

# Agreement. The Romance perspective

Roberta D'Alessandro

Utrecht University

2<sup>nd</sup> draft

preprint – to appear in Ledgeway, Adam and Martin Maiden (eds), *The Cambridge Handbook of Romance Linguistics*. Cambridge University Press

## 1. Introduction

The term “agreement” usually refers to a relation between two or more items in a sentence or a phrase. This relation can be explicitly (i.e. morphologically) marked, or not. According to Steele (1978:610), ‘The term agreement commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another’. The term co-variance, however, does not explicitly take into account the fact that agreement usually takes place between a core element and one or more dependent elements. The definition we will be using in this paper is therefore the following:

Agreement is a syntactic dependency relation ‘cross-linking’ two or more elements. This relation is very often made explicit by means of a marker of some kind on one or all the elements between which it is established.

This definition draws a distinction between a syntactic dependency, called agreement, and its marking, usually also called agreement in the literature. This chapter will consider both the syntactic and the morphological aspects of agreement.

Romance languages have played a substantial role in the development of the theory of agreement as we know it today. In Romance, agreement systematically obtains between the nominative subject and the finite verb and between the article, adjectives, and the noun within a DP. Other typical Romance phenomena, such as clitic doubling or subject clitics, are also considered agreement. Furthermore, some unusual agreement patterns are found in Romance, such as the inflected infinitive in Portuguese and Sardinian, some anti-agreement like effects in central Italo-Romance, impersonal *si* agreement patterns resembling quirky subject agreement (D'Alessandro 2004), or agreement with adverbials and topic-oriented agreement in some upper-southern Italo-Romance dialects (D'Alessandro 2017). In this chapter mostly core agreement facts will be discussed. For exceptional agreement patterns, the reader is referred to D'Alessandro & Pescarini (2015). The aim of this chapter is to highlight the milestones of the theory of agreement that have been established based on Romance data.

I have selected only some of the agreement facts that have inspired contemporary syntactic theory: starting from Phrase Structure Rules (PSRs), 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 Minimalism, Romance data have offered food for thought and challenges for those trying to develop a theory of agreement.

The chapter is organized as follows. Section 19.2 presents the first PSRs on agreement; Section 19.3 is dedicated to participial agreement and the birth of specifier-head (spec-head) agreement; Section 19.4 considers agreement in the Minimalist Program drawing on examples from a revised analysis of participial agreement, unaccusative agreement as the basis of long-distance agreement, agreement under c-command, and finally the theoretical mechanism of Agree. Section 19.5 then switches to morphological agreement, and the tests used to distinguish between agreement morphemes and pronominals, based on an analysis of subject clitics.

## 2. Phrase Structure Rules for agreement

The early stage of generative grammar, so-called transformational grammar, was characterized by a computational approach to language data. Since then, agreement has been at the core of the development of syntactic theory and is today not considered just a relation between elements, but, rather, the engine of syntax.

Katz and Postal (1964) and Postal (1966) exploited the intuition, also expressed in Chomsky (1957), that agreement is a transformation cross-linking two elements. This transformation consists in attaching an affix to all elements that enter an agreement relation. In 1966, Postal put forward a theory of agreement grounded on the idea that PSRs copy agreement morphemes from the head to the dependent elements. In an NP, for instance, the affix is specified on a noun, and it gets copied, adjoined to all other elements in the NP. These PSRs were developed based on Spanish, given its morphological transparency. One of the examples studied by Postal (1966:46) is in (1).

### Spanish (Postal 1966:46)

1	Un-o-s	alumn-o-s
	one-M-PL	pupil-M-PL
	'Some pupils'	

In (1), the affixes attached to N that undergo copying express gender and number. Not all affixes have the same explicit morphology: the affix can assume different morphological shapes, even if its value is constant. A masculine singular affix on a noun can have a different morpho-phonological realization from the same affix on a determiner, as illustrated in (2) from Cosentino:

2 Cosentino

Chiss-u                                 can-e  
 this.MED-MSG                         dog-MSG  
 ‘that dog close to you’

In (2), the masculine singular ending is underlyingly the same on the noun and on the adjective, but its phonetic realization on the noun and on the adjective is different. Postal’s proposal obviously concerned the morpheme as an abstract entry, not its phonetic realization. Postal proposed the following PSR for agreement (also called concord) in a phrase like (1):

- 3   R56<sup>1</sup> NP → Article     Noun (Adjective)  
      R57 Noun → Noun     Stem Affix  
      R58 Affix → Gender (plural)  
      R59 Noun Stem → Noun Stem Fem, Noun Stem Masc

R60 Gender →  $\left. \begin{array}{l} \text{M in Noun Stem Masc} \text{ \_\_\_\_\_\_} \\ \text{F} \end{array} \right\}$  (Postal 1966:46)

(3) can be read as follows:

- Rule 56: rewrite an NP as an Article plus a Noun;
- Rule 57: rewrite the Noun as a Stem plus an Affix, ...and so on. In addition, he states that the grammar must contain the following agreement transformation:

4   T<sub>agreement</sub>  
      Article,     Noun Stem,     Affix,     (Adjective)  
      1            2                 3            4

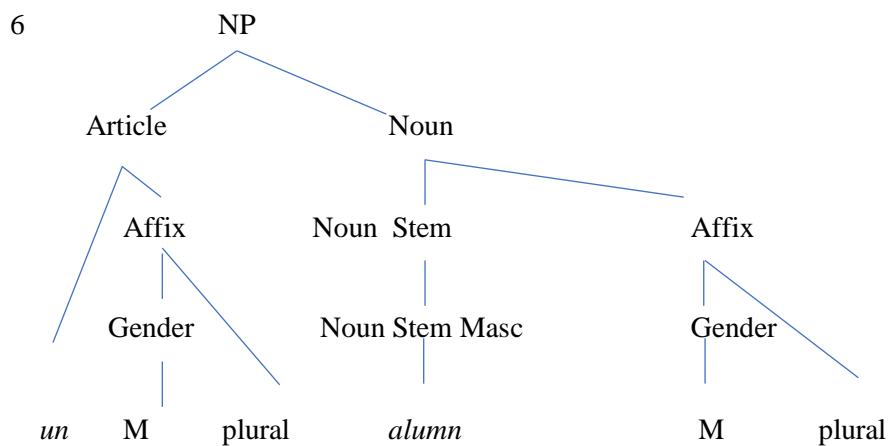
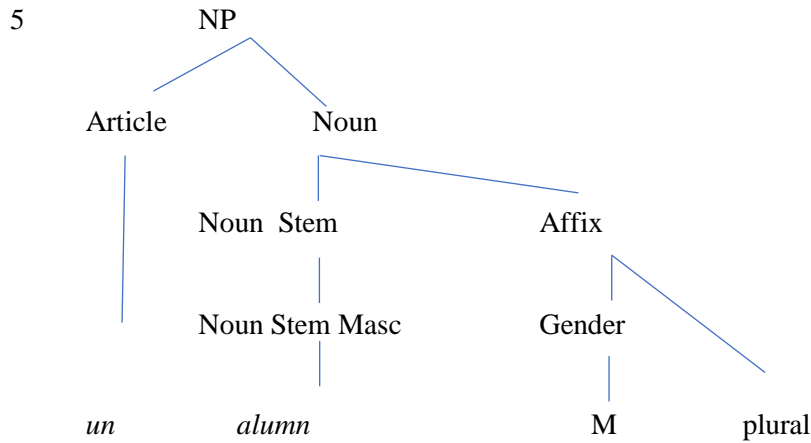
1...4 → Article + Affix, Noun Stem, Affix, (Adjective + Affix)

This rule describes the internal structure of a noun phrase. The 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 will be soon after, by Chomsky (1965). It is very important, as it is what underlies the formulation

---

<sup>1</sup> This example reproduces the PSRs proposed by Postal, with their number. R stands for rule; the number is the progressive number that Postal assigned to the set of PSRs he proposed.

of Agree in the Minimalist Program (Chomsky 2000). The tree diagrams for the transformation representing agreement within the Spanish NP *unos alumnos* ‘some pupils’ (masculine plural) are reproduced in (5) and (6):



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. He states, for instance, that a grammar must contain transformational rules that assign to an article all the feature specifications of the noun it modifies. The copy mechanism is made more explicit in Chomsky’s version of the agreement transformation. The rule he proposes reads as follows:

7

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

where Article ... N is an NP”

(Chomsky 1965:175)

This rule means that an article will take the  $\alpha$  affix for Gender, the  $\beta$  affix for Number and the  $\gamma$  affix for Case if it appears before a Noun that carries an  $\alpha$  affix for Gender, and so on. Observe that English, the language on which Chomsky based his theories in the early years, does not express gender morphologically. The reason why gender is included in the transformation is, arguably, the fact that Postal developed his rules based on Romance.

### 3. Spec-head agreement

The Government and Binding era that followed the publication of Chomsky's *Introduction to Government and Binding* (Chomsky 1981, henceforth GB) introduced several changes to the theory of agreement. There is a far-reaching 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 given in (8):

8 *The Mirror Principle* (Baker 1985:376)

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

In (1978), Emonds, building on Kayne's (1975) observations regarding auxiliary deletion, clitic placement, and other phenomena in French, concludes that in this language auxiliary and verbs are the same category, while in English they are not. Building on this observation Pollock (1989) brings the theory forward, proposing a rule of finite verb movement (the same movement that auxiliaries undergo) for French, but not for English. Pollock examines French and English finite verbs, like those in (9)-(11), and concludes that the verb in French moves to receive its inflexion. Given that negation and frequency/temporal adverbs occupy a fixed position in the clause, the difference between English and French with respect to the position of the verb must be due, according to Pollock, to movement in French, and lack thereof in English.

English and French (Pollock 1989: 367)

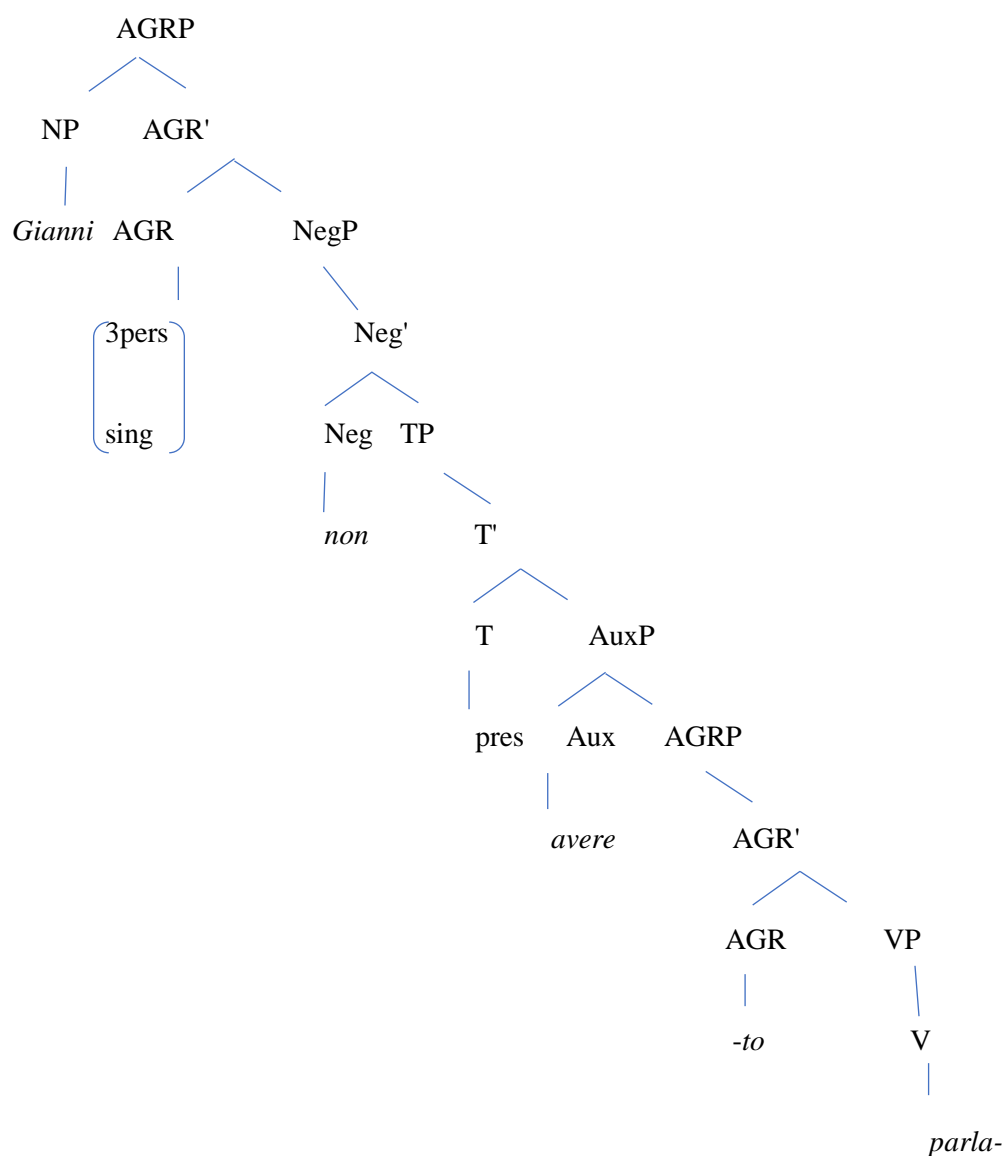
- 9 a. \*\*John likes not Mary.  
b. Jean (n') aime pas Marie.
- 10 a. \*\*Likes he Mary?  
b. Aime-t-il Marie?
- 11 a. \*\*John kisses often Mary.  
b. Jean embrasse souvent Marie.  
c. John often kisses Mary.  
d. \*\*Jean souvent embrasse Marie.

In (9), the finite verb precedes the negation in French (where negation is represented by *pas*), but not in English. (10) shows that the finite V raises in interrogative sentences in French but not in English. (11) shows that the finite verb precedes the temporal adverb *souvent* ('always') in French, but not in English. Pollock took these data to show that the finite verb moves like an auxiliary in French but not in English, thus supporting Emond's generalization. Pollock also observed that a different position is needed for V movement within the same language. An extra head is thus required to host the verb. This generalization, together with the considerations about the hybrid categorial status of INFL, which encoded both verbal inflexion and nominal inflexion and was therefore an exceptional mixed category, led to the postulation of a separate AGR(ement) position to which the verb can 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*. She undertakes a thorough comparative study of verbal morphology as well as syntax in Romance, concluding that finite verbs get assembled in the syntax through head movement of the verb through dedicated (inflexional) projections, and according to the *Mirror Principle* in (8). Consequently, the proposed structure for Italian sentences like (12) is, according to Belletti, as in (13).

Italian (adapted from Belletti 1990)

- 12 Gianni non ha parlat-o.  
Gianni NEG has.3SG talked-MSG  
'Gianni did not speak.'



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

Belletti's model is also adopted in early Minimalism, given its strong descriptive adequacy. In her model, Belletti tacitly assumes movement of the subject to the specifier position of the higher AGR projection licensing the person/number formative 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. Kayne's theory is also entirely based on Romance data.

### 3.1 Agreement in a spec-head configuration

We have just seen that, according to Belletti, nominative case is assigned in the specifier position of the AGR projection. The reasons for this assumption stem from different concepts that emerged more or less during the same period within the GB framework. A specifier-head (henceforth spec-head) relation is obtained under Government: a head governs whatever falls under the maximal projection that it heads, and in particular, a head also governs its associated specifier position. 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 with each other was only developed after the publication of a key paper by Kayne (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:

French (Kayne 2000:25)

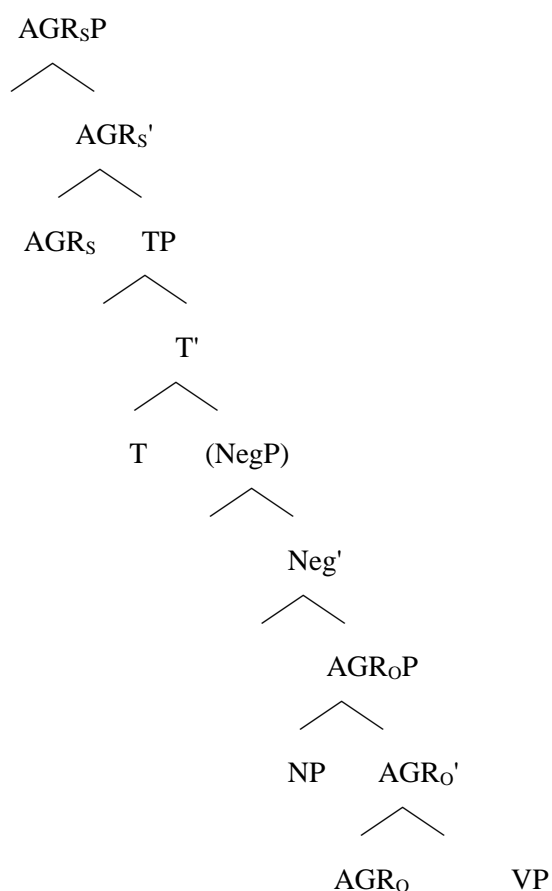
- 14 a Paul a repeint / \*repeintes les chaises.  
Paul has painted.MSG painted.FPL the chairs.F  
'Paul has repainted the chairs'
- b Paul les a repeintes.  
Paul them= has painted.FPL  
'Paul repainted them.'

The agreement alternation we see in (14a-b) is quite straightforward: whenever the DP object is postverbal, the past participle fails to agree with it, as shown by the ungrammaticality of *repeintes* in (14a). If the object moves and appears before the participle, the participle agrees with it. From this, Kayne concludes that there is a correlation between movement and agreement, a concept which provided the basis for agreement theory until very recently. In particular, 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 enters into a spec-head relation with the object, therefore 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 is the only configuration in which agreement can take place was very appealing for the GB framework, and therefore the spec-head configuration was immediately extended to all kinds of sentential agreement (as well as some cases of 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> (agreement with the subject) and AGR<sub>o</sub> (agreement with the object) 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 SpecIP, the canonical preverbal subject position, to be filled (Williams 1980; Chomsky 1981; 1982; Rothstein 1983; Lasnik 2001, and many others). Furthermore, A-movement of the subject is required for it to receive nominative case: the I head governs the NP subject and assigns nominative case to it in SpecIP.

In a sentence like (16), the subject has to move to SpecIP obligatorily. If SpecIP needs to be independently filled, and if the I(nfl) head is split into Infl proper and AGR, movement of the subject through AGR is an obligatory requirement. This causes agreement between the subject and the finite verb to emerge.

Provençal (Ledgeway 2012:432)

16	Li	bregands	m' =	an	cremat	l' =	ostau!	(Provençal)
	the	brigands	me =	have	burnt	the =	house	

‘The brigands have burnt my house down!’

Finally, while nominative was assigned under government and in a spec-head configuration, accusative was still assigned to the complement of the V head under government, and not in a spec-head configuration.

In order to unify case assignment, Chomsky (1993) proposes that accusative too is assigned in a spec-head configuration, and that the object always moves to SpecAgr<sub>o</sub>P 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 cases of covert agreement through an appeal to overt movement through AGR, in a way that we will discuss in the next section.

#### **4. Agreement in the Minimalist Program**

##### *4.1 Participial agreement revisited*

Chomsky (2000: 122 *ff*) puts forward a new conceptualization of agreement, according to which the relevant syntactic relation for agreement to take place is closest c-command, and no longer spec-head. Agreement is obtained through an operation, called Agree. The definition of the operation Agree is the following: “The  $\phi$ -set we can think of as a probe that seeks a goal, namely "matching" features that establish agreement. [...] Locating this goal, the probe erases under matching. [...] The erasure of uninterpretable features of probe and goal is the operation we called Agree.[...] Matching is a relation that holds of a probe P and a goal G. Not every matching pair induces Agree. To do so, G must (at least) be in the domain D(P) of P and satisfy locality conditions. More generally, uninterpretable features render the goal active, able to implement an operation. The operations Agree and Move require a goal that is both local and active.”

Agreement is therefore defined as a locality sensitive operation, and does not happen as a consequence of movement. It is, in fact, completely independent of movement. In this new framework, agreement is conceptualized in terms of structural precedence rather than a specific configuration like spec-head.

D’Alessandro and Roberts (2008) propose to capture Kayne’s intuition regarding agreement 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 reviewed.

We start with the observation that past-participle agreement in standard Italian is associated with promoted internal arguments, namely:

- internal arguments that are moved or linked to subject position: unaccusatives (17a), passives (17b), and impersonal-passives (17c);

- reflexive constructions (18), which are also argued to also involve promotion of the ‘antecedent’ of the reflexive (Kayne 1989);
- object clitics (19).

Italian (D’Alessandro and Roberts 2008:478)

- 17 a L-e        ragazz-e    sono    arrivat-e.  
       the-FPL   girls-FPL   are    arrived-FPL  
       ‘The girls have arrived.’
- b L-e        ragazz-e    sono    stat-e        arrestat-e.  
       the-FPL   girls-FPL   are    been-FPL   arrested-FP  
       ‘The girls have been arrested.’
- c Si        sono    vist-e        l-e        ragazze.  
       REFL=are    seen-FPL   the-FPL   girls-FPL  
       ‘We have seen the girls/the girls have been seen.’
- 18 L-e        ragazze    si        sono    guardat-e    allo    specchio  
       The-FPL   girls-FPL   REFL   are    looked-FPL   at.the   mirror  
       ‘The girls looked at themselves in the mirror.’
- 19 L-e        abbiamo    salut-at-e.  
       them-FPL   we-have    greeted- FPL  
       ‘We greeted them.’

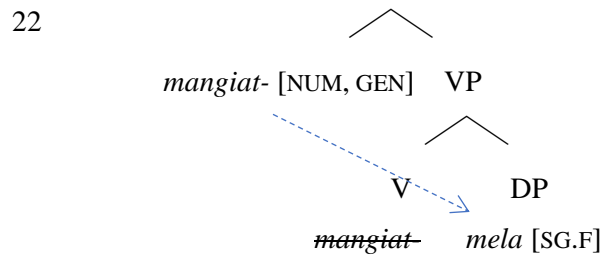
If the object stays *in situ*, agreement does not obtain:

- 20 \*\*Abbiamo salut-at-e    l-e        ragazz-e.  
       have.1PL    greeted-FPL   the- PL.F    girls. PL.F  
       ‘We greeted the girls.’

In light of this theoretical development, the data of French and Italian participial agreement are quite hard to explain. If we adopted Agree *tout court*, we would predict agreement with all postverbal subjects in modern Italian, contrary to fact. The past participle c-commands the object *in situ* in a simple transitive clause, and it has the relevant features to match the object. In a sentence like (17), the past participle is in the right configuration to Agree with the feminine singular object. We also know that the participle assigns accusative case to the object, so according to this new definition the past participle should show overt agreement with the object, but it does not.

21   \*\*Ho                                    mangiat-a    l-a                    mel-a.  
 have.1SG                                   eaten-FSG    the-FSG             apple-F

The relevant part of the structure is presented in (22):



D’Alessandro and Roberts build on the distinction between Agree, which is a syntactic operation taking place at narrow syntax, and morphological insertion of inflexional material, which takes place in Phonological Form (PF), the module where morphological insertion takes place. The idea is that only if two elements that have entered into an Agree relation are Spelled-Out together (Chomsky 1995) they belong to the same phonological phrase, and can therefore receive the same morphological specification. They propose a condition on the morphophonological realization of agreement (D’Alessandro and 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.

In sum, (23) means that the domain into which agreement can take place at PF is mapped directly from syntax. If the participle and the object are in the same phonological domain, they “see” each other’s values, and they can received the same agreement. In the case in which they belong to two different domains, they won’t be able to retrieve the information about agreement on the other element, and a default ending will be inserted.

For transitive verbs, the external argument is merged in SpecvP and v hosts the participle. At Spell-out, if the object has not moved to the same domain where the participle is, it will belong to a different phonological phrase than the past participle. Given the Condition on morphophonological realization of agreement in (23), it will not be possible to insert the same ending on the participle as the object. A ending (masculine singular) will then be inserted on the participle.

Consider now the contrast between the following examples, with spell-out domains corresponding to phonological phrases are represented:

Italian

24	a	Ho	mangiat-o	l-a	mel-a.
		have.1SG	eaten-MSG	the-FSG	apple-FSG
				↓	
	b**	Ho	mangiat-a	la	mela.
		have.1SG	eaten-FSG	the-FSG	apple-FSG
		‘I have eaten the apple.’			

In (24), *La mela* belongs to a different phonological domain than *mangiato*. This is the reason why the participle cannot receive a feminine singular specification, but must receive the default ending instead.

In the case of unaccusative verbs, *v* is generally argued to be defective. Specifically, this means that the sentence in which it occurs constitutes a single phase, inasmuch as there is only one domain for the whole sentence and not a lower phase in the *v*(erb) phrase. We therefore expect agreement between the internal argument (which is also the subject in unaccusative verbs) and the participle independently of their position. This prediction is indeed borne out:

25	a.	Sono	arrivat-e	l-e	ragazz-e.
		are	arrived-FPL	the-FPL	girls-F
		‘The girls have arrived.’			

Passives and reflexives basically work the same way: if the participle (probe) and the nominal (goal) surface in the same phonological phrase, they will carry the same (*mutatis mutandis*) ending. If not, the participle will be assigned a default ending.

Object clitics trigger overt, morphologically realized agreement, because they move to the Spell-out domain of the participle, which means that they will belong to the same phonological phrase as the past participle: they will trigger overt morphological agreement with the participle. In other words, the idea developed in D’Alessandro & Roberts (2008) is that what matters is whether the past participle and the element it agrees with end up in the same phonological domain or not. If they do, we see overt morphological agreement. If they do not, we see default agreement.

However, the case of old Italian is somewhat problematic for this analysis, since participles do agree with the *in situ* internal argument, as in example (26).

Old Italian (Novellino 18, 15-16)

26 mio padre ha offert-i duomila march-i  
my father has offered-MPL two.thousand marks-MPL  
'my father has offered two thousand marks'

One possible explanation for this pattern comes from word order: in older stages of the language, and importantly still at the time of the writing of the *Novellino* (viz. fifteenth century), from which these examples are taken, word order was rather different from that of modern Italian. In particular, many elements could be scrambled in front of the past participle (see Franco 2009; Benincà and Poletto 2010), suggesting that the participle itself occupied a lower position in the clause. See for instance the following sentences from thirteenth-century Italian:

27 Old Italian (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 in old (Tuscan) Italian the past participle surfaces in the same Spell-out domain as the internal argument, as it stays low, possibly in the head of the lexical VP. 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.

There are other exceptions to the agreement generalization, in addition to the Old Italian data we just saw. In some Italo-Romance dialects it is possible to have participial agreement with an *in situ* internal argument as long as the argument is plural, as in (28), an example of omnivorous participial agreement to which we will return in greater detail below.

Arielli, Abruzzo

28 So magnitə ddu melə.  
am eaten.PL two apples  
'I ate two apples.'

French agreement patterns are basically the same as those of Italian, but they also present some divergence from Italian. In French, agreement also obtains between the past participle and moved wh-objects:

French (Kayne 2000 :26)

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

In (29), the wh- object *combien de tables* has been moved and agreement with *repeintes* arises. This kind of agreement is not possible in standard Italian, but it was in older stages of the language. Below follow examples of standard vs old (Tuscan) Italian:

Italian

- 30 Mi chiedo quanti tavoli Paul abbia ridipint-o / \*\*ridipinti.  
me= ask how.many tables-M Paul has.SUBJ repainted-MSG repainted-MPL  
'I wonder how many tables Paul has repainted'

Old Italian (Novellino 1, 41-42)

- 31 le pietre [...] avevano perdut-a loro virtude  
the stones-F had.3.PL lost-FSG their virtue-F  
'the stones had lost their virtue'

Modern spoken French has arguably losing participial agreement completely and is moving towards the Spanish-style system. In any case, in standard written French agreement between a wh-object and a participle is obligatory, as in old Italian. Observe furthermore that in French gender agreement of the participle with 1<sup>st</sup> and 2<sup>nd</sup> person clitic pronouns is obligatory, and not optional like in Italian, where e.g. *ti ho vista*-FSG and *ti ho visto*-MSG are both accepted. Last, unlike in Italian, French does not show agreement in causative constructions, as illustrated in (32):

French (Belletti 2017:38)

- 32 a. Un pantalon a été fait faire (par Marie)  
a pant.MSG has been made.MSG make (by Marie)  
b. Une jupe a été fait(\*\*e) faire (par Marie)  
a skirt has been made.MSG(FSG) make (by Marie)

Compare (32) to its Italian counterpart in (33):

Italian

- 33 a. Un pai-o di pantaloni è stat-o fatt-o fare da Maria  
a pair-MSG of trousers is been-MSG made-MSG make by Maria

- b. Una gonna è stat-a fatt-a fare da Maria  
 a skirt.FSG is been-FSG made. FSG make by Maria

The difference between French and Italian agreement patterns remain an open issue.

#### 4.2 Unaccusatives

As we saw, in *Minimalist Inquiries* (1998/2000) Chomsky takes the step of finally dissociating agreement from movement also formally, through the formulation of Agree.

A theory of agreement based on structural precedence, like c-command can very straightforwardly account for agreement in inversion constructions, or with post-verbal subjects in Romance. Take for instance the following example from Romanian, in (34): the subject of unaccusatives is underlying generated as the object and it does not appear to have moved given its postverbal position. Yet, it shows agreement with the finite verb. Under the spec-head theory of agreement, the only way to analyse this simple sentence was to postulate the presence of a silent expletive subject (*pro*) in the preverbal subject position (SpecTP) which formed a representational chain with the *in situ* subject (cf., among others, Rizzi 1982; Belletti 1982).

#### Romanian

- 34 astăzi se nasc mulți băieți  
 today REFL are.born.3PL many boys  
 ‘Today many boys are being born’

With Agree, this agreement pattern follows straightforwardly: the finite verb searches for (probes) a DP, it finds the subject in its c-command domain, and then Agrees with it.

### 5. Morphological agreement

So far we have treated agreement in syntactic terms alone. We now turn to the other definition of agreement, namely the morphological one. In the introduction, we gave the first definition of agreement as “co-variance of a semantic or formal property of one element and a formal property of another” (Steele 1978:610). This definition focuses more on the marking of an agreement relation between two elements than on the agreement relation itself. Morphological agreement refers in fact to the marking of agreement on syntactic items rather than to the syntactic operation or the structural configuration that holds between them. A second meaning of “morphological agreement” refers instead to the full inflexional paradigm of a lexical entry, like for instance the whole set of declension endings of a noun in Latin, or the whole set of finite verb conjugation suffixes in Romanian. This definition is further away than the previous one from the syntactic, operation-like definition we have



considered in the first part of this article. The set of all morphological inflexional elements characterizing a verb, a noun, or an adjective, is also called “agreement”. This particular meaning is what we refer to when we talk about “rich agreement”: a language has rich verbal agreement if it has a large set of non-syncretic endings for the finite verb, for instance. Rich agreement has had a very important role in linguistic theory, and for this reason it will be discussed in this chapter<sup>2</sup>.

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.

### 5.1 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 inflexional verbal morphemes, and that there are at least some different inflexional morphemes in the paradigm. A definition of rich agreement has recently been given by Koenenman and Zeijlstra (2014) and is reproduced in (35):

- 35 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 ‘dedicated, differentiated inflexional morphology’.

The observation that rich agreement ‘licenses’ null subjecthood has been around since the beginning of modern linguistic thinking. The underlying intuition is that if you can retrieve the information about the subject from the verb inflexion, you do not need to express the subject overtly. This correlation has been observed in several languages. In Brazilian Portuguese, for instance, where the rich agreement paradigm has been radically reduced, witness Table 19.1 (cf. Nuñez 2011:17), null subjects are also more restricted. As for overt subjects, first- and second-person pronouns are almost always overt, while third-person subjects are still omitted, but much less than in European Portuguese.

Table 19.1: Verb agreement paradigm in (colloquial) Brazilian Portuguese, present indicative of *cantar* ‘to sing’

<i>eu</i> (I)	<i>canto</i>	Person:1; Number: SG
---------------	--------------	----------------------

<sup>2</sup> Romance languages offered an important empirical basis also regarding generalizations on the verb roots. See for instance Maiden (2004, 2012, 2018).

---

<i>você</i> (you.SG)		
<i>ele</i> (he)	<i>canta</i>	Person: default; Number :default (= 3SG)
<i>ela</i> (she)		
<i>a gente</i> (we)		

---

<i>vocês</i> (you.PL)		
<i>eles</i> (they.M)	<i>cantam</i>	Person: default; Number: PL (= 3pl)
<i>elas</i> (they.F)		

---

Observe however that despite the fact that first-person singular has a dedicated form, first- and second-person pronouns are almost never omitted. This suggests that the 1-to-1 correspondence between presence of inflexion and absence of an overt subject is not so straightforward.

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

36 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 and Varejão 2013:107)

The results of the inquiry are summarized in the Table 19.2:

Table 19.2: Null (vs overt) subjects in transcribed interviews according to structural context (adapted from Barbosa, Duarte, and Kato, 2005:24, in Duarte and Varejão 2013:108)

Pattern	European Portuguese	Brazilian Portuguese
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%)

Table 19.2 shows that overt subjects do not correlate only with the loss of agreement. Diachronically, the slow disappearance of pro-drop might have correlated with an impoverishment of the inflexional

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 is no longer pro-drop is French, whose inflexional system has been 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 inflexion and the loss of nominative assignment under government. This also explains why null subjects are lost in inversion structures during the sixteenth century. Together both causes led to the complete disappearance of null subjects in French.

Within the generative framework, the correlation between null subjecthood and agreement inflexion 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 (see also Chomsky 1981). The idea is that languages with rich agreement have a rich Infl head that can license an empty pronominal category (viz. *pro*) that is present only in null-subject languages. More specifically, Rizzi proposes that Infl in null subject languages governs the subject and it is rich enough to license the subject if empty by virtue of an empty pronominal on Infl coindexed with the empty subject. Consequently, the difference between (37a) and (37b) is that in Italian Infl is rich while in English it is not.

37 a        —     Verrà. (It.)

      b\*\*Will     come. (Eng.)

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 lack agreement inflexion altogether (Huang 1984). According to Huang, then, languages with no agreement (no Agr) can also license null subjects. A middle way between these two views is offered by Jaeggli and Safir (1989), who propose the Morphological Uniformity Hypothesis, according to which null subjects are permitted in all and only languages with morphologically uniform inflexional 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 assumed, with some substantial modification, by Alexiadou and Anagnostopoulou (1998). They compare the null-subject status of Germanic, Celtic, Greek, and Romance languages, and propose that a full agreement paradigm has a separate lexical entry to that of the verb. In particular, they take rich agreement to be pronominal, insofar as each of the endings 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 carries a D-feature with which it can satisfy the requirement on Infl (viz. the Extended Projection Principle) that each clause must have a subject. This means that pro-drop languages do not need a subject to satisfy the Extended Projection Principle: they can satisfy it via verb movement. This approach captures the correlation between being a pro-drop language, having rich agreement, and having movement of the verb to Infl.

A direct consequence of having languages with a D-feature that can satisfy the Extended Projection Principle is that subjects in the canonical preverbal position, SpecIP, have a different status than their corresponding subjects in non pro-drop languages. More precisely, preverbal subjects in rich agreement languages are said to be in a left-peripheral positions (viz, in an A'-position) outside of the sentential core (IP), and are therefore not in SpecAGR within the sentential core (which is the landing position of the subject in early Minimalism, as we saw in the previous section). Alexiadou and Anagnostopoulou further demonstrate that subjects in rich agreement languages with verb movement to Infl do indeed not surface in a canonical preverbal subject position, but are rather topicalized. To support their claim, they present empirical evidence that subjects in null-subject languages are topics, and in a clitic-left dislocation configuration. The first piece of evidence they offer is that in Romance (as well as in Greek and many other languages) subjects can precede adverbs and *if*-clauses. For instance, Italian allows sentences like (38):

Italian

38 Gianni ieri           dopo aver mangiato   ha fatto una passeggiata  
 Gianni yesterday after have eaten       has made a walk  
 ‘After having eaten, Gianni took a walk yesterday’

From the comparison between the Italian sentence in (38) and its English counterpart it appears evident that Italian, a null-subject language, offers the possibility of having the subject very far from the verb (on T). The same does not hold for English, where the subject must occur next to the finite verb. Alexiadou and Anagnostopoulou (1998) further remark that this generalization does not hold for Spanish, where the subject must occur next to the finite verb like in English.

A second piece of evidence they offer comes from binding facts. Alexiadou and Anagnostopoulou first introduce the generalization, originally put forward in Montalbetti (1984) that overt personal pronouns cannot be bound variables in null-subject languages, as shown in (39) for Catalan:

Catalan (Alexiadou and Anagnostopoulou 1998:509)

39 \*\*Tots els estudiants<sub>i</sub> es=pensen que ells<sub>i</sub> aprovaran  
 all the students they=think that they pass

If the subject appear in post-verbal position, binding is possible, as in (40). Following Solà (1992) and Barbosa (1994), Alexiadou and Anagnostopoulou conclude that this is the case because only subjects in post-verbal position are in an A-position, unlike those in preverbal position.

Catalan (Alexiadou and Anagnostopoulou 1998:510)

40 Tots els jugadors<sub>i</sub> estan convencus que guanyaran ells<sub>i</sub>  
 all the players are persuaded that win they  
 ‘All the players believe that they will win’

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

5.1.1 Agreement and subject clitics

Contrary to what intuition might suggest, the presence of subject clitics does not entail non null-subjecthood. If this were the case, we would expect SCLs to be overt pronominals, always overtly expressed.

If SCLs were overt pronominals, and would therefore count as “subjects”, we would expect them to be more frequent in languages with little or no verbal inflexion (like in the case of Brazilian Portuguese). This generalization is not borne out, as we will see below.

If, on the other hand, they were inflexional, agreement elements, we might expect them to replace agreement inflexion completely. This also is not the case.

Whether subject clitics are inflexional or pronominal elements is discussed extensively by Rizzi (1986). Before looking at Rizzi’s diagnostics, let us first have a look at the distribution of subject clitics, and their co-occurrence with inflexion (see further the discussions in §5.2 and §23.2.1). Roberts (2010), but see also Kayne (1975), presents a classification of languages according to the distribution of subject clitics and verbal inflexion. He identifies 4 language types:

- 41 a SCL [+agr]      V [+agr]
- b SCL [+agr]      V [-agr]
- c SCL [-agr]      V [+agr]
- d SCL [-agr]      V [-agr]

In (41) [+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 (38a) is a fully redundant null subject system in which clitics and the verb endings co-vary. An example of such a language is Florentine in (42):

Florentine, Roberts (2010)

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

Languages like (41b) are non-null-subject systems in which the verbal inflexion is unable to identify a null subject, and the pronominal paradigm is fully realized. One such language is French:

43 French (Roberts 2010)

<i>je dors</i>	(dɔʁ)	I sleep
<i>tu dors</i>	(dɔʁ)	you.SG sleep
<i>il/elle dort</i>	(dɔʁ)	he/she sleeps
<i>nous dormons</i>	(dɔʁ.mɔ̃)	we sleep
<i>vous dormez</i>	(dɔʁ.me)	you sleep
<i>ils/elles dorment</i>	(dɔʁ)	they.M/ they.F sleep

Languages like (41c) are null-subject systems with fully differentiated verbal inflexion but syncretism and gaps in the clitic paradigm. One example is Comasco, a northern Italian dialect spoken in Como:

44 Como (Roberts 2010)

- a *dorm-i*  
sleep-1SG  
'I sleep'
- b *ta dorm-at*  
SCL.2SG sleep-2SG  
'You sleep'
- c *al/la dorm-a*  
SCL.3SG.M/SCL.3SG.F sleep-3SG

- ‘He/She sleeps’
- d dorm-um  
sleep-1PL  
‘We sleep’
- e dorm-uf  
sleep-2PL  
‘You sleep’
- f dorm-an  
sleep-3PL  
‘They sleep’

The last group of languages illustrated in (41d) show a full set of forms that together form a single, complementary (or near-complementary) pattern.

45 Carrara (Roberts 2010)

- a dorm  
SCL sleep  
‘I sleep’
- b t dorm  
SCL.2SG sleep  
‘You sleep’
- c i/al dorm  
SCL.3M/SCL.3F sleep  
‘He/She sleeps’
- d a durm-in  
SCL sleep-1PL  
‘We sleep’
- e durm-it  
sleep-2PL  
‘You sleep’
- f i/al dorm-n  
SCL.3M/SCL.3F sleep-3PL  
‘They sleep’

Roberts (2010) treats subject clitics as agreement inflexion. In fact, most subject clitics in Italian varieties are inflexional, not pronominal, as shown by Rizzi (1982). He proposes a number of

diagnostics to distinguish between pronominal and inflexional subject clitics. His first observation is that subject clitic paradigms are often defective, while the absence of a subject pronoun is quite rare. Second, 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 second conjunct, as shown in (46):

46 You eat and drink.

In the case of subject clitics in most Italian varieties such omission is not possible. In the Bergamascan dialect of Grumello del Monte, for instance, it is not possible to omit the subject clitic from the second conjunct, as shown in example (47). Observe that the clitic paradigm is defective, and Grumellese lacks a first-person subject clitic.

Grumello del Monte (Manzini and Savoia 2005,I:152)

- 47 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, by contrast, coordinated subject clitics can be omitted, since, unlike those found in Italo-Romance dialects, they are pronominal, as shown in (48).

French

- 48 Il mange et boit.  
 he-3SG eats and drinks  
 ‘He eats and drinks’

The second observation concerns the fact that, while inflexional subject clitics can co-occur with negative quantifiers, subject pronouns cannot. In (49), for instance, the subject clitic can co-occur with *nigy* ‘nobody’:

49 Grumello del Monte (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:

#### French

50 \*\*Personne il ne fait cela.

nobody he.3SG NEG does that

‘Nobody does that.’

Finally, agreement markers may follow preverbal negation, but pronouns cannot. In (51) negation precedes the subject clitic, which is therefore an agreement marker, whereas in (52) we are dealing with a genuine pronoun, as in (50), with the result that negation can only follow the pronoun.

#### Venetan

51 No el magna. (Ven.)

NEG SCL.3SG eats

‘He doesn’t eat’

#### French

52 Il ne mange pas.

he.3SG NEG eats NEG

‘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 from this conclusion is that while northern Italian varieties are pro-drop languages with rich inflexion, instantiated by subject clitics, languages such as French are genuine non pro-drop languages (Rizzi 1986; Brandi and Cordin 1989).

Many studies have focused on subject clitics especially in relation to establishing their underlying, base positions and their surface positions. However, given that they are phonologically reduced, it is quite difficult to find evidence for their original, underlying position. One further important aspect of the debate on clitics that we should finally mention here is the theory advanced by Roberts (2010) that subject clitics represent the spell-out of an Agree relation between T, the inflexional core of the sentence. According to Roberts, dislocation is only apparent inasmuch as subject clitics are

inflexional, ultimately the spell-out of a subset of features of the subject on T. As such they are the result of an Agree operation and have nothing to do with pronouns and case.

## References

- Alexiadou, A. and Anagnostopoulou, E. (1998). 'Parameterizing AGR: Word Order, V-Movement, and EPP Checking', *Natural Language and Linguistic Theory* 16:491-539.
- Baker, M. (1985). 'The Mirror Principle and Morphosyntactic Explanation', *Linguistic Inquiry* 16:373-416.
- Barbosa, P. (1994). 'A new look at the Null Subject Parameter', Paper presented at Console III, Venice.
- Barbosa, P., Duarte, I. and Kato, M. (2005). 'Null subjects in European and Brazilian Portuguese', *Journal of Portuguese Linguistics* 4:11-52.
- Belletti, A. (1982). 'Morphological passive and pro-drop: The impersonal construction in Italian', *Journal of Linguistic Research* 2:1-34.
- Belletti, A. (1990). *Generalized verb movement*. Turin: Rosenberg & Sellier.
- Belletti, A. (2017). 'Labeling (Romance) causatives'. In Aboh, E. *et al* (eds), *Elements of Comparative Syntax. Theory and Description*. Berlin: Mouton de Gruyter.
- Benincà P. and Poletto, C. (2010). 'L'ordine delle parole e la struttura della frase'. In Renzi L. and Salvi G. (eds.), *Grammatica dell'italiano antico*. Bologna: Il Mulino, 27-75.
- Brandi, L. & P. Cordin. (1989). 'Two Italian dialects and the null subject parameter'. In Jaeggli, Osvaldo & Ken Safir (eds.), *The Null Subject Parameter*. 111-142.
- Chomsky, N. (1956). 'Three models for the description of language', *IRE Transactions on Information Theory* 2:113-124.
- Chomsky, N. (1957). *Syntactic structures*. Janua Linguarum 4. The Hague: Mouton.
- Chomsky, N. (1965). *Aspects of the theory of syntax*. MIT Research Laboratory of Electronics Special Technical Report 11. Cambridge, MA: MIT.
- Chomsky, N. (1981). *Lectures on Government and Binding: The Pisa Lectures*. Dordrecht: Foris.
- Chomsky, N. (1982). *Some concepts and consequences of the theory of government and binding*. Cambridge MA: MIT Press.
- Chomsky, N. (1993). 'A Minimalist Program for Linguistic Theory'. *MIT occasional papers in linguistics*, 1-67.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge MA: MIT Press.
- Chomsky, N. (1998/2000). 'Minimalist Inquiries. The Framework'. *MIT Working Papers in Linguistics*, MIT. Reprinted in: Martin, R., Michaels, D. and Uriagereka, J. (eds), *Step by step: Essays in honor of Howard Lasnik*. Cambridge, MA: MIT Press.
- D'Alessandro, R. (2015). Null subjects. In Fábregas, A., Mateu, J. and Putnam, M. (eds), *Contemporary Linguistic Parameters*. London: Bloomsbury Press, 201-226.

- D'Alessandro, R. and Ledgeway, A. (2010). 'The Abruzzese T-v system: feature spreading and the double auxiliary construction'. In D'Alessandro, R., Ledgeway, A., and Roberts, I. (eds), *Syntactic variation. The dialects of Italy*. Cambridge, Cambridge University Press.
- D'Alessandro, R. and Roberts, I. (2008). 'Movement and agreement in Italian past participles and defective phases', *Linguistic Inquiry* 39:477-491.
- D'Alessandro, R. and Scheer, T. (2015). 'Modular PIC', *Linguistic Inquiry* 46:593-624.
- Duarte, M. E. and Varejão, F. (2013). 'Null subjects and agreement marks in European and Brazilian Portuguese', *Journal of Portuguese Linguistics*, 12:101–123. (DOI: <http://doi.org/10.5334/jpl.69>)
- Emonds, J. 1978. 'The Verbal Complex V'-V in French', *Linguistic Inquiry* 9:151-175.
- Franco, I. (2009). *Verbs, Subjects and Stylistic Fronting*. PhD Dissertation, University of Siena.
- Huang, C.-T. J. (1984). 'On the distribution and reference of empty pronouns'. *Linguistic Inquiry* 15:531–74.
- Jaeggli, O. and Safir, K. (1989). *The null subject parameter*. Dordrecht: Foris
- Katz, J. and Postal, P. (1964). *An integrated theory of Linguistic Descriptions*. Cambridge MA: MIT Press.
- Kayne, R. (1975). *French Syntax. The transformational cycle*. Cambridge MA: MIT Press.
- Kayne, R. (1989). 'Facets of Romance Past Participle Agreement'. In Benincà, P. (ed.), *Dialects Variation and the Theory of Grammar*. Dordrecht: Foris, 85-103. Reprinted in Kayne, R. (2000). *Parameters and Universals*. Oxford: Oxford University Press.
- Koenenman, O. and Zeijlstra, H. (2014). 'The Rich Agreement Hypothesis Rehabilitated'. *Linguistic Inquiry* 45:571 – 615.
- Lammoglia Duarte, M. E. (1995). *A perda do princípio "Evite Pronome" no português brasileiro*. PhD Dissertation, UNICAMP, São Paulo, Brazil.
- Lasnik, H. (2001). 'A note on the EPP'. *Linguistic Inquiry* 32:356-362.
- Ledgeway, A. (2012). 'From Latin to Romance: configurationality, functional categories and head-marking'. *Transactions of the Philological Society* 110.3:122-142.
- Maiden, M. (2004). 'Morphological autonomy and diachrony'. *Yearbook of morphology 2004*: 137–175.
- Maiden, M. (2012). 'A paradox? The morphological history of the Romance present'. In S. Gaglia & Hinzelin, M.-O. (eds.), *Inflection and word formation in Romance languages*, Amsterdam: John Benjamins.
- Maiden, M. (2018). *The Romance Verb: Morphomic structure and diachrony*. Oxford: Oxford University Press.
- Manzini, M. R. and Savoia, L. (2005). *I dialetti italiani e romanci. Morfosintassi generativa*. Turin: Edizioni dell'Orso.
- Miller, G. and Chomsky, N. (1963). 'Finitary models of language users'. In D. Luce (ed.), *Handbook of Mathematical Psychology*. John Wiley & Sons, 2—419.

- Montalbetti, M. (1984). *After binding. On the interpretation of pronouns*. PhD dissertation, MIT.
- Nuñez, J. (2011). 'On the diachronic reanalysis of null subjects and null objects in Brazilian Portuguese. Triggers and consequences'. In Rinke, E. and Kupisch, T. (eds), *The Development of Grammar: Language acquisition and diachronic change. In honour of Jürgen M. Meisel*, 331–354.
- Pollock, J.-Y. (1989). 'Verb Movement, Universal Grammar, and the Structure of IP'. *Linguistic Inquiry* 20:365-424.
- Postal, P. (1966). 'On so-called 'pronouns' in English'. In Dinneen, F. (ed.), *Georgetown University monograph series on languages and linguistics*. Washington, DC: Georgetown University Press 19, 177–206.
- Richards, M. (2007). 'On feature inheritance: an argument from the phase impenetrability condition'. *Linguistic Inquiry* 38:563—572.
- Rizzi, L. (1982). *Issues in Italian Syntax*. Dordrecht: Foris.
- Rizzi, L. (1986). 'On the Status of Subject Clitics in Romance'. Jaeggli, O. and Silva Corvalan, C. (eds), *Studies in Romance Linguistics*. Dordrecht: Foris Publications.
- Roberts, I. (1993). *Verbs and Diachronic Syntax. A Comparative History of English and French*. Dordrecht: Kluwer.
- Roberts, I. (2010). *Agreement and head movement: Clitics, incorporation, and defective goals*. Cambridge MA: MIT Press.
- Rothstein, S. (1983). *The Syntactic Forms of Predication*. PhD dissertation, MIT.
- Salvi, G. and Renzi, L. (2010). *Grammatica dell'italiano antico*. Bologna: Il Mulino.
- Solà, J. (1992). *Agreement and Subjects*. PhD dissertation, Universitat Autònoma de Barcelona.
- Taraldsen, K. T. (1980). *On the Nominative Island Constraint, Vacuous Application and the That-Trace Filter*. Indiana University Linguistics Circle. Bloomington: Indiana.
- Vance, B. (1989). *Null subjects and syntactic change in Medieval French*. PhD dissertation, Cornell University.
- Williams, E. (1980). 'Predication'. *Linguistic Inquiry* 11:203-238.

