Nested Agree: auxiliary selection and participle agreement in Italian

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1. In a nutshell

Auxiliary selection is Agree for person features.

- Auxiliary switch: emergence of the unmarked, due to:
  - failed Agree,
  - Agree with π-defective items.
- Both argument structure-based split (Standard Italian) and person-driven split (Southern dialects) are π-Agree.
- Nested Agree (Amato 2020): for features ordered on the same head, the locality domain of a subsequent operation depends on the previous operation:
  1. Try to probe the same goal. If no result:
  2. Scan c-command domain from the latest checked position.

5. Complicating the picture

Person-driven auxiliary selection (Tuttle 1986, Kayne 1993)

- Southern Italian dialects: auxiliary alternations depend only on the feature of the subject (sometimes on tense and aspect).
- Different ordering of features on Perf: [uπ] ≻ [uInfl] →Perf always probes the subject.
- Language variation captured by reordering of features.
- ex. Ariellese (D'Alessandro & Roberts 2010): 1.BE, 2.BE, 3.HAVE: /HAVE/ ↔ Perf^0[π:3], /BE/ ↔ Perf^0 elsewhere

Restructuring (Cinque 2004, Wurmbrand 2012, Grano 2015)

- A modal verb embeds a non-finite verb (monoclausal).
- "Transparent auxiliary selection": if the embedded verb is a BE-verb, the auxiliary of the modal is optionally BE or HAVE.

☞ $v$restr: [uInfl:non-fin] ≻ [uπ:_] ≻ [Infl:_]: it probes lower v for π-feature, it is probed by Perf for π-feature.

- Different complement sizes (vP / TP) determine the search domains for Agree and the interaction with clitic climbing.

References

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2. Argument-driven auxiliary selection

- Auxiliary selection: alternation between BE and HAVE auxiliaries in the perfect (Kayne 1993, Cocchi 1995, Sorace 2000, 2004, McFadden 2007, Bjorkmann 2011).

(1) a. Maria ha lavato la camicia.
Maria have.PRS.3SG wash.PRTC the skirt
'Maria has washed the skirt.'

b. Maria l=ha lavat-a.
Maria 3SG.F.ACC=have.PRS.3SG wash.PRTC-SG.F
'Maria has washed her/it.'

c. Maria ha lavato se stessa.
Maria have.PRS.3SG wash.PRTC herself
'Maria has washed herself.'

(2) a. Maria è arrivat-a.
Maria be.PRS.3SG arrive.PRTC-SG.F
'Maria has arrived.'

b. Si=sono lavat-e le camicie.
self=be.PRS.3PL wash.PRTC-PL.F the skirts
'One has washed the skirts.'

c. Maria si=è lavat-a.
Maria self=be.PRS.3SG washed.PRTC-SG.F
'Maria washed herself.'

- Transitive, unergative verbs: HAVE
- Unaccusative verbs: BE

💣 Unexpected switch to BE if impersonal argument (2b), reflexive (in-)direct object (2c).

3. Auxiliary selection is π-Agree

Previous analyses: incorporation of D/P^0 to T^0 (Kayne 1993, Cocchi 1995), types of v (D'Alessandro & Roberts 2010), external argument (Bjorkman 2011) → 💣 Problems in root clauses and in restructuring.

☞ We need to track the π-features of the object:
- object: /HAVE/
- no object: /BE/
- π-defective object: /BE/

- Person Agree: π-features realized not as inflection, but as lexical selection.
- BE inserted when Agree on Perf has failed (Perminger 2014): either no goal, or defective goal.

💣 Minimality violation: Perf agrees with v across the subject.

Nested Agree (Amato 2020): Let F_1 and F_2 be two ordered probes on the same head H. The locality domain of F_1 is the sister of H. An Agree operation A_2 for the feature F_2 must target the goal G if G has been targeted by a previous Agree operation A_1 for the feature F_1. If G is not a matching goal for F_2, the locality domain of F_2 is the sister of G.

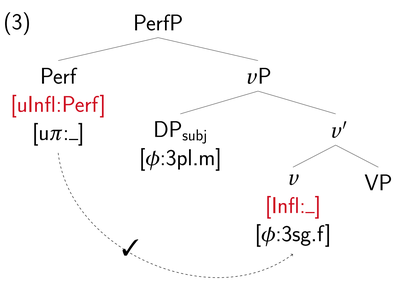
- Features on the same head are extrinsically ordered (Müller 2009, Georgi 2014).

(i) Try to Agree with the same goal: cf. Maximize Matching Effect (Chomsky 2001), General Specificity Principle (Lahne 2012), Multitasting (Van Urk & Richards 2015).

(ii) You cannot backtrack: the latest goal becomes the upper boundary of the nested operation (Amato 2020).

☞ Solution to the minimality problem: the intervener lies outside the locality domain of the nested Agree operation.

- The perfective auxiliary spells out the head Perf^0: [uInfl:perf] ≻ [uπ:_]
- (3) [Infl] checking: Perf targets v
- (4) Nested Agree for [uπ:_]: Perf targets v instead of DP$_{subj}$
- Vocabulary entries (metarule): /HAVE/ ↔ Perf^0[π:α], /BE/ ↔ Perf^0 elsewhere

(3)


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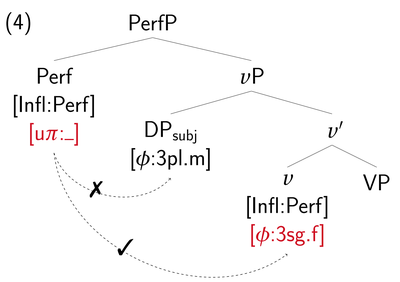
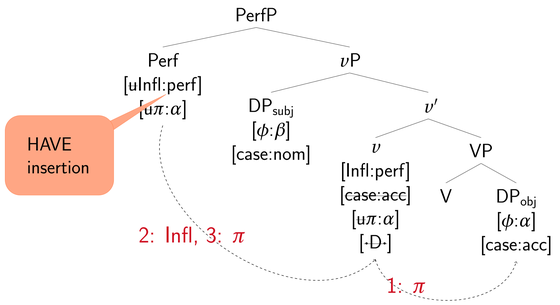


☞ And participle agreement (ppAgree)?

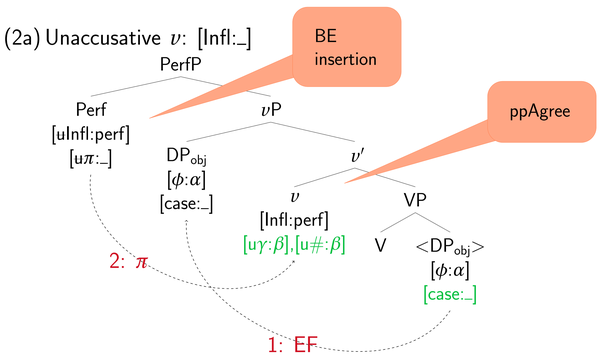
- ppAgree (Kayne 1989, D'Alessandro and Roberts 2008, Belletti 2017) spells out an edge feature on v: /ppAgree/ ↔ v^0[γ:α],[#:α]
- Each v is a phase (Legate 2003, Müller 2011); it can be assigned an edge feature (EF) if a XP in its complement bears an unchecked feature (Chomsky 2001, Müller 2010) ☞ EF comes with a flat gender and number probe that targets that XP.

4. Deriving the alternation

(1a) Transitive v: [Infl:_] ≻ [case:acc] ≻[uϕ:_] ≻ [·D·]

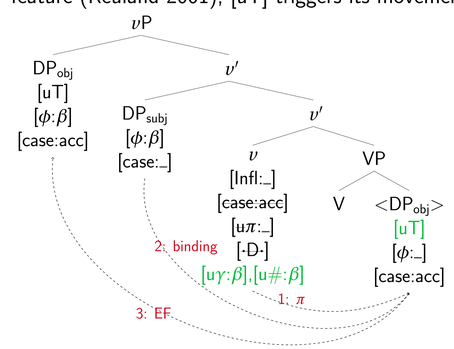


(2a) Unaccusative v: [Infl:_]



- [case:_] on DP → EF insertion: v[uγ:α],[u#:α] → ppAgree
- Perf probes v for [Infl] ≻ [π]: (i) no value on v (ii) the search starts downwards from the sister of v, but the DP has moved + PIC: [π]-Agree fails → BE insertion

(2c) Reflexive clitic: it enters the derivation with unvalued ϕ-feature (Reuland 2001); [uT] triggers its movement to T.



(2b) Impersonal *si* has unvalued π-feature (Cinque 1988).

- *si* behaves similarly to a by-phrase: introduced by Voice that bears a [Infl:_]-feature and unvalued [π:_] (Legate 2014).
- Perf probes Voice for [Infl] ≻ [uπ] → BE insertion