

## ROMANCE PAST PARTICIPLE AGREEMENT

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### 1. INTRODUCTION

#### 1.1. PAST PARTICIPLE AGREEMENT IN ITALIAN

In Standard Italian past-participle agreement is associated with:

- internal arguments that are promoted to subject position (passives, unaccusatives, medio-passive *si*) (1a, b, c);
- reflexive constructions (argued to also involve promotion of the “antecedent” of the reflexive [Kayne (1988)]) (1d);
- preposed direct-object clitics.

- (1) a. *Le ragazze sono arrivate.*  
the girls-fem pl are arrived-FEM PL  
'The girls have arrived.'
- b. *Le ragazze sono state arrestate.*  
the girls-fem pl are been-FEMPL arrested-fem pl  
'The girls have been arrested.'
- c. *Si sono viste le ragazze.*  
SI are seen-femplthe-fem pl girls-fem pl  
'We have seen the girls/the girls have been seen.'
- d. *Le ragazze si sono guardate allo specchio*  
the girls selves are looked-fem pl at-the mirror  
'The girls have looked at themselves in the mirror.'
- e. *Le abbiamo salutate.*  
them-fem pl we-have greeted-fem pl  
'We have greeted them.'
- f. *\*Abbiamo salutate le ragazze.*  
have-1<sup>st</sup> pl greeted-fem pl the-fpl girls-fem pl  
'We have greeted the girls'

## 1.2. PAST PARTICIPLE AGREEMENT IN FRENCH

In French, past-participle agreement is mostly like in Italian, with one exception.

Wh-phrases:

- (2) *Je me demande combien de tables Paul a repeintes* [Fr]  
I refl ask how-many of tables-FPL Paul has repainted-fpl  
'I wonder how many tables Paul has repainted' [Kayne 2000:26]
- (3) a. *Mi chiedo quanti tavoli Paul abbia ridipinto* [It]  
to-me ask how-many tables-mpl Paul has-subj repainted-msg  
'I wonder how many tables Paul has repainted'
- b. *\*Mi chiedo quanti tavoli Paul abbia ridipinti* [It]  
to-me ask how-many tables-mpl Paul has-subj repainted-mpl

NB: Old Italian allowed for the agreement pattern in (3b)

Modern spoken French is losing pp agreement completely. It is moving towards the Spanish model.

## 1.3. PAST-PARTICIPLE AGREEMENT IN SPANISH, PORTUGUESE, RUMANIAN

In Spanish, Portuguese and Romanian past-participle agreement is like in English (i.e. no agreement) [from Loporcaro 1998:156]

- (4) a. *(la sopa) Pedro la ha comido/ \*-a* [Sp]  
the soup Pedro it has eaten-msg /fsg  
b. *(a carta) o João a tem lido/ \*-a* [Pt]  
the letter the João has read-msg/fsg  
c. *(pe Ana) el a văzut-o* [Rum]  
Anna he has seen-msg
- (5) a. *Pilar no ha venido/ \*-a* [Sp]  
Pilar-fsg not has come-msg fsg  
b. *Os deuses têm todos morrido/ \*os* [Pt]  
the gods has all dead-msg mpl  
c. *Ana și Nicu au venit/ \*-ți ieri* [Rum]  
Ana and Nicu have come-msg mpl yesterday

[Pp agreement does obtain in passive constructions]

#### 1.4. BELLETTI'S GENERALIZATION

Belletti (2001:17/2005): "A crucial piece of data concerning the phenomenon of past participle agreement in Romance is that no variety allows for the past participle to agree with the subject of intransitive/unergative and transitive verbs [...] Any treatment of the computation involved in past participle agreement must account for this fact."

#### 1.5. PAST-PARTICIPLE AGREEMENT IN EASTERN ABRUZZESE (EA)

The past participle (pp) in EA **always** agrees with a plural DP, be it the subject or the object [see D'Alessandro & Roberts (2010)]:

- (6) a. *Giuwanne a pittate nu mure.*  
**John-sg has-3<sup>rd</sup> sg/pl painted-pp sg a wall**  
'John has painted a wall' [sg SUBJ-sg OBJ]
- b. *Giuwanne a pittite ddu mure*  
**John-sg has-3<sup>rd</sup> sg painted-pp pl two walls**  
'John has painted two walls' [sgSUBJ-plOBJ]
- c. *Giuwanne e Mmarije a pittite nu mure*  
**John and Mary-pl have-3<sup>rd</sup> sg/pl painted-pp pl a wall**  
'John and Mary have painted a wall' [pl SUBJ- sg OBJ]
- d. *Giuwanne e Mmarije a pittite ddu mure*  
**John and Mary-pl have-3<sup>rd</sup> sg/pl painted-pp pl two walls**  
'John and Mary have painted two walls' [pl SUBJ-pl OBJ]

Observe that pp agreement with a plural subject also takes place when an object clitic is present in the sentence:

- (7) *Giuwanne e Marije l'a pittite, (lu mure)*  
**John and Mary-pl it-sg-have painted-pp pl the wall**  
'John and Mary have painted it, the wall'

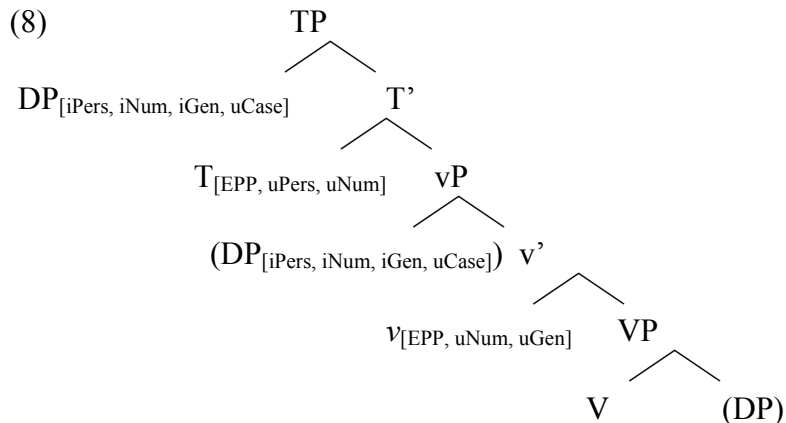
Problems that Abruzzese poses:

1. Belletti's (and Kayne's) generalization
2. Kayne's analysis of pp agreement as movement (agreement with the object)

## 2. ANALYSING PP AGREEMENT

### 2.1. TRANSLATING KAYNE INTO MINIMALISM:

The transitive structure we can adopt:



Trying to translate Kayne into Minimalism:

- $v$  probes the  $\phi$ -features of the VP-internal DP;
- DP has an unvalued Case feature and so is an active goal. DP moves to SpecvP since  $v$  also bears an EPP feature.
- DP also has a person feature and T has unvalued person and number features  $\Leftrightarrow$  T probes for DP.
- T also has an EPP feature, and so DP raises to SpecTP. DP's Case feature is checked by T since all of DP's features are checked by T at this point.

NB: In Minimalism: Agree and Move are independent, so we cannot capture what Kayne proposes and make the following

#### **(WRONG) PREDICTION**

the unmoved direct object of a transitive verb will show morphological agreement with the past participle, since  $v$  Agrees with that object (and licenses its Case feature). For Standard Italian, this is incorrect:

- (9) \**Ho mangiata la mela*  
I-have eaten-FEM SG the-FEM SG apple-FEM SG  
'I have eaten the apple'

## 2.2. ALTERNATIVE PROPOSAL

**CONDITION ON THE MORPHOPHONOLOGICAL REALISATION OF AGREEMENT**  
(D'Alessandro & Roberts 2008:482)

- A. Given an Agree relation A between Probe P and Goal G, morphophonological agreement between P and G is realised 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.

### **PIC (PHASE IMPENETRABILITY CONDITION)**

- (10) For a strong phase HP with head H, the domain of H is not accessible to operations outside HP; only H and its edge are accessible to such operations Chomsky (2001:13).

### **THIS MEANS THAT:**

Morpho-phonological agreement is sensitive to the PIC.

Q1. How exactly does it work?

Q2. How likely is this?

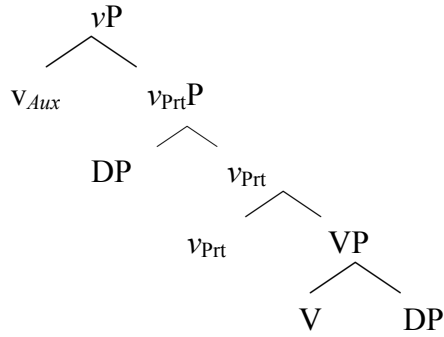
A1: 2.3. ff.

A2: Other phenomena that seem to be PIC sensitive (for example, RF)

## 2.3. TRANSITIVE VP

I assume the following structure, involving an iterated vP, for periphrastic tenses in Romance generally (cf. Pollock 1989):

(11)



- the external argument is merged in Spec<sub>vPrtp</sub>.
- auxiliary= raising predicate which selects v<sub>Prtp</sub>P (see Ross (1969)).
- v<sub>Prtp</sub> assigns the external  $\theta$ -role to the external argument and Agrees with the direct object in  $\phi$ -features, valuing the direct object's Case feature  $\Rightarrow$  v<sub>Prtp</sub> heads a non-defective phase (Chomsky (2001)).

**QUESTION:** Why does the past participle not show agreement with the postverbal object?

#### CINQUE'S OBSERVATION

Cinque (1999:102-3; 146ff.; see also Belletti 2001:30): active transitive past participles must raise over a certain class of manner adverbs in Italian:

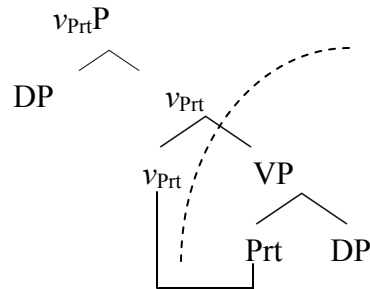
- (12) a. *Hanno accolto bene il suo spettacolo solo loro.*  
 have-PL received well the his show only they
- b. \**Hanno bene accolto il suo spettacolo solo loro.*  
 have well received the his show only they  
 'They alone have well received his show.'

Passive participles may remain in a lower position:

- (13) a. *Questo genere di spettacoli è sempre stato bene accolto.*  
 this kind of shows is always been well received
- b. *Questo genere di spettacoli è sempre stato accolto bene.*  
 this kind of shows is always been received well  
 'This kind of show has always been well received'

**PROPOSAL:** Obligatory raising of the participle in (12a) = movement to v<sub>Prtp</sub> in (14)

(14)



⇒ **AT SPELL OUT THE PARTICIPLE OCCUPIES  $v_{Prt}$ .**

Since  $v_{Prt}$  heads a non-defective phase, its complement VP is sent to PF on a distinct cycle.

⇒ Overt morphophonological agreement in Standard Italian is constrained by this version of the PIC.

(15) *Ho mangiato la mela.*  
I-have eaten-masc sg the-fem sg apple-fsg  
'I have eaten the apple.'

(16) \**Ho mangiata la mela.*

## 2.4. NON-TRANSITIVE $vP$

Let us now consider the cases in (1):

### 2.4.1. UNACCUSATIVES

(17) *Le ragazze sono arrivate.*  
the girls-fem pl are arrived-fem pl  
'The girls have arrived.'

- $v_{Prt}$  is not the head of a non-defective phase: there is no external argument and  $v_{Prt}$  is unable to Case-license the object DP (see Burzio's generalisation (Burzio 1986:178f.), and Kratzer (1989)).
  - Even if the participle raises to  $v_{Prt}$ , the participle and the object are contained in the complement of the same minimal phase head (in this case the TP).
- ✓ Morphophonological agreement between the participle and the direct object is possible.

### 2.4.2. PASSIVES

(18) *Le ragazze sono state arrestate.*  
the girls-fem pl are been-fem pl arrested-fem pl  
'The girls have been arrested.'

- $v_{\text{Prt}}$  is the head of a defective phase
- ✓ A-B predict that the participle and the direct object will show overt agreement.

### 2.4.3. REFLEXIVES/IMPERSONALS

(19) *Si sono viste le ragazze.*  
SI are seen-FEM PL the-FEM PL girls-FEM PL  
'We have seen the girls/the girls have been seen.'

(20) *Le ragazze si sono guardate allo specchio*  
the girls selves are seen-FEM PL at-the mirror  
'The girls have seen themselves in the mirror.'

- Owing to the presence of *si*,  $v_{\text{Prt}}$  cannot be a non-defective phase head (for similar ideas, see Belletti (1982), Burzio (1986), Cinque (1988), Reinhart & Siloni (1999), but see D'Alessandro (2007) for a slightly different approach).
- the participle and the object are in the complement of the minimal phase head
- ✓ A-B predict that the participle and the direct object will show overt agreement

### 2.4.4. OBJECT CLITICS

(21) *Le abbiamo salutate.*  
them-FEM PL we-have greeted-F PL  
'We have greeted them.'

- Past-participle agreement is triggered by clitic-movement (Kayne (1989), Belletti (2001)).
- $v_{\text{Prt}}$  is clearly active and transitive, and so it is a non-defective phase head.
- The clitic moves to the higher  $v$  (Mavrogiorgos (2009), Roberts (to appear)). It is in the complement of the same phase head, C, as the raised participle at Spell Out.
  - ✓ Hence, by B, overt morphophonological agreement is expected.

## Q2: HOW LIKELY IS THAT?

Is this PIC sensitivity an isolated phenomenon?

No, other phonological morpho-phonological processes are sensitive to the PIC (raddoppiamento fonosintattico in EA, Biberauer & D'Alessandro 2006, 2010).

### 3. PP AGREEMENT IN ABRUZZESE

#### 3.1. THE DATA

The past participle (pp) in EA **always** agrees with a plural DP, be it the subject or the object [recall (6)]:

- (22) a. *Giuwanne a pittate nu mure.*  
**John-sg has-3<sup>rd</sup> sg/pl painted-pp sg a wall**  
'John has painted a wall' [sg SUBJ-sg OBJ]
- b. *Giuwanne a pittite ddu mure*  
**John-sg has-3<sup>rd</sup> sg painted-pp pl two walls**  
'John has painted two walls' [sgSUBJ-plOBJ]
- c. *Giuwanne e Mmarije a pittite nu mure*  
**John and Mary-pl have-3<sup>rd</sup> sg/pl painted-pp pl a wall**  
'John and Mary have painted a wall' [pl SUBJ- sg OBJ]
- d. *Giuwanne e Mmarije a pittite ddu mure*  
**John and Mary-pl have-3<sup>rd</sup> sg/pl painted-pp pl two walls**  
'John and Mary have painted two walls' [pl SUBJ-pl OBJ]

#### 3.1.1. QUESTIONS RAISED BY EA

How does past-participle agreement work, and why is it an exception to Belletti's generalization?

#### 3.1.2. TWO PRELIMINARIES REGARDING EA MORPHOLOGY

- PP in EA does not show gender inflection, but only number inflection
- Metaphony:

Final vowels are reduced to schwa, but (some) inflectional distinctions formerly carried by these are carried by height alternations in stem-internal vowels (presumably the reflex

of an earlier process of vowel harmony). This is pervasive in EA, as in many Central-Southern Italo-Romance varieties:

(23)

|    | SG   | PL  |
|----|--|---|
| a. | lu tone<br>The-sg thunder-sg               | Li tune<br>the-pl thunders-pl               |
| b. | esse jè bbelle<br>(s)he-sg is beautiful-sg | jisse jè bbille<br>they-pl are beautiful-pl |
| c. | jì so' magnate<br>I-sg am eaten-sg         | vu sete magnite<br>you-pl are eaten-pl      |

Thus, we have an -a (sg)/ -i (pl), -e/-i, -o/-u alternation within the word, not at the word ending (*magnate/magnite*). Metaphony applies throughout in EA (nouns, verbs, participles, adjectives, pronouns).

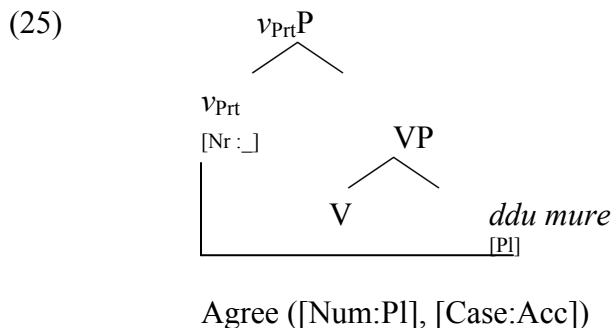
### 3.1.2. ONE THEORETICAL PRELIMINARY

- Chomsky (2005): Features may be inherited from a phase-head (e.g. C) by a non-phase-head (e.g. T); this is how T gets the  $\phi$ -features that make it a Probe (usually for the subject).
- ‘Ideally, transmission of Agree features should be a property of phase heads in general, not just of C. Hence  $v^*$  should transmit its Agree-feature to V’ (Chomsky, 2005)

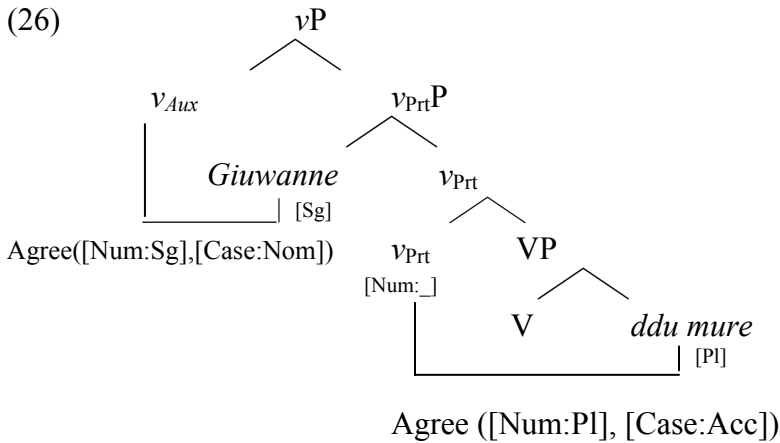
### 3.2. ANALYSIS

(24) *Giuwanne a pittite ddu mure*  
 John-sg has-3<sup>rd</sup> sg painted-pp pl two walls-pl  
 ‘John has painted two walls’

- VP is merged with  $v_{Prt}$ , which bears unvalued number-features and so probes the object inside VP:



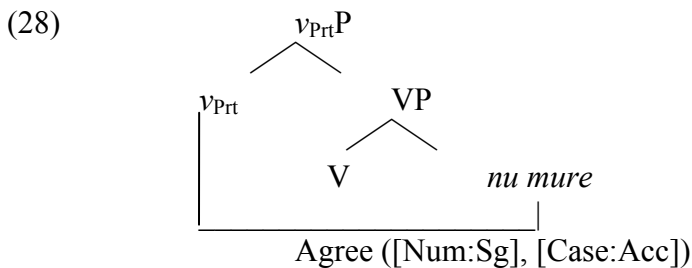
- The subject is merged in the spec, $v_{Prt}P$ . The auxiliary is merged in a higher  $v$ , which selects  $v_{Prt}$ :



If we have a plural subject and a singular object, as in (27), the past participle agrees with the subject.

- (27) Giuwanne e Mmarije a pittite nu mure  
**John and Mary-pl** have-3<sup>rd</sup> sg/pl **painted-pp pl** a wall  
 ‘John and Mary have painted a wall’ [pl SUBJ– sg OBJ]

The  $v_{Prt}P$  in (27) is as follows:

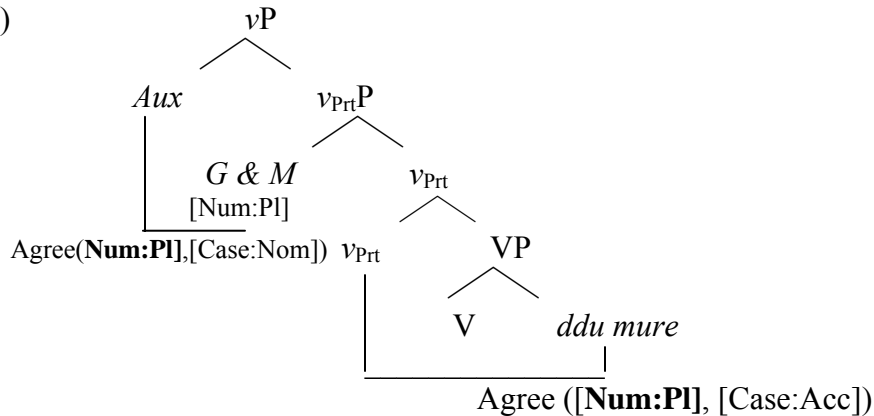


However: Sg is plausibly the Spellout of the unvalued [Num] feature, so the number feature on the object *nu mure* is unvalued, as such it can't value  $v_{Prt}$ 's [Num] in (28)

- [Num:\_]** on singular DPs

Following Chomsky (2005), feature-copying from a phase-head to a selected functional head is possible. In EA, the Pl-value of Num is copied from the higher  $v$  to  $v_{Prt}$ .

(29)



Here  $v_{Prt}$  shows up as plural, thanks to feature-copying from the higher (phase-head)  $v$ , which selects it.

Proposal: in EA,  $v_{Prt}$  doesn't have Num at all; this feature is always "inherited" from  $v_{Aux}$ ; valuation takes place before transfer, where a value is specified. In (3c/16) [Num:pl] is passed; in (3a,b) [Num:\_\_\_] is passed (in (3d) also [Num:Pl]).

**Q:** why does Abruzzese vPrt show agreement with the object while Italian doesn't?

**RECALL THE CONDITION ON THE MORPHOPHONOLOGICAL REALISATION OF AGREEMENT**

A. Given an Agree relation A between Probe P and Goal G, morphophonological agreement between P and G is realised 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.

What's the difference between Abruzzese and Italian?

The participle is in a higher position in Italian than in EA:

- (30) a.     *Le*    *so*                    *poche*        *capite*  
          it    am-1<sup>st</sup> sg        little    understood  
          'I understood it little'
- b.     ??? *L'ho*        *poco*    *capito*  
          it-have-1st sg    little    understood  
          'I understood it little'

- c. *L'ho capito poco*  
 it-have-1<sup>st</sup>.sg understood little  
 'I understood it little'

Cinque's hierarchy:

(31) *W poco X bene Y VP*

It seems that movement to the head immediately above the lowest functional head – the one specified by *bene* according to Cinque (1999) – is enough to take the participle out of the domain in which the Agree relation with the direct object can be morphologically realised.

- X and Y are contained in the same spell-out domain as VP but W is not (and the rest of hierarchy is presumably outside the vP phase)
- W = v<sub>Prt</sub> in Italian
- X = v<sub>Prt</sub> in EA

Italian: pp and direct object are not in the same Spell-out domain

EA: pp and direct object are in the same Spell-out domain

Remaining issues

- French Wh-agreement
- A fine-grained discussion of agreement in other Romance languages

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