): The item φ is situated at the edge E of domain D; for Latin, φ = Prosodic head, E = right edge, and violations are calculated in terms of syllables (page 35, 57-58, 63-64)

4. amīcum

/ami:kum/	FtBin	NonFin	Edge('σ, R)
a. ('a)(mi:)(kum)	*!		**
b. (a)('mi:)(kum)			*
c. (a)('mi:.kum)		*!	*
d (a)(mi:)('kum)		*!	

5. salicem

/salikem/	FtBin	NonFin	Edge('σ, R)
a. ('sa)(li)(kem)	*!		**
b. ('sa.li)(kem)			**
c. (sa)('li)(kem)	*!		*
d. (sa.li)('kem)		*!	

6. <u>arborem</u>

/arborem/	FtBin	NonFin	Edge('σ, R)
a. ('ar)(bo)(rem)			**
b. ('ar.bo)(rem)			**
c. (ar)('bo)(rem)	*!		*
d. (ar.bo)('rem)		*!	

These constraints alone do not allow us to choose a metrical structure for <u>arborem</u>: both candidate (6a) (with a moraic trochee) and candidate (6b) (with an uneven trochee) fare equally well. Therefore, Prince and Smolensky introduce another constraint called Rhythmic Harmony which eliminates the uneven trochee parsing in candidate (6b). They argue that (HL) feet "are known to be marked or even absent in trochaic systems" and they "ban these on grounds of *rhythmic* structure, which favors length at the end of constituents" (page 59).

7. Rhythmic Harmony RhHrm: Length is favored at the end of constituents, thereby ruling out *(HL) trochaic feet (page 59)

One could argue that the RhHrm constraint is designed to rule out a structure whose existence is, in fact, not necessarily absent in trochaic systems. This is the core of the debate: whether (HL) feet are or are not found in trochaic systems such as Latin. Ruling out such structures with a constraint designed explicitly for that purpose might miss out on other observations that could be made.

If we reject the RhHrm constraint, we still have to decide between candidates (6a) and (6b). Prince and Smolensky use the NonFin constraint to refer to both the syllable and the foot. If we use the Edgemost constraint to refer to both the syllable and the foot the results are different.

8. Edgemost Edge('σ, R)
    Edgemost Edge('F, R)

We will follow the common practice of calculating violations based on lower prosodic units than the one contained within the constraint. Therefore, for Edge('σ, R), violations are calculated based on the number of moras separating φ from the right

edge of the word, and Edge('F, R), the violations are calculated based on the number of syllables separating φ from the right edge of the word. As seen in the following tableau, candidate (9b), with an uneven trochee, is the optimal output.

9. arborem

/arborem/	FtBin	NonFin	Edge('σ, R)	Edge('F, R)
a. ('ar)(bo)(rem)			*μμμ*	σσ!
b. ('ar.bo)(rem)			*μμμ*	σ
c. (ar)('bo)(rem)	*!		*μμ*	σ
d. (ar.bo)('rem)		*!		

Whether we adopt a derivational model or OT, and whether we use the RhHrm constraint or the Edgemost ('F, R) constraint, Latin stress patterns alone can not help us to determine whether the moraic trochee model or the uneven trochee model is the correct one since both make the same predictions about stress assignment. Therefore, other processes have been studied: shortening, syncope, and enclisis in Latin, vowel reduction and deletion in Late Latin, the evolution of the Gallo-Romance stress rule from the Latin one. After carefully analyzing these processes, some authors have concluded that the moraic trochee is the best way to represent Latin foot structure (Hayes 1995, Mester 1994, Prince 1992, Prince and Smolensky 1993), while others argue that the uneven trochaic model can best account for the data (Jacobs 1990, 1997, Kenstowicz 1994, Lahiri, et al. to appear).[2]

Even after examining these other processes, a clear conclusion still cannot be drawn. Are there any other probes into the structure of the Latin foot? One idea would be to examine the metrical structure of Romance words deriving from Latin words with antepenultimate stress with an eye to the plausibility of the Romance forms having evolved from an uneven trochaic system vs. a moraic trochaic system.

In this article, I provide data from the dialects of northern Italy, and specifically those of the Emilia-Romagna region (henceforth, E-R),[3] to argue that the uneven

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[2]   The bibliography on the structure of metrical feet is vast. I list here only those studies that deal specifically with the controversy over the representation of the Latin foot. See Hayes (1995) for an overview of metrical theory.

[3]   See Hajek (1997) for the main characteristics of these dialects, and Repetti (to appear) for a study of their prosodic structures.

trochee must be posited for Latin in order to account for certain metrical patterns observed in these dialects. Furthermore, these data suggest that the uneven trochee is the best way to represent the foot structure of the modern dialects as well.

This article will be organized as follows. I will first briefly describe the relevant aspects of the metrical structure of the E-R dialects and elaborate on the structure of words which derive from Latin words with antepenultimate stress. The only way to account for these forms, I say, is to posit an uneven trochaic foot for the parent language. I then provide further evidence of the uneven foot in these dialects.

§2   Metrical Structure of the Emilian and Romagnol Dialects

The E-R dialects do not have phonemic consonant length distinctions, but they do have phonemic vowel length distinctions in stressed position. A word ending in a CV syllable can have final, penultimate, or antepenultimate stress. A word ending in a CVC syllable can have final or penultimate stress. If a word ends in a CV: syllable or a superheavy (CV:C, CVCC) syllable, the final syllable is invariably stressed.[4]

10. Stress patterns in the E-R dialects

	final stress	penultimate stress	antepenultimate stress
σCV#	[par'la] 'spoken'	['gata] 'cat (f)', ['ka:ra] 'dear (f)', ['pa:rla] 's/he speaks'	[ka'rɔtula] 'carrot'
σCVC#	[ga'lɛŋ] 'chickens'	['guməd] 'elbow', ['vɛjdəv] 'widower'	
σCV:#[5]	[la'sa:] 'to leave' (dialect of Coli)		

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[4]   Unless otherwise indicated, the data are from the dialect of Gazzoli, province of Piacenza, in the Emilia part of the region.

[5]   A word-final vowel can be long or short in monosyllabic words: [maa] 'poorly', [ma] 'but'. In the dialect of Gazzoli, a word-final vowel is always short in polysyllabic words, but other dialects

σCV:C#, σCVCC#	[aˈmiːz] 'friend', [ligaˈbusk] 'ivy'		

We can best account for the pattern of stress assignment in E-R dialects by positing a quantity-sensitive trochaic foot system aligned at the right edge of the word. If the word ends in a CV: or a superheavy syllable we would expect final stress, and this is, in fact, the only pattern found. If a word ends in a CV syllable we would expect penultimate stress, and this is indeed the most common pattern, although final stress is also found; antepenultimate stress is extremely rare and is allowed only if both the penultimate and final syllables are light. For words ending in a CVC syllable, we expect final stress, which is found along with penultimate stress.

Within OT, we can account for these patterns using the constraints in (11). (Edgemost constraints are reinterpreted as Alignment constraints.)

11.   Maximal Bimoraicity $*\sigma_{\mu\mu\mu}$: Trimoraic syllables are not allowed; bimoraic syllables may be CV: or CVC [6]

  Alignment Align-R('F, PrWd): The right edge of the prosodic word must be aligned with the right edge of the main foot; violations are calculated in terms of syllables and unsyllabified consonants [7]

Let us study the exceptionless cases: words which end in a CV: or a superheavy syllable. In both cases, our constraints make the correct predictions.

12.

/σ CV:/	$*\sigma_{\mu\mu\mu}$	Align-R('F, PrWd)
('σ)(CV:)		σ!

allow long vowels in this context as well. For example, in the dialect of Coli, we find [piˈsa] 'lit', [laˈsaː] 'to leave'.

[6] Vowels are lengthened before sonorant + consonant clusters, so the long vowel in, for example, ['paːrla] 's/he speaks', is not phonemic. I will assume that this phonetic lengthening does not affect the moraic structure of the word. Hence, superheavy syllables are found word-internally.

[7] For a discussion of unsyllabified consonants in OT, see Rubach (1997).

b. (σ)('CV:)		

13.

/σ CV:C/	*σ_{μμμ}	Align-R('F, PrWd)
a. ('σ)(CV:C)	*!	σ
b. ('σ)(CV:) C		σ! C
c. (σ)('CV:C)	*!	
d. (σ)('CV:) C		C

14.

/σ CVCC/	*σ_{μμμ}	Align-R('F, PrWd)
a. ('σ)(CVCC)	*!	σ
b. ('σ)(CVC) C		σ! C
c. (σ)('CVCC)	*!	
d. (σ)('CVC) C		C

What do our constraints predict for words ending in a CV syllable? For CV-final words we have a tie.

15.

/CVCVCV/	*σ_{μμμ}	Align-R('F, PrWd)
a. ('CV) (CV.CV)		σ σ!
b. ('CV.CV) (CV)		σ!
c. (CV) ('CV) (CV)		σ!
d. (CV) ('CV.CV)		
e. (CV.CV) ('CV)		

With the constraints listed above, we cannot predict an optimal output since candidates (15d) and (15e) fare equally well. However, the Foot Binarity constraint (3) which bans main feet consisting of a single light syllable would eliminate candidate (15e), and we would predict candidate (15d) to be the output. As stated above, this pattern with penultimate stress is, in fact, the most common. Therefore, words with final stress and antepenultimate stress would have to be marked in the lexicon for stress assignment.

What do our constraints predict for words ending in a CVC syllable? The tableau in (16) predicts final stress with words ending in a CVC syllable. Therefore, words with a CVC-final syllable which have penultimate stress must be specially marked for stress assignment.[8]

16.

/σCVC/	*σ_{μμμ}	Align-R('F, PrWd)
a. ('σ)(CVC)		σ!
b. ('σ.CV) C		C!
c. (σ)('CVC)		
d. (σ)('CV) C		C!

§3 The Fate of Latin Proparoxytones in the E-R Dialects

An interesting aspect of the metrical structure of the E-R dialects is found in words which derive from (Late) Latin proparoxytones (i. e., words with antepenultimate stress). In most (though not all) E-R dialects, (Late) Latin words with antepenultimate stress have not followed the same evolution as words with penultimate stress (i. e., paroxytones). For example, the Latin paroxytone largu 'wide' underwent apocope and is pronounced [laːrg] in most E-R dialects. However, a Latin proparoxytone with a similar sequence of phonemes, caricu 'loaded', is pronounced either ['kaːrəg] or ['kaːrgə]. (And in a handful of dialects we find [kaːrg].) (See footnote 6.)

17. (a) largu 'wide' > [laːrg]
    (b) caricu 'loaded' > ['kaːrəg] or ['kaːrgə]

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[8] Words with penultimate stress ending in a CVC syllable usually have an epenthetic vowel in the final syllable. If, following Piggott (1995), we assume that epenthetic vowels are without moras in the lexical component of the grammar, they would be invisible to stress assignment processes. The stress would fall on the final moraic vowel which is in the penultimate syllable, and these words would not be exceptional.

There are two ways to account for the post-tonic vowel (represented as schwa, although its quality varies widely from dialect to dialect) in (17b). Either it is etymological and synchronically part of the lexical input, or it is epenthetic and its presence and position are predictable.

We will first examine the arguments that the post-tonic vowel is a reduced form of the etymological post-tonic vowel and is now part of the lexical representation of the word, and then study the possibility that the post-tonic vowel is epenthetic.

§4 Post-Tonic Vowel is Etymological/Lexical

The standard analysis of these words is that the post-tonic vowel is a reduced form of the etymological vowel, and synchronically it is part of the input.

According to the etymological/lexical analysis, historically, these words underwent syncope but not apocope in some dialects (caricu > ['kaːrgə]), apocope but not syncope in other dialects (caricu > ['kaːrəg]), and both apocope and syncope in yet other dialects (caricu > [kaːrg]).

18. syncope but not apocope: caricu > ['kaːrgə]
    apocope but not syncope: caricu > ['kaːrəg]
    both apocope and syncope: caricu > [kaːrg]

According to this analysis, synchronically, in some dialects the input consists of an unstressed vowel in final position, in other dialects the input consists of an unstressed vowel in penultimate position, and in yet other dialects the input does not contain an unstressed vowel.

19. input: /kargə/
    /karəg/
    /karg/

There are a number of problems with this approach. First, the dialects which have forms like ['kaːrəg] (deriving from proparoxytones) are the same dialects with forms like ['maːgər] < macru 'thin' (deriving from paroxytones) in which the post-tonic vowel is needed in order to syllabify the final cluster. Similarly, the dialects which

have forms like ['kaːrgə] are the same dialects which have forms like ['maːgrə]. If we adopt the etymological/lexical analysis, we would have to assume that in some varieties <u>caricu</u> underwent apocope but not syncope resulting in ['kaːrəg], and coincidentially epenthesis results in forms like ['maːgər], while in other varieties <u>caricu</u> underwent syncope but not apocope resulting in ['kaːrgə], and coincidentially epenthesis results in forms like ['maːgrə]. In other words, these forms are the result of unrelated processes.

20. ['kaːrəg]/['maːgər]
    ['kaːrgə]/['maːgrə]

Second, there are some E-R dialects that have words which appear to have undergone syncope and other words which appear to have undergone apocope. For example, in the dialect of Coli (province of Piacenza, in the Emilia part of the region) we find ['kaːrgə] (which appears to have undergone syncope) as well as ['sejgər] < <u>sēcale</u> 'rye' (which appears to have undergone apocope). Here there is variability in the choice between syncope and apocope.

21. Coli (province of Piacenza): ['kaːrgə] < <u>caricu</u> (syncope)
    ['sejgər] < <u>sēcale</u> (apocope)

Third, the claim that some words underwent syncope but not apocope is contradicted by other data in these dialects: loss of unstressed final vowels is productive. (Word-final unstressed vowels are permitted if the vowel is a morpheme or is epenthetic.) For example, neologisms entering the dialects from standard Italian generally undergo loss of the final vowel: [miliˈtaːr] < standard Italian <u>militare</u> 'military' (lack of voicing of the intervocalic stop indicates it is a relatively recent introduction). There is no reason to suppose that apocope is blocked in a category of words whose etymological origin is no longer accessible to a native speaker. In other words, there is no reason why the final (lexical) vowel of ['kaːrgə] is not apocopated.

22. [miliˈtaːr] < standard Italian <u>militare</u> 'military'

Fourth, all three forms in (18) are often attested in very closely related dialects, such as the three in (23) in the province of Reggio Emilia (in the Emilia part of the

region) (Malagòli 1934). Did these very closely related dialects undergo such different historical processes and now have different inputs?

23.	'wild'	'tasteless'	'stomach'
Castelnovo	[sal'va:dge̲]	['tsevde̲]	['stomge̲]
Valèstra	[saj'va:de̲g]	[das'seve̲d]	['stome̲g]
Carpineti	[saj'va:dg]	[tsevd]	[stomg]

Finally, in those dialects with a form like [ka:rəg] we would expect a feminine form *['ka:rəga]. However, this is not attested. Instead, we find ['ka:rga].

24. ['ka:rga], not *['ka:rəga]

We have seen that there are a number problems with the etymological/lexical analysis of the post-tonic vowel. Let us now examine the possibility that the post-tonic vowel is epenthetic and see if this analysis fares any better.

§5 Post-Tonic Vowel is Epenthetic

The epenthetic nature of the post-tonic vowel is supported by two facts. First, as noted by Piagnoli (1904: 48), the quality of the post-tonic vowel in these words is identical to the quality of the epenthetic vowel. Second, as seen in (20), the position of the post-tonic vowel in words deriving from proparoxytones is the same as the position of the epenthetic vowel needed to syllabify final clusters in words deriving from paroxytones. In other words, dialects with ['ka:rgə] also have ['ma:grə], and languages with ['ka:rəg] also have ['ma:gər]. Furthermore, if we assume that the post-tonic vowel is epenthetic, the problems identified in §4 with the eytmological/lexical analysis disappear. These cases will be dealt with in more detail below.

Given the fact that the post-tonic vowel in word deriving from proparoxytones is of the same quality as the epenthetic vowel and that its position is entirely predictable, we can assume that the post-tonic vowel found in words which derive from (Late) Latin proparoxytones is epenthetic, and not etymological/lexical.

We now have to answer the question of why an epenthetic vowel is needed, since there is not always a phonetic condition which requires epenthesis. For example, why is an epenthetic vowel inserted in ['kaːrəg]/['kaːrgə], since [kaːrg] would be a perfectly acceptable word? If we accept the proposal that the post-tonic vowel is epenthetic, then we can deduce that the lexical input is monosyllabic, /karg/, but the output is bisyllabic. Why would this be? I would like to suggest that the answer lies in the metrical structure of the original Latin form.

As we saw in §1 both the uneven trochee model and the moraic trochee model result in the same foot structure for words with a light antepenultimate syllable (salicem), but a different foot structure for words with a heavy antepenult (arborem).

25. moraic trochee: ('sa.li) kem   ('ar) bo.rem

    uneven trochee: ('sa.li) kem   ('ar.bo) rem

Let us now examine the possibility that the Latin form consisted of an uneven trochee to see if we can account for the E-R facts. In this case, Latin proparoxytones consisted of a disyllabic foot followed by an extra syllable: ('σ σ$_L$) σ. Though both apocope and syncope have eroded the segmental structure, the template of the disyllabic trochaic foot is preserved in these words: ('σ σ$_L$). These E-R words are the result of a high ranking metrical faithfulness constraint whereby, historically, the output remained faithful to the metrical structure of the input (i. e., a disyllable trochaic foot), although not necessarily to its segmental structure. The template survived in these dialects as part of the lexical input. Synchronically, the lexical vowel is associated with the first syllable of the template, and the second syllable of the template is associated with an epenthetic vowel. As a result, words deriving from Latin proparoxytones all have a disyllabic trochaic foot.

If we assume that the Latin foot was a moraic trochee, we might expect words with a light antepenult, such as sálice, to undergo epenthesis (since they originally had a disyllabic foot), but not words with a heavy antepenult, such as arborem (since they originally had a monosyllabic foot). However, this is not what we find. Both forms undergo the same metrical changes.

§6   *Diachronic Analysis*

If we accept the analysis that these E-R words have a monosyllabic input and a

disyllabic output because the structure of the original foot was disyllabic, then we must account for the survival of the template diachronically.

Once stress assignment was no longer predictable, presumably once Latin vowel length distinctions were lost, stress became a lexical feature. For example, the words /amiko/ (< amīcu) and /kariko/ (< caricu), have a similar phonemic structure, but a different metrical structure: the former has stress on the penult and the latter on the antepenult. (Romance stress systems are notoriously conservative.) We can assume that one of these two stress patterns was 'predictable' and one was lexically marked. Since penultimate stress appears to be (have been) the productive stress pattern, and antepenultimate stress the more marked one, we will assume that /kariko/ (which became /karigo/ after intervocalic voicing of obstruents) was marked in the lexicon for stress assignment and /amiko/ had predictable stress. The exceptionally stressed antepenult is indicated by including foot structure in the lexical representation of the word.

26. ('σ   σ)

    Λ   Λ

  ka   ri   go

Since historical grammarians are not in agreement as to whether apocope preceded syncope or syncope preceded apocope, let us first examine the possibility that syncope preceded apocope. In this case, /karigo/ became /kargo/, which is identical in structure to /largo/. There is no reason that /kargo/ should have then developed into ['kaːrəg]/['kaːrgə], while /largo/ became [laːrg]. Since there is no reason that a form such as /kargo/ should have undergone different changes from a form such as /largo/ we can assume that syncope could not have preceded apocope.

Let us now examine the evolution of proparoxytones assuming that apocope preceded syncope. To account for final vowel loss, we can posit a constraint prohibiting the word from ending in an unstressed vowel.

27. *V#: The prosodic word must not end in an unstressed vowel

In this case, the input /karigo/ results in the output /karig/. In order to assure that stress is kept on the first syllable and is not shifted to the heavy final syllable, we can assume that the original metrical template is retained. The survival of the bisyllabic

template is the result of a high ranking metrical faithfulness constraint according to which the output remains faithful to the metrical structure of the input.

28.   Metrical Faithfulness Faith(Met): The output must be faithful to the metrical structure of the input

As a result of the high ranking constraints (27) and (28), the structure in (26) changed. Its new form is given in (29).

29.('σ   σ)
    /\   /\
    ka   ri   g

The structure in (29) contains information that is redundant: it has both a disyllabic template and a post-tonic vowel. The presence of the disyllabic template requires a post-tonic vowel, and the presence of a post-tonic vowel implies a disyllabic structure. Therefore, the structure in (29) can be simplified by eliminating the unstressed vowel, but retaining the disyllabic template.[9]

30. /karg/, ('σ σ)

This, I will argue, is the structure of the input in the E-R dialects. The first syllable of the template is associated with the lexical vowel, and the second syllable is filled with an epenthetic vowel. In the next section I will discuss the factors determining the position of the epenthetic vowel.

Before we move on to the synchronic analysis, it should be noted that in some E-R dialects the structure in (30) was further simplified by eliminating the disyllabic template. In these dialects, the input form, /karg/ does not have a template associated with it, so the output form is monosyllabic [ka:rg].

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[9]   The structure in (29) is found in other northern Italian dialects in which words deriving from Latin proparoxytones have an unstressed vowel in penultimate position with none of the problems listed in §4 for the E-R dialects. See Miglio (1997) for arguments to this effect for the dialect of Mantua in the Lombardy region.

§7 Synchronic Analysis

Synchronically, most E-R dialects have the input form in (30). In order to satisfy the metrical requirements of the input, an extra syllable is needed. This extra syllable is supplied by epenthesis. The choice between ['kaːrəg] and ['kaːrgə] is made on the basis of the relative ranking of two constraints in the dialect: (27) *V# and (11) Align-R('F, PrWd). As we saw above, the presence of the *V# constraint in the E-R dialects is motivated by the historical process of apocope and the synchronic generalization that words do not end in an unstressed vowel (except for morphemes). The Align-R('F, PrWd) constraint says that the main foot must be aligned with the end of the word, and its presence is motivated by the stress patterns exemplified in §2.

Those dialects that have forms like ['kaːrəg] have a higher ranking *V# constraint, and those dialects that have forms like ['kaːrgə] have a higher ranking Align-R('F, PrWd) constraint.

31.

/karg/, ('σσ)	Faith(Met)	*V#	Align-R('F, PrWd)
a. ('σ) /|\ kar g	*!		C
b. ('σ σ) /\ /\ ka re̱ g			C
c. ('σ σ) /|\ /\ kar ge̱		*!	

32.

/karg/, ('σσ)	Faith(Met)	Align-R('F, PrWd)	*V#
a. ('σ) /|\ kar g	*!	C	
b. ('σ σ) /\ /\ ka re̱ g		C!	

c. ('σ σ)			*
/l\ /\			
kar ge			

By positing the input structure in (30), we can also provide solutions to the problems with the etymological/lexical analysis discussed in §4. First, we find the parallel structures in (20) because the post-tonic vowel is all cases is epenthetic. We expect that the position of the epenthetic vowel would be the same for words deriving from proparoxytones as well as words deriving from paroxytones. Second, in dialects like Coli (21), the position of the post-tonic vowel varies from word to word because of phontactic constraints affecting the placement of the epenthetic vowel. These constraints apply not only to words deriving from proparoxytones, but to all words: ['kaːrgə]/['laːrgə] 'loaded'/'wide' and ['sejgər]/['nejgər] 'rye'/'black'; the first word in each pair derives from a proparoxytone, and the second a paroxytone. (See §8.) Third, words do not generally end in an unstressed vowel (unless that vowel is a morpheme or is epenthetic). If we assume that the final vowel in ['kaːrgə] is epenthetic (and not lexical) this class of words does not present an exception to that generalization. Fourth, the forms in (23) may have a different output structure, but they have very similar inputs; what varies from dialect to dialect is the presence or absence of the template, and the constraint ranking which determines the position of the post-tonic (i. e., epenthetic) vowel. Finally, we do not find forms like *['karəga] (24) because the /ə/ is not part of the input and is not needed to satisfy any metrical requirements.

One might ask if the prespecified prosodic structure consists of a disyllabic trochaic foot ('σ σ), or simply a disyllabic minimum requirement: σ σ. Evidence that the template is a disyllabic **foot** comes from words with a disyllabic input like /bazilg/ < basilicu 'basil'. If the requirement were simply that the output be disyllabic (with no reference to foot structure), we would expect an output [baˈziːlg]. This word is disyllabic and has stress (as predicted) on the superheavy final syllable. However, this is not the form found in most E-R dialects. It is found only in those dialects with forms like [kaːrg] in which, I have argued, the template is no longer part of the input. Nor do we find a form like ['bazilg] (because penultimate stress is not permitted in words ending in two consonants), or ['bazilag]/['bazilgə] (because antepenultimate stress is permitted only if the penultimate and final syllables are light). The actual form is [baˈziːləg]/[baˈziːlgə] proving that the output must contain a disyllabic foot and not simply be a disyllabic word.

We have seen that E-R words deriving from Latin proparoxytones do not contain a post-tonic vowel as part of the input, but do have a disyllabic trochaic foot template as part of the input. This means that the output must contain a stressed syllable followed by an unstressed one, which is created through the process of epenthesis. The origin of this template is to be found in the Latin disyllabic trochaic foot which was an uneven trochee, not a moraic trochee. This analysis posits the same uneven trochaic structure for the E-R dialects. For example, in (32c) the output contains an uneven trochee. In the next section we will see that there is independent evidence that these dialects have an uneven trochee. We find various phonological processes in the E-R dialects which apply to heterosyllabic adjacent consonants within the same foot. Since the first syllable of the foot constains a coda consonant, that foot is an uneven trochee.

§8 Uneven Trochees in the Dialect of Coli

It has been shown that there are both historical and synchronic phonological processes in Romance which apply within the domain of the uneven trochaic foot (Bullock 1995, to appear, Jacobs 1990, Lahiri, et al. to appear). We will now see that we can add a number of phonological processes in the E-R dialects to that list.

In the dialect of Coli (see Repetti 1995) we find forms such as ['ka:rgə], suggesting the following ordering of constraints: Align-R('F, PrWd) >> *V#. However, the epenthetic vowel is in penultimate position in some cases: ['sejgər], ['re:dən] 'reins', suggesting the opposite ordering of constraints: *V# >> Align-R('F, PrWd). The position of the epenthetic vowel (in final or penultimate position) is determined by the sonority contour of the consonant cluster. If the cluster has falling sonority, the two consonants may be adjacent, and the epenthetic vowel is inserted at the end of the word. If the cluster has rising sonority, the two consonants may not be adjacent, and the epenthetic vowel is inserted between them.

Consider the data in (33).[10]

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[10] The words in (33b)-(33c) derive from Latin proparoxytones and, therefore, would normally have a metrical template as part of the input. However, a post-tonic vowel is required for independent reasons: the final cluster has rising sonority and is, therefore, unacceptable. This makes the presence of the template redundant. I will, therefore, assume that it is no longer present.

33. Coli

a. /karg/ > ['ka:rgə]

b. /sejgr/ > ['sejgər] (not *['sejgrə])

c. /re:dn/ > ['re:dən] (not *[re:dnə])

d. /grã:nd/ > [grã:nd] 'big'

e. /dmɑŋ/ > [əd'mɑŋ] 'tomorrow' (not *[də'mɑŋ])

The forms in (33b) show that an internal cluster is not allowed: *['sej.grə], even though /gr/ is an acceptable word-initial onset clusters (33d). The forms in (33c) also show that a structure with an internal onset cluster is not allowed: *[re:.dnə], but this would not be expected on independent grounds since /d/ + nasal is not an acceptable word-initial onset cluster (33e). Furthermore, the internal clusters in (33b) and (33c) cannot be syllabified heterosyllabically: *['sejg.rə], *[re:d.nə], because of a constraint on the sonority contour of a pair of heterosyllabic adjacent consonants: the first consonant must be more sonorous than the following consonant. In other words, the first consonant of a heterosyllabic cluster (a coda) must not be less sonorous than the following consonant (an onset).

34. Sonority Contour (SonCon): $*C_1 . C_2$ iff C_1 is less sonorous than C_2

This constraint on the sonority contour of adjacent consonants falls out from general principles of syllabification which predict that an intervocalic consonant cluster of rising sonority will form an onset cluster while an intervocalic consonant cluster of falling sonority will be heterosyllabic. (Other constraints would further define the nature of acceptable onset clusters, for example, /gr/ is acceptable word-initially, but /dm/ is not.)

If we assume that the Align-R('F, PrWd) constraint is ranked higher than the *V# constraint in order to account for (33a), then we must rank the SonCon constraint higher than both in order to account for the forms in (33b) and (33c).

35.

/re:dn/	SonCon	Align-R('F, PrWd)	*V#
a. ('re:.də) n		ℭ	
b. ('re:) (dən)		σ!	
c. ('re:d.nə)	*!		*
d. ('re:d) (nə)	*! .	σ	*

The question now arises as to why the SonCon constraint does not apply to the form in (33e): [əd.'maŋ], resulting in an output such as [də'maŋ]. In the tableau in (36), we see that this is precisely what the constraints, as formulated above, would predict.

36.

/dmaŋ/	SonCon	Align-R('F, PrWd)	*V#
a. (əd) ('maŋ)	*!		
b. (də) ('maŋ)			

We need to refine the SonCon constraint so that it applies to forms like *['re:d.nə], eliminating them from the competition, but not to foms like [əd.'maŋ]. We can do this by limiting the domain of application of this constraint to heterosyllabic consonants within the same trochaic foot. In this way, the SonCon constraint does not apply if the two consonants are in different feet.

37. SonCon (revised): *(VC$_1$. C$_2$V) iff C$_1$ is less sonorous than C$_2$

This new formulation of the SonCon constraint does not apply to either of the candidate outputs in (36), repeated in (38): in (a) the two consonants are in different feet, and in (b) the two consonants are not adjacent.

38.

/dmaŋ/	SonCon (revised)	Align-R('F, PrWd)	*V#
a. (əd) ('maŋ)			
b. (də) ('maŋ)			

However, our tableau still does not give us a result: candidate (38b) must be eliminated from the competition. I would like to suggest another constraint is at play, one which bars monosyllabic feet consisting of a light syllable. (See Kenstowicz (1994) for a discussion of unmatched "orphan" syllables.) This is the more general version of FtBin constraint as formulated in (3) which bars monomoraic stressed feet. Since the constraint formulated in (39) is the more general one, we can assume that it is ranked lower than the more specific one. (This type of ranking in which a constraint

applies first to a more specific domain and then to a more general one is well attested in the literature.)

39.   FtBin (general): Feet are binary at some level of analysis (μ, σ); this version of the constraint applies to all feet

The FtBin (general) constraint eliminates candidate (38b), and the correct output (38a) is chosen.

The SonCon (revised) constraint (37) and the FtBin (general) constraint (39) do not affect the outcome of /reːdn/ (35). SonCon eliminates (35c) since the /dn/ cluster is contained within the same foot, and the alignment constraint eliminates (35b) and (35d). Candidate (35a) ['(reː.də)n] is selected, despite the fact that it to has an alignment violation.

There is also evidence that SonCon refers to the trochaic foot, and not just post-tonic clusters. We saw above that /dmɑŋ/ results in the output [əd'mɑŋ/. However, /dmɑŋ/ + /ma'tɛ/ 'morning' results in the output [dəma'tɛ], not *[ədma't ɛ].

40.   /dmɑŋ/ > [əd'mɑŋ]
       /dmɑŋ/ + /ma'tɛ/ > [dəma'tɛ] (not *[ədma'tɛ])

In (40) we see *[(əd.ma)('tɛ)] is not selected since the /dm/ cluster is in the same foot, incurring a fatal violation of SonCon. However, the /dm/ cluster is not in the same foot in [(əd)('mɑŋ)].

Note, furthermore, the alternation in (41).

41.   /nvuːd/ > [ən'vuːd] 'nephew, grandson'
       /nvuːd/ + /ɛ/ > [ənvu'dɛ] '(diminutive)'

In (41) we find both [(ən)('vuːd)] and [(ən.vu)('dɛ)] since neither violates SonCon.

There are cases, however, in which the output does violate SonCon. For example, we find the form ['ʒuːvn] 'young (mas)' (and not *[ʒuːvnə] because of SonCon), but we also find [ʒuːvna] 'young (fem)' which does violate SonCon. This form is better than the best competitor, *[ʒuːvəna], because the latter has a violation of higher ranking DEP while the former does not.

42. DEP: Every segment in the output has an input correspondent

43.

/ʒuːvn + a/	DEP	SonCon (revised)
a. ('ʒuːv.na)		*
b. ('ʒuː.va̠) (na)	*!	

What we get for free from this analysis is that the revised SonCon constraint forces an analysis of the structure of trochaic feet: they must be uneven (and not moraic) since the first syllable of the foot ends in a consonant, i. e., it is heavy. The uneven trochee permits (HL) feet, while the moraic trochee does not. If, instead, we assume that trochaic feet are moraic trochees, we could no longer formulate the SonCon constraint to apply within a particular phonological domain. For example, there would be no explanation for the presence of initial epenthesis in [ə̠d'maŋ], but not in *[ə̠dma'tɛ], as opposed to [ə̠n'vuːd] and [ə̠nvu'dɛ].

§9 Uneven Trochees in the Dialect of Vediceto

Vediceto is a town approximately 10 km from Coli. The dialects of these two towns are, for all intents and purposes, identical, except for one significant difference. While non-homorganic nasal clusters are permitted in the dialect of Coli: ['gɔmdə̠] 'elbow', ['maːngə̠] 'handle', ['stomgə̠] 'stomach', such clusters are not allowed in the dialect of Vediceto: ['gumə̠d], ['manə̠g], ['stumə̠g]. These data suggest that there is a constraint banning non-homorganic clusters in Vediceto.

44. Nasal Homorganicity (*NαCβ): Non-homorganic nasal clusters are not permitted

However, we do find non-homorganic nasal clusters pre-tonically: [ə̠m.'te] 'you (pl) put', [ə̠m.'dy.ra] 'thrashing'. As with the SonCon constraint, it appears that the *NαCβ constraint applies within the domain of the foot, the uneven trochee. It applies to forms like *['gum.də̠], eliminating them from the competition, but not to forms like [ə̠m.'dy.ra].

45. Revised <u>Nasal Homorganicity</u> *(VN$_\alpha$. C$_\beta$V): Non-homorganic nasal clusters are not permitted in the same foot

§10   Conclusions

The data from the E-R dialects provide support for the hypothesis that Latin had an uneven trochee. Latin's disyllabic (uneven) trochaic foot survived in these dialects as part of the input which is synchronically satisfied by epenthesizing a vowel post-tonically. It is only by positing such metrical structure as part of the input that we can account for epenthesis in words deriving from proparoxytones. There is no other constraint or process which can account for the presence of the post-tonic vowel in these words.

These facts also show that the input form of some words can contain information not only about the string of phonemes and the location of the stressed syllable, but about metrical structure as well, for example, whether the foot is mandatorily disyllabic. And these metrical structures can be traced back to earlier stages of the language.

The stress assignment patterns in the E-R dialects suggest that the uneven trochee is present in the contemporary neo-Latin languages as well. Furthermore, the Coli and Vediceto facts provide independent evidence of the existence of the uneven trochee: constraints in these dialects apply to heterosyllabic consonants in the same foot. The best way to describe this domain is as a trochaic foot which, by definition, is uneven since the first syllable contains a coda consonant.

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