

# **AGREEMENT. THE ROMANCE PERSPECTIVE**

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## **Introduction**

Romance languages have played a substantial role in the development of the theory of agreement as we know it today. In this chapter, I limit myself to the description of some of the milestones in the theory of agreement that have been established based on Romance data.

For this chapter, I selected only some of the agreement facts that have inspired contemporary syntactic theory. Starting from Phrase Structure Rules, which has been the basis for computational agreement systems, going through the Government and Binding period, where Romance data were at the core of the theory, to end with Minimalism, Romance data have offered food for thought and challenges for everyone trying to draw a theory of agreement.

This chapter is organized as follows. In Section 1, the very first PSRs on agreement will be presented; Section 2 is dedicated to participial agreement and the birth of spec-head agreement; Section 3 is dedicated to agreement in the Minimalist Program: participial agreement revised, unaccusative agreement as the basis of long-distance agreement, agreement under c-command, and ultimately Agree. Section 4 switches to morphological agreement, and the tests used to distinguish between agreement morphemes and pronominals, based on subject clitics. Section 5 concludes the chapter.

The chapter is far from comprehensive: rather, it aims at offering an idea of how Romance languages have contributed to the development of syntactic theory in the last fifty years.

## **1. Phrase Structure Rules for agreement**

The early phase of generative grammar, the so-called transformational grammar, was characterized by a computational approach to language data. Finite-state automata were proven to be unable to generate natural language grammars also because of agreement facts: agreement between subject and verb is a problematic dependency for a finite-state grammar, as it can nest at an arbitrary depth. No finite-state grammar can keep track of such a dependency: in order to generate agreement dependencies, a grammar must be at least context-free (Miller & Chomsky 1963). The Chomsky Hierarchy (Chomsky 1956) was therefore based on agreement considerations, among other things. Since that time, agreement has been at the core of the development of syntactic theory. It is nowadays not just considered a relation, but the engine of syntax.

Romance languages have played a significant role in the development of agreement, starting from the early days of generative grammar.

Each affix is specified for some feature, like Gender. These features vary depending on the language and the lexical item hosting them. The affix will result in different morphological shapes, even if its value is constant: a masculine singular affix on a noun can have a different morpho-phonological realization than the same affix on a determiner.

(1) R56 NP → Article Noun (Adjective)  
R57 Noun → Noun Stem Affix  
R58 Affix → Gender (plural)  
R59 Noun Stem → Noun Stem Fem, Noun Stem Masc  
R60 Gender → { M in Noun Stem Masc \_\_\_\_  
F }

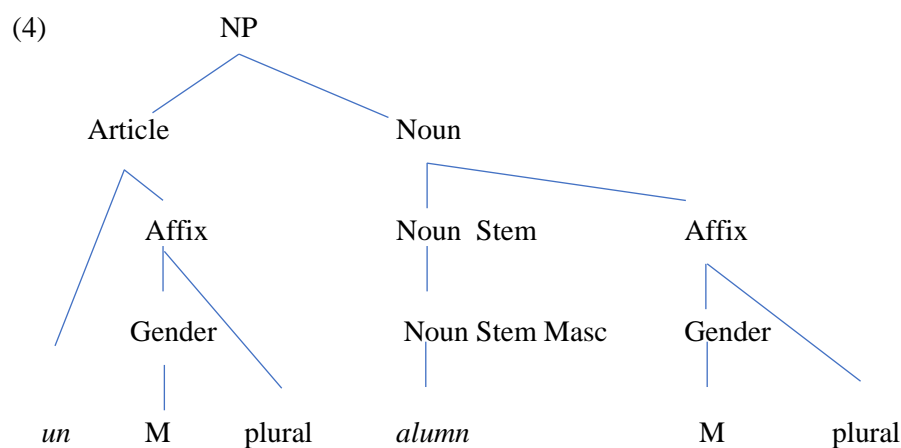
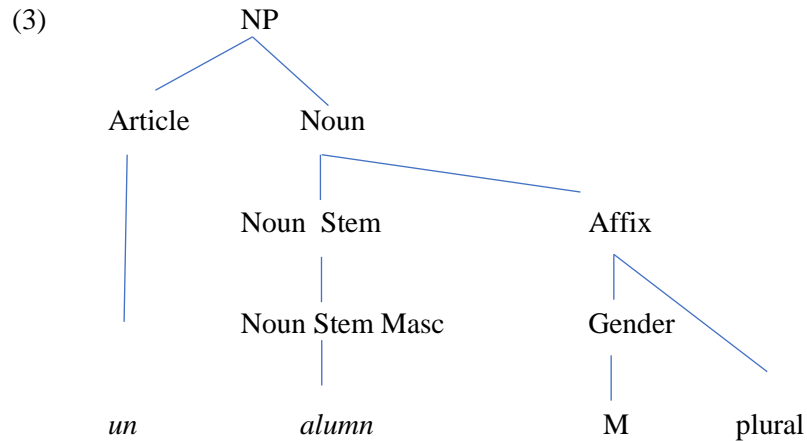
(Postal 1966:46)

(2) T<sub>agreement</sub>

Article,	Noun Stem,	Affix,	(Adjective)
1	2	3	4

This transformation takes an affix of a Noun and attaches it to the Article and to the Adjective (if there is one). Note that attaching an affix to several elements can be decomposed into two operations: first, make a copy of the Affix; then, attach it to the relevant elements. This two-step concept of agreement is not made explicit in Postal (1966), but it will be made so soon after, by Chomsky (1965).

The agreement transformation rule is put forward based on Spanish data. The tree diagrams of transformation representing agreement within the Spanish NP *undoes alumnos* (some pupils, masculine plural), are reproduced in (3) and (4):



Chomsky (1965) refers to Postal's analysis in his *Aspects*, proposing a transformational mechanism for agreement, assigning a specification to every feature, according to the specification of the most prominent element.

Chomsky (1965:175) states, for instance, that a grammar must contain transformational rules that assign to an article all the feature specification of the noun it modifies. The copy mechanism is made more explicit in Chomsky's version of the agreement transformation. The rule he proposes is formulated like a phonological rule, and reads as follows:

(5)

$$\text{"Article"} \rightarrow \left[ \begin{array}{l} \alpha \text{ Gender} \\ \beta \text{ Number} \\ \gamma \text{ Case} \end{array} \right] / \_ \dots \left[ \begin{array}{l} + \text{N} \\ \alpha \text{ Gender} \\ \beta \text{ Number} \\ \gamma \text{ Case} \end{array} \right]$$

where Article ... N is an NP"

(Chomsky 1965:175)

Observe that English, the language on which Chomsky based his theories in the first years, does not express gender morphologically. The reason why gender is included in the transformation is, arguably, the fact that Postal had developed his rules based on Romance.

## 2. Spec-head agreement

The Government and Binding era that followed the publication of Chomsky's (1981) *Introduction to Government and Binding* (GB henceforth), introduced several changes in the theory of agreement. There is a ponderous change in the whole understanding of grammar that we cannot reproduce here. As far as agreement is concerned, one of the key concepts underlying the new system is the *Mirror Principle*, formulated by Baker (1985), according to which morphology reflects syntax. The definition is in (6):

### (6) *The Mirror Principle*

Morphological derivations must directly reflect syntactic derivations (and vice versa)

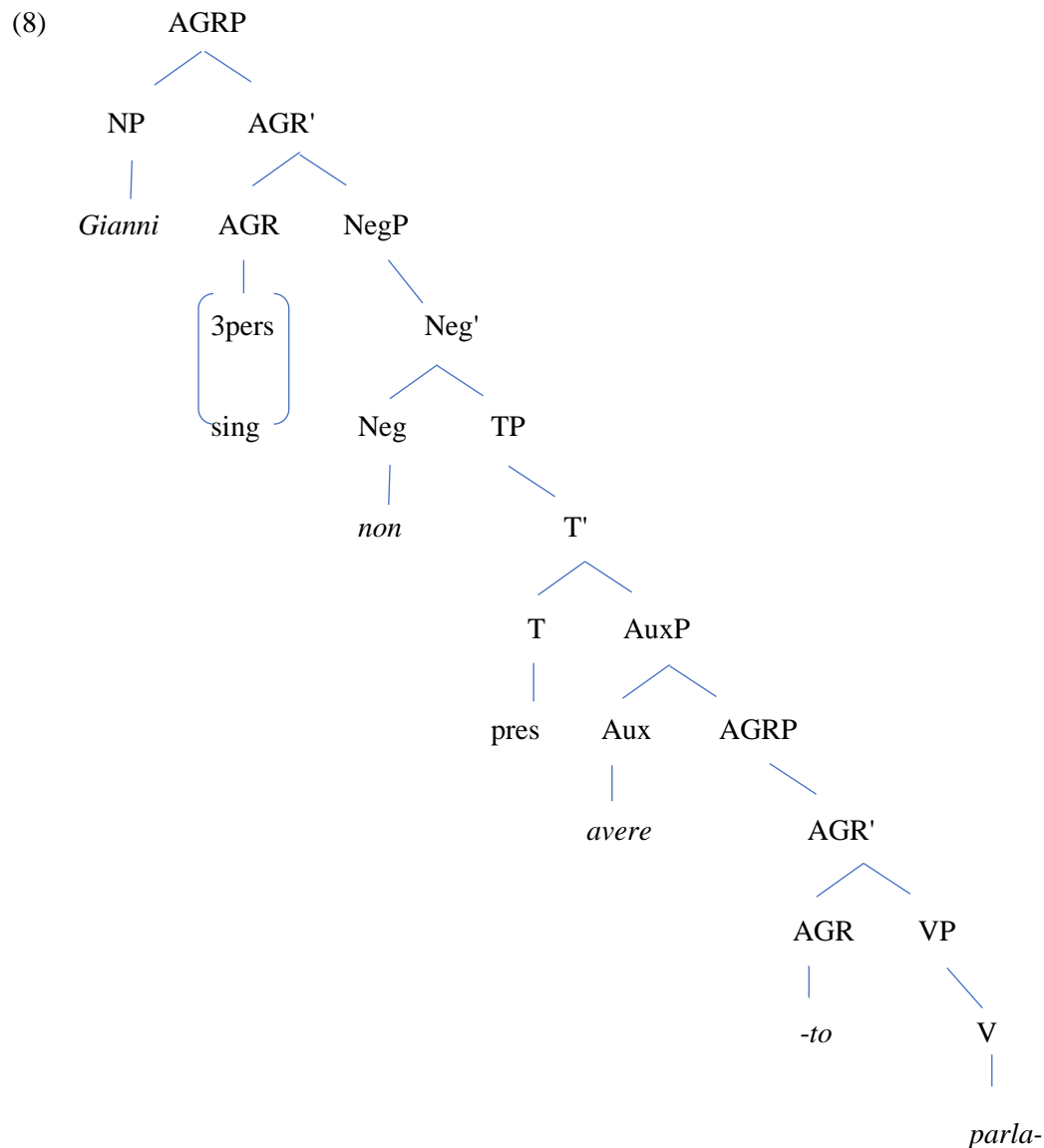
(Baker 1985: 376)

Another important ingredient for the theory of agreement in GB is provided by Emonds (1978). Emonds observes that the different position of V with respect to negation in English and French can be given a principled account in terms of verb movement. This observation is brought forward by Pollock (1989), who observes that there is more than one position to which the verb can move, in French. This, together with the considerations about the hybrid categorial status of INFL, which encoded both verbal inflection and nominal inflection and was therefore an exceptional mixed category, brought to the postulation of an AGR head onto which the verb would move in Romance.

The idea of verb movement and the existence of different heads to which the verb can move is synthesized in Belletti's (1990) *Generalized Verb Movement*. Belletti performs an accurate comparative study of verbal morphology as well as syntax in Romance, concluding that finite verbs get assembled at syntax through head movement of the verb through dedicated (inflectional) projections, and according to the Mirror Principle in (6). The proposed structure for sentences like (7) is, according to Belletti, in (8).

- (7) Gianni non h-a parlat-o  
Gianni neg has-3SG talked-SG.M  
'Gianni did not speak'

(adapted from Belletti 1990)



The verb head-moves successive-cyclically to incorporate morphemes on every functional head, acquiring the necessary inflection. Belletti proposes a more elaborate structure than Pollock, introducing two AGR heads: a higher one, which is the head that contains subject agreement inflection, and a lower one, which contains participial agreement inflection.

This model is adopted in early Minimalism, given its strong descriptive adequacy. In her model, Belletti tacitly assumes movement to the specifier of the higher Agr projection for nominative assignment. This assumption has solid roots in Kayne's proposal for object agreement, which we review hereafter, and from which the whole spec-head agreement theory stemmed.

## 2.1. Agreement in a spec-head configuration

We have just seen that, according to Belletti, Nominative is assigned in the spec, AGR position. The reasons for these assumption stem from different concepts developed more or less during the same period within the GB framework.

A spec-head relation is obtained under Government. A head governs whatever falls under the maximal projection that it heads, and in particular, a head governs its specifier. That the spec-head relation was important was a shared notion in the early '90s. However, the assumption that this would be the only way for two syntactic items to agree was only developed after the publication of a key paper by Kayne, in 1989. This article is the milestone of agreement in the GB framework, and is entirely based on Romance data. Kayne's (1989) work examines participial agreement in French and Italian. He considers the following agreement alternation:

(9) a. Paul a reprint les chaises  
Paul has painted.SG.M the chairs.PL.F  
'Paul has repainted the chairs'

b. \*Paul a repeintes les chaises  
Paul has painted.SG.F the chairs.PL.F

(10) Paul les a repeintes  
Paul them.PL.F has painted.PL.F  
'Paul repainted them'

(Kayne 2000: 25)

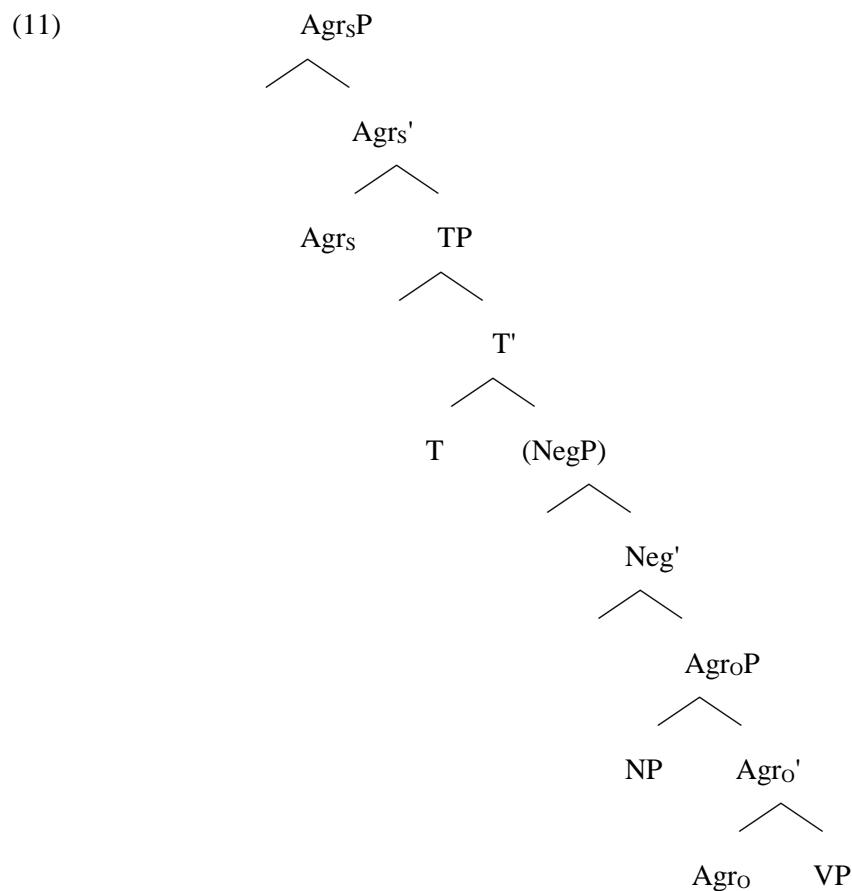
The agreement alternation we see in (9)-(10) is quite straightforward: whenever the DP object is postverbal, it will not agree with the past participle. In fact, this agreement is ungrammatical, as shown in (9b). If the object has moved and appears somewhere before the participle, it will agree with it. Kayne concludes that there is a correlation between movement and agreement. This concept will be the base for agreement theory until very recently.

Kayne proposes that agreement stems from the movement of the object into the specifier of an AGR projection. The participle moves to this AGR head in languages like French and Italian (but not in

Spanish, where the participle is incompatible with AGR), and it enters a spec-head relation with the object, yielding agreement between the two.

Kayne only discusses the lower AGR projection, the one that connects with the object. The idea that a specific syntactic configuration would be the only configuration in which agreement could take place was very appealing for the GB framework, and therefore spec-head was immediately extended to all kinds of sentential agreement (as well as intra-DP agreement).

The general structure adopted for agreement, until early minimalism, is the following:



The higher AGR and the lower AGR have become Agr<sub>s</sub> and Agr<sub>o</sub> respectively.

While Kayne capitalized on the clitic nature of the moved object to justify obligatory movement out of the VP for the object, movement for the subject was linked to the Extended Projection Principle, which was formulated in many ways, but which was basically a requirement for the Spec, IP to be filled (Williams 1980, Chomsky 1981, Chomsky 1982, Rothstein 1983, Lasnik 2001 and many others). If Spec, IP was to be filled independently, and if the I head had to be split into Infl proper and AGR, movement of the subject through AGR was an obligatory requirement. This requirement was linked to

finite verb agreement with the subject, as well as to Nominative case assignment (the I head governs the NP subject and assigns Nominative case to it).

Last, while Nominative was assigned under government and in a spec-head configuration, Accusative was still assigned to the complement of the V head (still under government, but not in a Spec position). In order to unify Case assignment, Chomsky (1993) proposes that also Accusative is assigned in a spec-head configuration, and that the object always moves to Spec, AGR<sub>o</sub> to get Accusative case. Kayne's spec-head agreement, based on Romance data, soon became the only way to represent agreement in GB. Overt agreement started to be separated from movement through AGR, in a way that we will discuss in the next section.

### 3. Agreement in the Minimalist Program

#### 3.1. Participial agreement revisited

The spec-head agreement idea mainly stemmed from Kayne's observation that the object agrees with the participle when moved, based on data from French and Italian, as we saw. When the object stays *in situ* there will be no agreement with the participle. The advent of the Minimalist Program (MP) brought movement and agreement apart: they are not one parasitic on the other, and while Case and agreement are still strictly connected, movement and agreement are not. We have also seen that movement of the object to spec, AGR<sub>o</sub> for Case reasons did not necessarily trigger agreement.

D'Alessandro & Roberts (2008) propose to capture Kayne's intuition by considering domains within which agreement can apply rather than movement of the agreeing elements. In this section, their analysis of participial agreement in Italian is reproduced.

Let us start by considering that past-participle agreement in Standard Italian is associated with promoted internal arguments, like for instance:

- internal arguments that are moved or linked to subject position: unaccusatives, like in (12a); passives, like in (12b); impersonal-passives, like in (12c);
- reflexive constructions (argued to also involve promotion of the "antecedent" of the reflexive [Kayne (1989)]), like in (13);
- object clitics, like in (14).

(12) Italian (D'Alessandro & Roberts 2008: 478)

- |                           |            |      |              |             |
|---------------------------|------------|------|--------------|-------------|
| a. L-e                    | ragazz-e   | sono | arrivat-e.   |             |
| the- PL.F                 | girls-PL.F | are  | arrived-PL.F |             |
| 'The girls have arrived.' |            |      |              |             |
| b. Le                     | ragazz-e   | sono | stat-e       | arrestat-e. |



the- PL.F      girls-PL.F      are      been-PL.F      arrested-PL.F

‘The girls have been arrested.’

c. Si      sono      vist-e      l-e      ragazze.

SI      are      seen-PL.F      the- PL.F      girls- PL.F

‘We have seen the girls/the girls have been seen.’

(13) L-e      ragazze      si      sono      guardat-e      allo      specchio

The- PL.F      girls- PL.F      REFL      are      looked- PL.F      at=the      mirror

‘The girls have looked at themselves in the mirror.’

(14) L-e      abbiamo      salut-at-e.

them- PL.F      we-have      greeted- PL.F

‘We have greeted them.’

As we know, if the object stays *in situ*, agreement does not obtain:

(15) \*Abbiamo      salutate      l-e      ragazz-e.

Have.1PL      greeted. PL.F      the- PL.F      girls. PL.F

‘We have greeted the girls’

There are at least two exceptions to this descriptive generalization: first, the kind of agreement illustrated in (15) was perfectly grammatical in older stages of Italian (Salvi & Renzi 2010). Here’s an example of participial agreement with the unmoved object:

(16) ...mio padre      ha offert-i      duo=mila      march-i [Novellino 18, 15-16]

my father.msg      has offered.PL.M      two=thousand      marks- PL.M

‘My father offered two thousand marks’

Second, in some Italian varieties it is possible to have participial agreement with an *in situ* internal argument as long as the argument is plural. An example of omnivorous participial agreement with an external argument is in (17). We will return to this later on.

(17) Abruzzese

So      magnitə      ddu      melə

am      eaten.PL      two      apples

‘I ate two apples’

This kind of participial agreement is discussed at length by D'Alessandro & Roberts (2008). It mostly involves agreement with all arguments of a verb.

French agreement patterns are basically the same as those of Italian, with one notable exception: agreement also obtains with moved wh- objects:

(18) French (Kayne 2000:26)

Je me demande combien de tables Paul a repeint-es  
 I REFL ask how-many of tables-PL.F Paul has repainted-PL.F  
 'I wonder how many tables Paul has repainted'

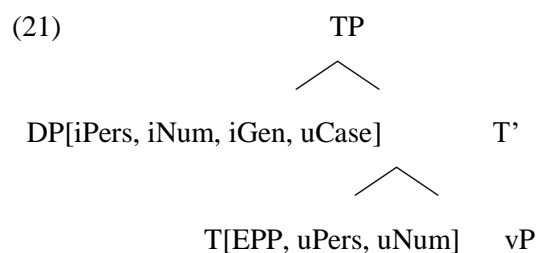
This kind of agreement is once again not possible in Standard Italian, but it was in older stages of the language. Here is an example of Standard vs old (Tuscan) Italian:

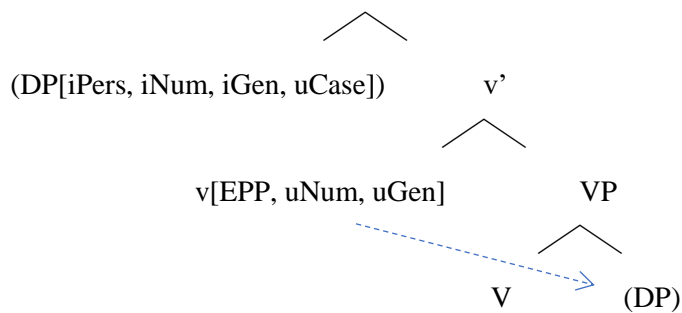
(19) Mi chiedo quanti tavoli Paul abbia ridipint-o/\*ridipinti  
 REFL ask how=many tables-PL.M Paul has.SUBJ repainted-SG.M/repainted-PL.M  
 'I wonder how many tables Paul has repainted'

(20) le pietre (...) avevano perduto-a loro virtute... [Nov. 1, 41-42]  
 the stones-PL.F had-3.PL lost-SG.F their virtue-SG.F  
 'The stones had lost their virtue'

Modern spoken French is losing participial agreement completely. It is moving towards the Spanish system. In any case, in Standard written French agreement between a wh- object and a participle is possible, like in Old Italian. The problem is how to account for these data within an Agree-based system (Chomsky 1995) which does not see a correlation between movement and agreement.

If we adopted Agree *tout-court* we would predict agreement with postverbal subjects in modern Italian, contra facts. Adopting a simple transitive structure, we would have the participle probe the object in its original position for Case, and Agree with it.





For Italian, this prediction is incorrect, because as we have seen a sentence like (22) is ungrammatical:

- (22) \*Ho        mangiat-a        l-a        mel-a  
       I-have    eaten-SG.F    the-SG.F    apple-SG.F

D'Alessandro & Roberts build on the distinction between Agree, which is a syntactic operation taking place at narrow syntax, and morphological insertion of inflectional material, which takes place at PF. The idea is that only if two elements that have entered an Agree relation are Spelled-Out together (Chomsky 1995) can they receive the same morphological specification at PF. They propose a condition on the morphophonological realization of agreement (D'Alessandro & Roberts 2008:482), according to which:

- (23) A. Given an Agree relation A between Probe P and Goal G, morphophonological agreement between P and G is realized iff P and G are contained in the complement of the minimal phase-head H.  
       B. XP is the complement of a minimal phase head H iff there is no distinct phase head H' contained in XP whose complement YP contains P and G.

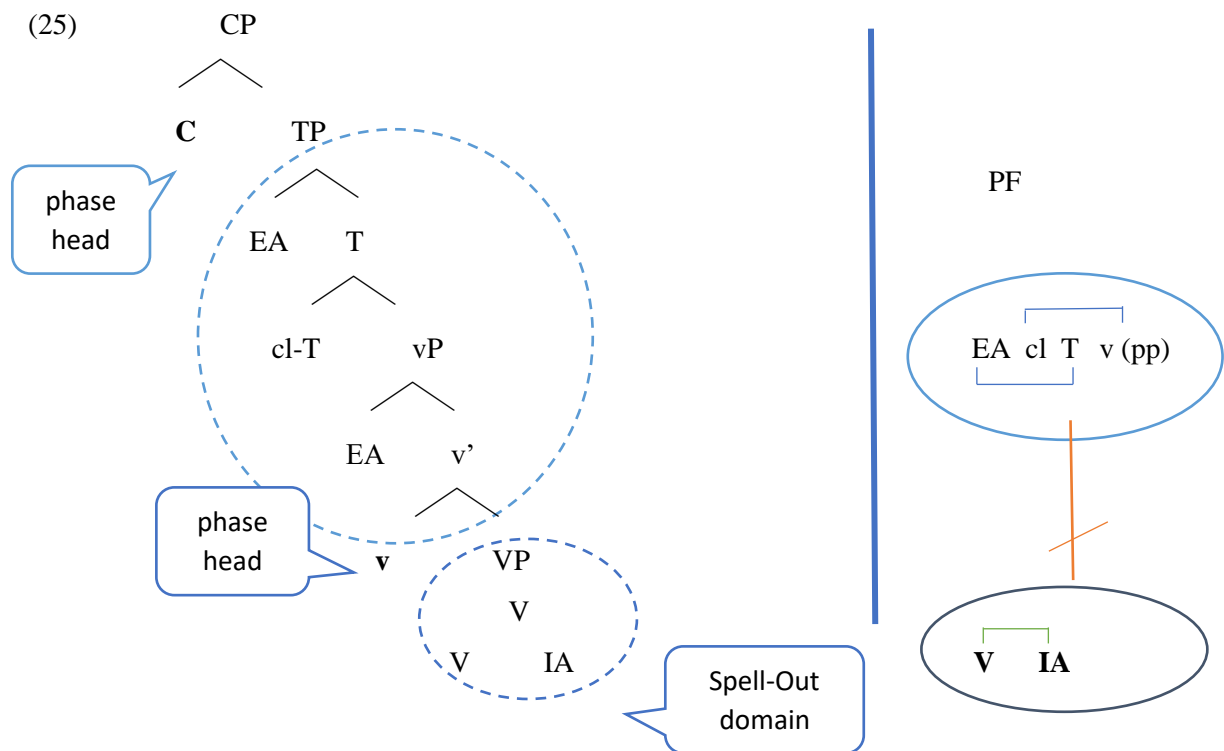
D'Alessandro & Roberts assume that the domain into which agreement can take place at PF is mapped directly from syntax through the Phase Impenetrability Condition (PIC):

- (24) In a phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ ; only H and its edge are accessible to such operations.

Chomsky (2000:108)

According to the PIC, when a phase is completed<sup>1</sup> the complement of the phase head becomes invisible for further computation. This happens because it is Transferred (Transfer, Chomsky 200\*) to the interfaces<sup>2</sup>.

The domain defined by the PIC is the following (the past participle raises to *v* in Italian, and is a phase head, according to D'Alessandro & Roberts):



When agreement has taken place at syntax and features have been valued, the derivation does not crash at the interfaces. The insertion of the inflectional ending is however a PF matter: only if the participle and the object are in the same PF domain are the inserted agreement endings the same. In the case in which the two belong to two different domains, default agreement is inserted.

For transitive verbs, D'Alessandro & Roberts assume a layered *v* structure (see also D'Alessandro & Ledgeway 2010) with the lower *v* a phase head hosting the participle. For simplicity, we will not

<sup>1</sup> The exact Spell-Out moment does not concern us here, as we are only concerned with the domain which is transferred, not with the edge or the phase head, but see the discussion in Richards (2007) about PIC timing.

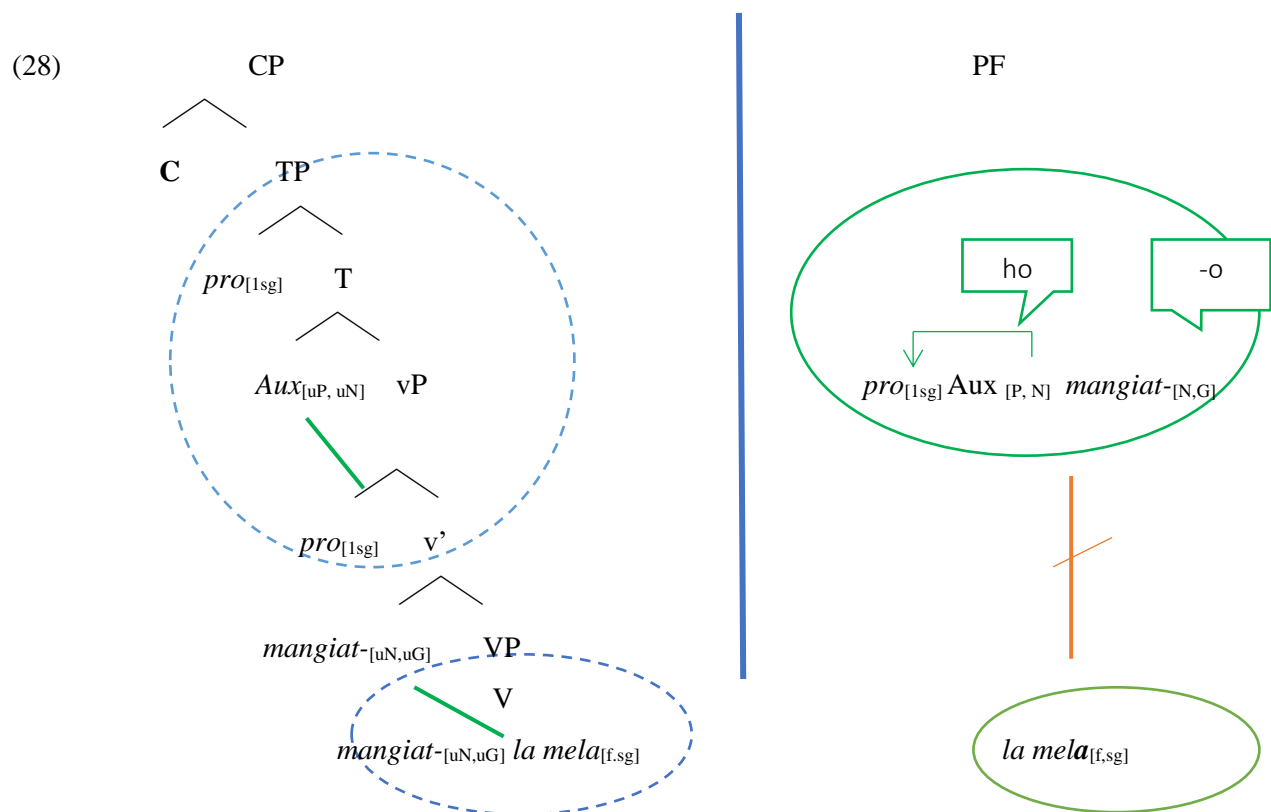
<sup>2</sup> The direct mapping model assumed by D'Alessandro & Roberts is far from generally accepted. Specifically, the domain created at narrow syntax and defined by the PIC does not seem to correspond to prosodic domains. In a number of papers, D'Alessandro & Scheer have proposed a direct mapping model, called Modular PIC, where PF domains “inform” narrow syntax. We refer those who are interested in syntax-PF mapping to D'Alessandro & Scheer (2015). For the present purposes, it is enough to assume that the morphophonological insertion domain corresponds directly to the domain determined by the PIC.

reproduce the higher  $v$  here. In a transitive sentence, the external argument is merged in spec,  $v$ , and  $v$  hosts the participle. At Spell-out, if the object has not moved to the higher phasal domain, it will be sent to PF in a different chunk from the past participle. Given the Condition on Morphophonological realization of agreement in (24), it will not be possible to insert the same ending to the participle as the object, despite the fact that the participle features (in  $v$ ) have been valued. PF will then insert a default ending (masculine singular) to the participle.

Consider now the contrast between the following examples:

- (26) Ho mangiato la mela.  
 I-have eaten-masc sg the-fem sg apple-fsg  
 ‘I have eaten the apple.’
- (27) \*Ho mangiata la mela.

The diagrams of these examples are as follows:

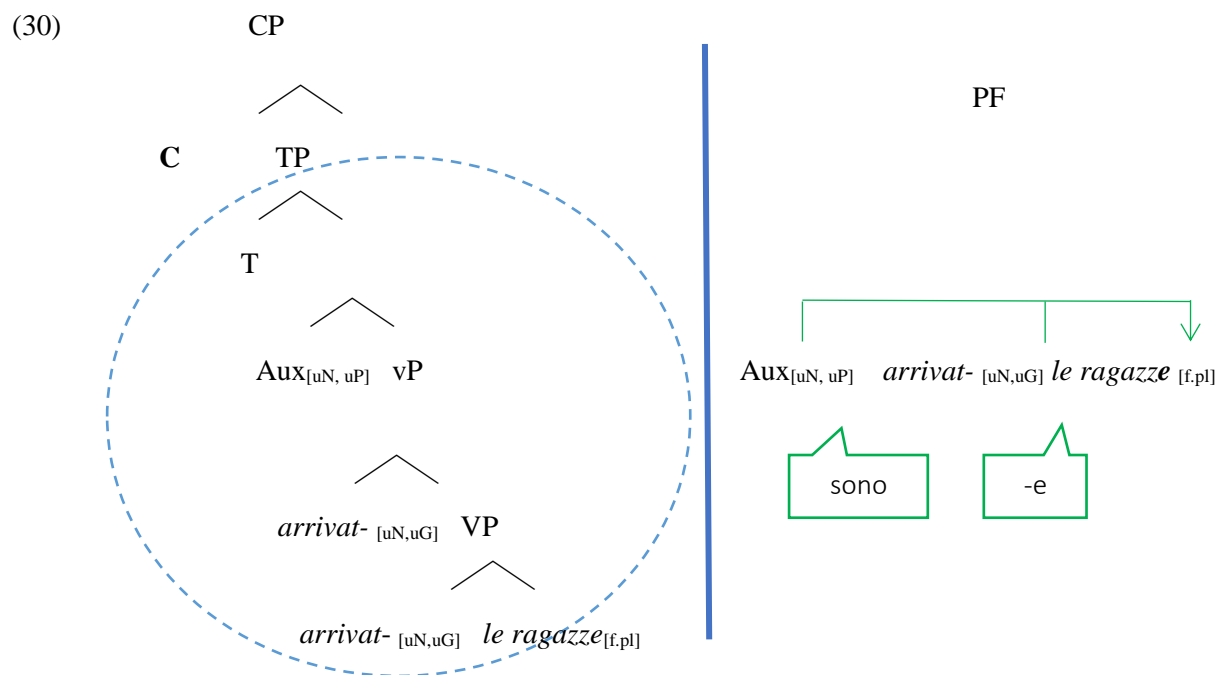


In the case of unaccusative verbs,  $v$  is not a phase head, or it is defective. Specifically, this means that it does not activate a Transfer operation, i.e. it is not connected to Spell-Out. The sentence is hence a unique phase, there is only one domain. We therefore expect agreement between the internal argument

(which is also the subject in unaccusative verbs) and the participle independently of their position. This is in fact the case:

- (29) Sono arrivat-e l-e ragazz-e.  
 are arrived-PL.F the-PL.F girls-PL.F  
 ‘The girls have arrived.’

The derivation for (29) is as follows:



Passives and reflexives basically work the same way: if the probe and the goal belong in the same domain at PF, they will carry the same (*mutatis mutandis*) ending. If not, the probe will be assigned a default ending.

Object clitics trigger overt, morphologically realized agreement, because they move to the Spell-out domain of the participle, thus they are visible for lexical ending insertion.

The case of Old Italian is somewhat problematic for this analysis, since participles do agree with the internal argument *in situ*, as we saw in example (16). One possible explanation for this pattern comes from word order: in older stages of the language, and importantly still in the stage of *Novellino*, from

which these examples are taken (i.e. XV c.), word order was rather different from that of modern standard Italian. In particular, many elements could be scrambled in front of the past participle (see Franco 2009, Benincà & Poletto 2010), suggesting that the participle itself occupied a lower position in the clause. See for instance the following sentences from XIII c. Italian:

(31) Bono Giamboni, *Orosio*, 2, 9, 15-16

...i nimici	avessero	già	il	passo	pigliato
the enemies	had	already	the	pass	taken

‘the enemies had already taken the pass’

Given this, it is possible to argue that the past participle did belong in the same spell-out domain as the internal argument, as it stayed low, possibly in V. Note that the object has moved in this particular sentence, but that was not always the case: the object could follow the participle in old Italian. Moreover, the participle could be preceded by a number of other elements, like adverbs and quantifiers, that can no longer appear pre-participially in modern Italian.

The French agreement with the moved *-wh* remains an open issue.

### 3.2. Unaccusatives

In *Minimalist Inquiries* (1998/2000) Chomsky takes the step of finally dissociating agreement from movement also formally, through the formulation of Agree. Chomsky formulates then the operation Agree as follows (as in Roberts 2010):

(32) Agree ( $\alpha > \beta$ ), where  $\alpha$  is the Probe and  $\beta$  is the Goal, and  $>$  means c-command.

Agree takes place between a Probe, with uninterpretable features, and a Goal, with interpretable features (very much like Attract). Differently from Attract, Agree does not require movement, and features can be checked long-distance.

A c-command-based theory of agreement can very straightforwardly account for agreement in inversion constructions, or with post-verbal subjects in Romance. Take for instance the following example from Italian: the subject of unaccusatives is an internal argument. It does not seem to move in any way. Yet, it shows agreement with the finite verb. In the spec-head era, the only way to analyze this simple sentence was to postulate the presence of an expletive *pro* in Spec-TP, in a chain with the subject *in situ* (Rizzi 1982, Belletti 1982 and many others).

(33)	Sono	arrivat-i	molt-i	ragazz-i
	are.PL	arrived-PL.M	many-PL.M	boys-PL.M

‘Many boys arrived’

With Agree, this agreement pattern is straightforward: the verb is T Probes for a DP, it finds the subject in its c-command domain, and it Agrees with it.

#### **4. Morphological agreement**

So far, we have talked about agreement in syntactic terms. We have also made a distinction between Agree (syntactic operation) and morphological agreement. This is obviously only one of the possible ways to conceive agreement. Many scholars use the term “agreement” to refer exclusively to morphological marking of the co-variance relation. In this sense, agreement is not a syntactic operation (like Agree), but it is what we identified earlier as happening at PF.

Romance languages have had a large impact on the understanding of morphological agreement. Some aspects for which Romance data have been of fundamental importance are the classification of clitics, and in particular the difference between agreement clitics and subject pronouns.

##### **4.1. Rich agreement and null subjects**

It is usually assumed, in traditional grammars, that if a language has a rich agreement paradigm, then it will be pro-drop. By rich agreement we mean here that the language has a number of inflectional verbal morphemes, and that there are at least some different inflectional morphemes in the paradigm. A definition of rich agreement has been recently given by Koenenman & Zeijlstra (2014) and is reproduced in (34):

- (34) A language exhibits rich subject agreement if and only if agreement involves at least the same featural distinctions as those manifested in the smallest (subject) pronoun inventories universally possible. (Koenenman and Zeijlstra 2014:574)

For our purposes, it is not necessary to define rich agreement too precisely. We will use the working definition of rich agreement as “dedicate, differentiated inflectional morphology”.

The observation that rich agreement “licenses” pro-drop has been around since the beginning of times. The underlying intuition is that if you can retrieve the information about the subject from the verbal inflection, you don’t need to express the subject again as a pronoun or a full DP. This correlation has been observed in several languages.



In Brazilian Portuguese, for instance, where the rich agreement paradigm is getting reduced, also null subjects are more restricted. BP inflectional endings have disappeared almost completely. As for overt subjects, 1<sup>st</sup> and 2<sup>nd</sup> person pronouns are almost always overt, while 3<sup>rd</sup> person subjects are still omitted, but much less than in EP.

The verbal agreement patterns in BP are summarized in Table 1 (from Nuñez 2011:7):

Table 1: Verbal agreement paradigm in (Colloquial) Brazilian Portuguese

**cantar ‘to sing’: indicative present**

eu (I)	canto	P:1.N:SG
você (you.SG) ele (he) ela (she) a gente (we)	canta	P:default; N:default (= 3SG)
vocês (you.PL) eles (they.MASC) elas (they.FEM)	cantam	P:default; N:PL (= 3PL)

Despite the fact that 1<sup>st</sup> person singular has a dedicated form, 1<sup>st</sup> and 2<sup>nd</sup> person pronouns are almost never omitted. This suggests that the 1-to-1 correspondence between presence of inflection and absence of an overt subject is not so straightforward.

Several scholars have tried to analyze the structural conditions for pro-drop. Barbosa, Duarte & Kato (2005) performed an extensive study of some journal interviews, to check subject omission in European Portuguese (EP) and Brazilian Portuguese. Following Duarte (1995), they identified four main patterns of subject drop:

- (35) Pattern I: the antecedent of the null subject is the subject of the matrix clause  
Pattern II: the antecedent is the subject of the previous adjacent sentence  
Pattern III: the antecedent is the subject of a previous, non-adjacent sentence

Pattern IV: the antecedent is in the previous adjacent sentence, but is functionally distinct from the null subject (Duarte & Varejão 2013:107)

The results of the inquiry are summarized in the following table:

Table I – Null (vs overt) subjects in transcribed interviews, according to the structural context (Adapted from Barbosa, Duarte & Kato, 2005: 24, in Duarte & Varejão 2013:108)

Pattern	EP	BP
I	39/40 (97%)	18/23 (78%)
II	49/55 (89%)	28/48 (58%)
III	20/28 (71%)	07/28 (25%)
IV	16/24 (67%)	10/23 (43%)

This table shows that overt subjects do not correlate only with the loss of agreement. Diachronically, the slow disappearance of the pro-drop status might have correlated with an impoverishment of the inflectional system, but synchronically the distribution of overt subjects depends on structural, as well as featural, reasons.

Another example of a former pro-drop language which has become non pro-drop is French, whose inflectional system has heavily impoverished, with the simultaneous emergence of obligatory subject clitics. Roberts (1993), building on Vance (1989) proposes that the loss of pro-drop in French is due to both the loss of agreement inflection and the loss of Nominative assignment under government. This explains also why null subjects are lost in inversion structures during the 16<sup>th</sup> century. Both causes, together, brought to the complete disappearance of null subjects in French.

Within the generative framework, the correlation between null subjecthood and agreement inflection was first formalized by Taraldsen (1980), followed by Rizzi (1982) and then Rizzi (1986) who, with different formulations, proposed the NULL SUBJECT PARAMETER, linking null subjecthood, rich agreement, inversion and that-trace effect in languages. The idea is that languages with rich agreement have a rich INFL head, which can license a pro, i.e. an empty pronominal category that is present in null-subject languages.

Specifically, given the ECP, Rizzi proposes that INFL in null subject languages governs the subject and it is rich enough as to license it if empty, by virtue of a sort of coindexation between the features of INFL and the empty subject.

The difference between (36a) and (36b) is that in Italian the INFL is rich while in English it isn't.

- (36) a. \_\_\_\_ verrà  
b. \*will come

While a correlation between null subjecthood and rich verbal agreement system seems plausible, many scholars have noted several exceptions. Chinese, Japanese and Korean are, for instance, pro-drop languages, but they lack agreement inflection altogether (Huang 1984). According to Huang, then, also languages with no agreement (no Agr) can license null subjects. A middle way between these two views is offered by Jaeggli & Safir (1989), who propose the Morphological Uniformity Hypothesis (MUH), according to which null subjects are permitted in all and only languages with morphologically uniform inflectional paradigms (see D'Alessandro 2015 for a thorough discussion of the Null Subject Parameter).

Rich agreement corresponds, for Rizzi and Taraldsen, to the presence of agreement morphology on the INFL head. Such a view is also taken, with some substantial modification, also by Alexiadou & Anagnostopoulou (1998). Alexiadou & Anagnostopoulou compare the null-subject status of Germanic, Celtic, Greek, and Romance languages and propose that a full agreement paradigm has a separate lexical entry than the verb. To be more precise: rich agreement is pronominal (each of the ending of a rich verbal agreement paradigm has pronominal status). Default or impoverished agreement is instead totally dependent on its host, and therefore does not constitute a separate lexical entry from the verb. If rich agreement attached to the verb root is pronominal, it has a D-feature with which it can check the EPP on I. This means that pro-drop languages do not need a subject to check the EPP: they can check it via verb movement. This elegant approach captures the correlation between being a pro-drop language, having rich agreement, and having verb movement to I/T.

A direct consequence of having languages with a D-feature that can check the EPP is that subjects in spec-IP position have a different status than their corresponding XPs in non pro-drop languages. More precisely, XP subjects in rich agreement languages are in A'-position, and are therefore NOT in spec, Agr (which is the landing position of the subject in early MP, as we saw in the previous section). Alexiadou & Anagnostopoulou continue with showing that subjects in rich agreement, V-to-I languages, are indeed not in a canonical subject position, but are rather topicalized. They show this by checking the position of adverbs and *if* clauses, which can occur between the subject and the verb in pro-drop languages but not in non pro-drop languages, and definiteness restrictions for postverbal subjects in inversion.

If these generalizations are true, when a language loses rich agreement it will have to express the subject overtly. Subject clitics are often called in, with expletive subjects, to this function. Their nature is however not completely straightforward, and several scholars have shown that there are several kinds of subject clitics. One of the most debated issues is whether subject clitics are pronominal or simply inflectional. We will return to this in the next section.

#### **4.1.1. Agreement and subject clitics**

Contrary to what our intuition would suggest, the presence of subject clitics (SCLs) does not entail null subjecthood. If SCLs were overt pronominals, we would expect them to be more frequent in languages with low or no verbal inflection (like in the case of BP). This generalization does not hold. If, on the other hand, they were inflectional, agreement elements, we might expect them to replace agreement inflection completely. This is also not the case.

Whether SCLs are inflectional or pronominal elements is discussed extensively by Rizzi (1982). Before looking at Rizzi's diagnostics, let us have a look at the distribution of SCLs, and their co-occurrence with inflection.

Roberts (2010) (but see also Kayne 1975) presents a classification of languages according to the distribution of subject clitics and verbal inflection. He identifies 4 language types:

- (37)
- |    |            |         |
|----|------------|---------|
| a. | SCL [+agr] | V[+agr] |
| b. | SCL [+agr] | V[-agr] |
| c. | SCL [-agr] | V[+agr] |
| d. | SCL [-agr] | V[-agr] |

where [+agr] indicates a full set of morphological person/number distinctions. A full set can contain at most one zero exponent and one syncretism, and V [+agr] indicates a null subject language.

A language like (37a) is a fully redundant null subject system in which the clitics and the verbal endings co-vary. An example of such a language is Florentine, in (36):

- (38) Florentine, Roberts (2010)

(E) parlo	Si parla	<i>I speak</i>	<i>we speak</i>
Tu parli	Vu parlate	<i>you speak</i>	<i>you.PL speak</i>
E parla	E parlano	<i>he speaks</i>	<i>they.M speak</i>
La parla	Le parlano	<i>she speaks</i>	<i>they.F speak</i>

Languages like (37b) are non null-subject systems in which the verbal inflection is unable to identify a null subject, and the pronominal paradigm is fully realized. One such language is French:

- (39) French (Roberts 2010)

je dors	<i>I sleep</i>
tu dors	<i>you sleep</i>
il/elle dort	<i>he/she sleeps</i>
nous dormons	<i>we sleep</i>
vous dormez	<i>you sleep</i>
ils/elless dorment	<i>they.M/ they.F sleep</i>

Languages like (37c) are null-subject systems with fully differentiated verbal inflection but syncretism and gaps in the clitic paradigm. One example is Comasco, a northern Italian dialect spoken in Como:

(40) Como (Roberts 2010)

dorm-i

sleep-1.SG

‘I sleep’

ta dorm-at

SCL.2SG sleep-2SG

‘you sleep’

al/la dorm-a

SCL.3SG.M/SCL.3SG.F sleep-3SG

‘he/she sleeps’

dorm-um

sleep-1PL

‘we sleep’

dorm-uf

sleep-2PL

‘you.PL sleep’

dorm-an

sleep-3PL

‘they sleep’

The last group of languages, illustrated in (37d), show a full set of forms that together form a single, complementary (or near-complementary) pattern.

(41) Carrara (Roberts 2010)

a dorm

SCL sleep

‘I sleep’

t dorm

SCL.2SG          sleep  
'you sleep'

i/al                  dorm  
SCL.3M/SCL3F   sleep  
'he/she sleeps'

a                  durm-in  
SCL          sleep-1PL  
'we sleep'

durm-it  
sleep-2PL  
'you.PL sleep'

i/al                  dorm-n  
SCL.3M/SCL.3F   sleep-3PL  
'they sleep'

Roberts (2010) treats subject clitics as agreement inflection. In fact, most subject clitics in Italian varieties are inflectional, not pronominal, as shown by Rizzi (1982).

Rizzi (1982) proposes a number of diagnostics to distinguish between pronominal and inflectional subject clitics. His first observation is that subject clitic paradigms are often defective, while the absence of a subject pronoun is quite rare. Secondly, subject clitics are (almost always) obligatory in coordinated structures, while pronouns can be omitted in the second conjunct of coordination. Even in non null-subject languages, like English, the subject can be omitted in the 2<sup>nd</sup> conjunct, as shown in (42):

(42) You eat and drink

In the case of SCLs for most Italian varieties, this omission is not possible. In Grumellese, a northern Italian dialect, for instance, it is not possible to omit the subject clitic from the second conjunct, as shown in example (43). Observe that the clitic paradigm is defective, and Grumellese lacks the 1<sup>st</sup> person clitic.

(43) Grumellese (Manzini & Savoia (2005, I:152)

a. mang-e            e bi-e  
 eat-1SG            and drink-1SG  
 'I eat and drink'

b. ta      mang-et            e      ta            bi-et  
 SCL.2SG eat-2SG            and    SCL.2SG            drink-2SG  
 'you eat and drink'

c. al      mang-ia            e      l            bi:-f  
 SCL.3SG eat-3SG            and    scl.3SG            drink-3SG

In French, coordinated subject clitics can be omitted instead, since they are pronominal, as shown in (44). French subject clitics are in fact pronominal, differently from those found in Italian varieties.

(44) Il            mange            et      boit  
       he-3SG    eats            and    drinks  
       'he eats and drinks'

The second observation concerns the fact that while inflectional subject clitics can co-occur with negative quantifiers, subject pronouns cannot. In (45), for instance, the subject clitic can co-occur with *nigy* ('nobody'):

(45) Grumello (Manzini & Savoia (2005, I:62))  
       nigy      i            ve  
       nobody SCL.3PL            come.3PL  
       'Nobody comes'

This is again not possible in French, where subject clitics are pronominal in nature:

(46) \*Personne il ne fait cela.

Finally, agreement markers may follow preverbal negation, but pronouns cannot. In (47), negation precedes the subject clitic, which is therefore an agreement marker. In (48), instead, we have a real pronoun, like in (49), and in fact negation can only follow it.

(47) Veneto  
       No      el            magna  
       NEG    SCL.3SG            eats  
       'He doesn't eat'

(48) Il            ne      mange pas

He.3SG NEG eats NEG  
'He doesn't eat'

(49) Lui non mangia  
He.3SG NEG eats  
'He doesn't eat'

The facts shown in this section show that clitics come in at least two forms: pronominal and agreement-like. While French clitics are, for instance, pronouns, northern Italian dialects are agreement markers. The implication of this conclusion is that while northern Italian varieties are pro-drop languages with rich inflection, which is instantiated by subject clitics, languages like French are real non pro-drop languages (Rizzi 1982, Brandi & Cordin 1989).

Many studies have targeted subject clitics especially to determine their base-generation, or first-merge position, and their target position. Being phonologically reduced, it is quite difficult to find evidence for their original position. One part of the debate on clitics that is worthwhile mentioning here is the theory according to which subject clitics are the spell-out of an Agree relation between T and the subject, put forward by Roberts (2010). According to Roberts, dislocation is only apparent, and SCLs are inflectional bits, the spell-out of a subset of features of the subject on T. They are, therefore, the result of an Agree operation, and have nothing to do with pronouns and Case.

## 5. Conclusions

This article has shown that Romance languages have been fundamental for the development of that part of linguistic theory dedicated to agreement. Both for syntactic and morphological agreement, the variety and richness of Romance language phenomena has offered key insights for the understanding of agreement.

The list of relevant phenomena is far from complete. Nevertheless, I hope to have selected some key phenomena that were crucial for the development of syntactic and morphological theory, especially within generative grammar.

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