

# TOPICS IN SYNTACTIC AGREEMENT

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## 1. Two case-studies in past participle agreement

Let's go back to Kayne's observation

- object movement corresponds to pp agreement
- object in situ: no pp agreement

### 1.1. Past participle agreement in Italian and French

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-fem pl arrested-fem pl  
'The girls have been arrested.'
- c. *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.'
- 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'

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*  
I refl ask how-many of tables-FPL Paul has repainted-fpl  
'I wonder how many tables Paul has repainted' [Kayne 2000:26]

- a. *Mi chiedo quanti tavoli Paul abbia ridipinto*  
to-me ask how-many tables-mpl Paul has-subjrepainted-msg  
'I wonder how many tables Paul has repainted'

- b. \**Mi chiedo quanti tavoli Paul abbia ridipinti*  
to-me ask how-many tables-mpl Paul has-subjrepainted-mpl

NB: Old Italian allowed for the agreement pattern in (6b)  
Modern spoken French is losing pp agreement completely. It is moving towards the Spanish model.

Problem: how do we account for these data within an Agree-based system which does not see a correlation between movement and agreement?

### Belletti's generalization

(3) "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."  
Belletti (2001:17/2005)

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

- (4)a. *Giuseppe 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. *Giuseppe a pittate 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-pppl 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:

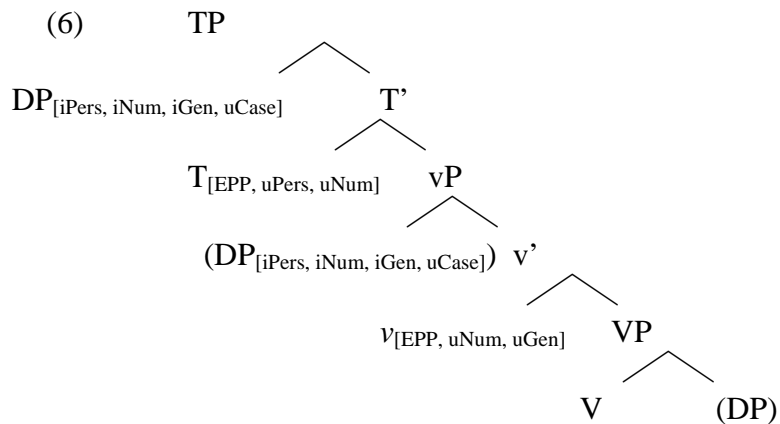
- (5) *Giuwanne e Marije l'a pittite, (lu mure)*  
**John and Mary-pl** it-sg-have **painted-pp pl** the wall  
 'John and Mary have painted it, the wall'

2nd problem: how do we account for these data?

### 1.2. ANALYSING PP AGREEMENT

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 Spec*vP* since *v* also bears an EPP feature.
- DP also has a person feature and T has unvalued person and number features
- 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.

Recall: 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:

(7)\**Ho mangiata la mela*  
I-have eaten-fem sg the-fem sg apple-fem sg  
'I have eaten the apple'

### 1.3. AN ALTERNATIVE PROPOSAL

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

(8) 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.

Recall: THE PIC (PHASE IMPENETRABILITY CONDITION) [PIC1]

(9) 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)]

[this is the 1st version of the PIC. The 2nd version is:

(10) a. The domain of H is not accessible to operations at ZP, but only H and its edge.

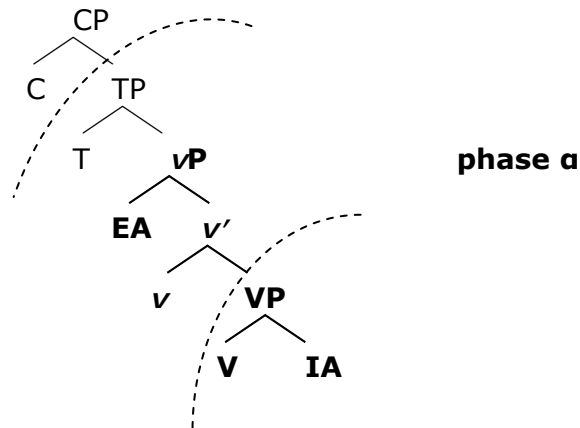
b. [ZP Z... [HP  $\alpha$  [H YP]]]

c. Z and H are (strong) phase heads

We adopt PIC1 (see Richards 2007)]

THE PIC

(11)



(8) MEANS THAT

MORPHO-PHONOLOGICAL AGREEMENT IS SENSITIVE TO THE PIC

QUESTION 1. How exactly does it work?

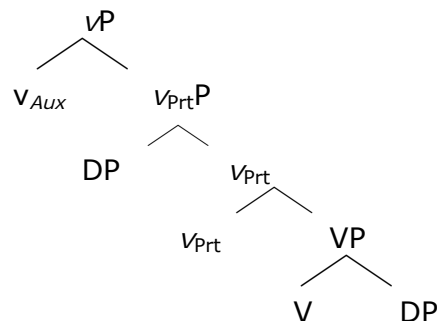
QUESTION 2. How likely is this?

2.4. ANSWER 1. HOW IT WORKS.

TRANSITIVE VP

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

(12)



→ the external argument is merged in Spec<sub>vPrtP</sub>.

→ auxiliary= raising predicate which selects v<sub>PrtP</sub> (see Ross (1969)).

→ v<sub>Prt</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

→  $v_{Prt}$  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:

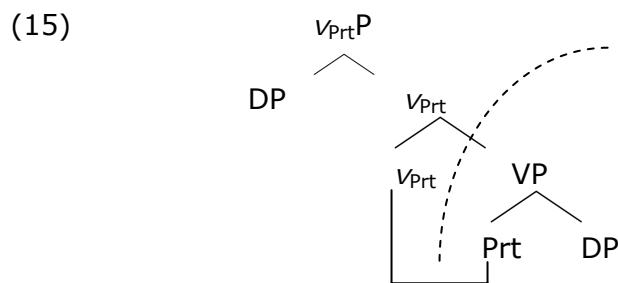
- (13) a. *Hanno accolto bene il suo spettacolo solo loro.*  
 have-pl received well the his show only they
- b. \**Hanno bene accolto il suo spettacolo solo loro.*  
 have well received the his show only they  
 'They alone have well received his show.'

Passive participles may remain in a lower position:

- (14) 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'

Also recall Pollock's observation about pp raising above *souvent* but below *pas*

PROPOSAL: Obligatory raising of the participle = movement to  $v_{Prt}$



**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.

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

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

#### INTRANSITIVE VP

##### UNACCUSATIVES

(18) *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.

#### PASSIVES

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

→  $v_{prt}$  is the head of a defective phase

✓ A-B predict that the participle and the direct object will show overt agreement.

#### REFLEXIVES/IMPERSONALS

(20) *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.'

(21) *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*,  $v_{prt}$  cannot be a non-defective phase head (for similar ideas, see Belletti (1982), Burzio (1986), Cinque (1988), Reinhart & Siloni (1999), D'Alessandro (2007)).

→ 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

OBJECT CLITICS

- (22) *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)).

→  $v_{Prt}$  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.

**QUESTION 2: 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).

## 2. Past participle agreement in Abruzzese

Food for thought:

### 2.1. THE DATA

Recall: the past participle (pp) in EA **always** agrees with a plural DP, be it the subject or the object [recall (4)]:

- (23) 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-pppl two walls**  
'John and Mary have painted two walls' [pl SUBJ-pl OBJ]

3.1.1. QUESTIONS RAISED BY EA

Q1: How does past-participle agreement work in Abruzzese?

Q2: Can we explain these data in terms of the condition on morpho-phonological agreement?

Q3: How can there be 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:

(24)

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

3.1.3. ONE ADDITIONAL THEORETICAL PRELIMINARY

FEATURE INHERITANCE

→ Chomsky (2005, [2008]): 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 [2008])

Can you think of an analysis of these data (without looking at tomorrow's handout?)

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