

Transitive Agreement?

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The picture of syntactic displacement in the MP goes as follows:

- A head α bearing an edge feature (ϵ) and a feature $[\phi]$ capable of undergoing agreement probes its c-command domain for a $[\phi]$ -bearing β (1a).
- On finding β , α agrees with it on $[\phi]$, activates its edge feature and raises β to its Spec (1b).
- The probe-goal relation respects Minimality; α cannot probe γ “past” an intervening β that is an actual/potential $[\phi]$ -bearer (1c):

- (1) a. $[_{\alpha P} \alpha \dots [\dots \beta \dots]]$
 $[\epsilon, \phi] \rightarrow \text{probes} \rightarrow [\phi]$
- b. $[_{\alpha P} \beta \alpha \dots [\dots \beta \dots]]$
- c. $[_{\alpha P} \alpha \dots [\dots \beta \dots [\dots \gamma \dots]]]$
 $[\phi] \rightarrow \text{probes} \rightarrow \text{X} \rightarrow [\phi]$

- (2) a. $[_{CP} C \dots [\dots \beta \dots [\dots \gamma \dots]]]$
 $[\alpha] \rightarrow \text{probes} \rightarrow [\alpha] \rightarrow \text{X} \rightarrow [\alpha]$
- b. **Who** saw **what**?
- c. ***What** did **who** see ?

“Superiority”

Although this picture neatly explains Superiority, it also raises questions for any displacement purporting to cross one phrase over another of the same type:

- (3) a. $[_{\alpha P} \gamma \alpha \dots [\dots \beta \dots [\dots \gamma \dots]]]$
 \uparrow **??**

In this talk I:

- Review potential cases of the problematic type, both in the clause nucleus (vP/VP) and in the left periphery (CP).
- Explore a possibility for establishing agreement relations between α and β in (1c) that doesn't involve a direct probe-goal relation, viz., by transitivity via a moving head.
- Explore a potential consequence of this picture for the left periphery.

1.0 Non-Problem Cases: Passives & Raising

The situation in (1a-c) is sometimes put in terms of α finding the “closest” β . Crucially “closest” requires c-command between α - β and β - γ . This means standard analyses of passive and raising (where $\alpha = T$) encounter no Minimality problems.

- (4) a. John T was $[_{VP} [_{VP} \text{recognized } \mathbf{John}] \text{ by } \mathbf{Mary}]$ *Passive*
- b. John T seems $[_{VP} \text{ to } \mathbf{Mary}] [_{VP} \text{ } \mathbf{John} \text{ to be ill}]$ *Raising*

In (4a,b) *Mary* (β) is not taken to c-command *John* (α), so *Mary* does not count as closer to T in the sense relevant for (1c).

2.0 Problem Cases: vP/VP

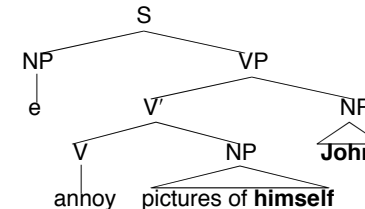
There are a wide variety of argument alternations/reorderings within vP/VP in which a lower γ might be analyzed as crossing a commanding β enroute to a higher position.

2.1 Subject Raisings

2.1.1 Psych Vs

Belletti and Rizzi (1988) argue that subjects of certain psych verbs like (5a) raise across an underlying higher experiencer (5b).

- (5) a. [Pictures of **himself**] annoy **John**.
- b.



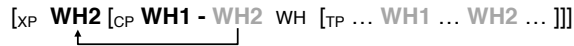
2.1.2 “Instrumental Advancement”

- (6) a. John opened this door with this key.
 b. This door opens with this key.
 c. This key opens this door. *“Instr \rightarrow 1”*
- (7) a. [**John’s** apartment walls] displayed/featured [pictures of **himself**].
 b. Mary decorated/festooned [**John’s** walls] [with pictures of **himself**].
 c. [pictures of **himself**] decorated/festooned **John’s** walls.
- (8) [pictures of **himself**] decorated/festooned **John’s** walls ____.

2.1.3 Mandarin “Non-canonical Subjects”

Lin (2001), Barrie & Li (2012, 2014), Zhang (2005) and Li (2014) note pairs like (9-12), which occur in the absence of a canonical agent/experiencer subject.

3) Apparent Superiority Violations arise by WH2 raising over WH1 to CP



But doesn't this movement violate Minimality/Superiority, even if *wh*-movement didn't?

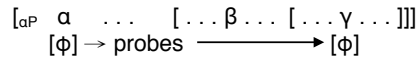
4.0 My Kingdom for a Feature!

Responses to Minimality problems typically appeal to "feature juggling".

Assume 1: Minimality only involves actual feature bearers, not potential ones.

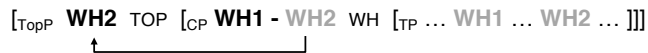
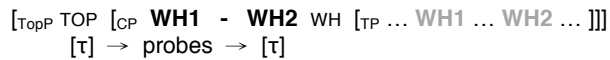
Assume 2: α and γ bear a feature $[\phi]$ that β does not bear in the derivation.

Then the probe from α can "look past" β to γ .



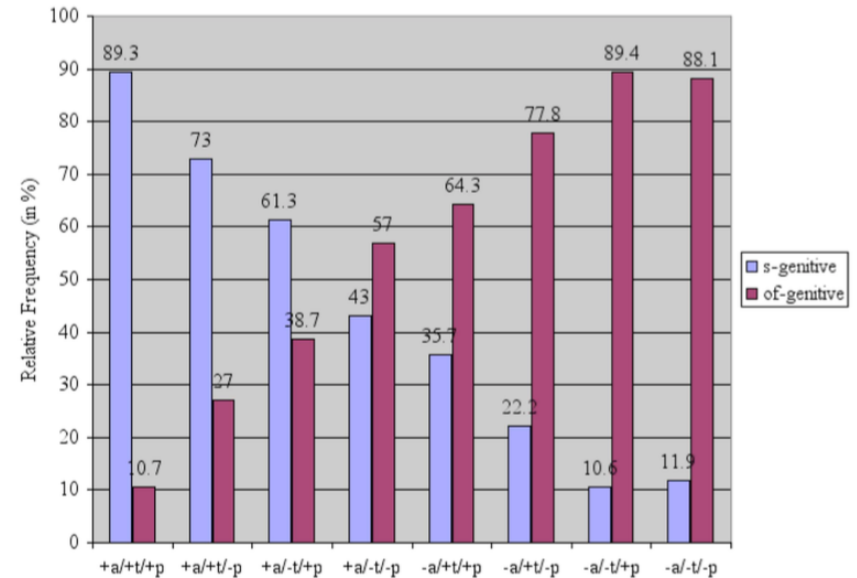
This proposal requires us to find a single feature (ϕ) shared by α/γ but not β that can be assigned responsibility for raising.

Example: (Scott 2012)



Problem (vP/VP): With the subject raising cases, it is very unclear what feature might be shared by T and the lower NP but not the intermediate NP.

Problem (vP/VP): With the object raising cases, extensive research by Bresnan et al demonstrates that a **cluster of features** determine speaker choice between PPDs and DOCs. Parallel results by Rosenbach (2002,2003) demonstrating choice between pre-/post-nominal genitive in English is closely predicted by **three features**: [\pm animacy], [\pm topicality], and [\pm prototypicality of poss relation].

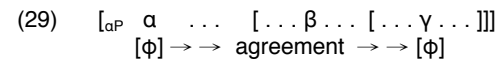


This means there is no single feature resident on the lower NP and higher app to which responsibility for movement could be assigned.

Problem (CP): Does it make sense to call a Wh-operator a "topic"? Topics are old info. *Wh*- request new info. Bare *wh*'s are not D-linked. It seems likely that Superiority violating vs. preserving matrix structures will involve a set of features on a *wh*-determining speaker choice.

5.0 Agreement by Probe-Goal vs. Agreement by Transitivity

The prerequisite for movement is **an agreement relation** between α and γ across β .

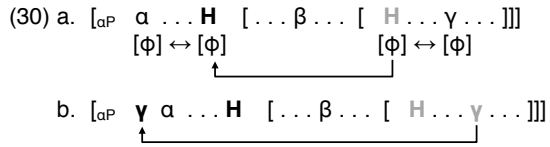


But probe-goal cannot establish that relation in the case of (29) (Minimality). Is there an alternative?

Suppose:

- γ agrees with a local head H on $[\phi]$,
- H raises to the vicinity of α and agrees with it on $[\phi]$

Then α and γ will agree on $[\phi]$ despite no probe-goal relation holding between them (30a). If α carries an edge feature, γ can raise **without violating Minimality** (30b).

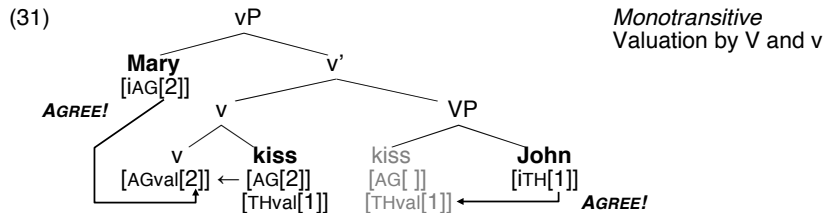


Agreement by transitivity can therefore evade Minimality in (29) if we have a head H of the required sort and features of the right kind.

6.0 vP/VP Cases Revisited

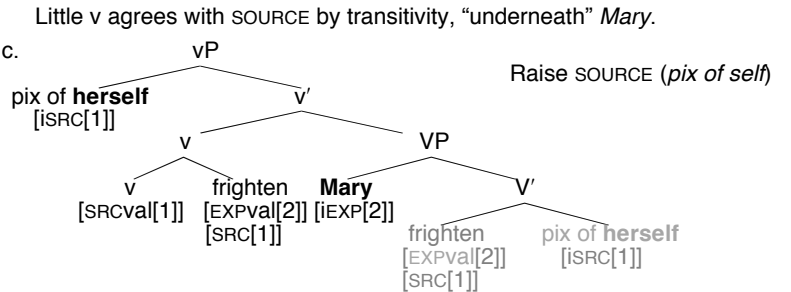
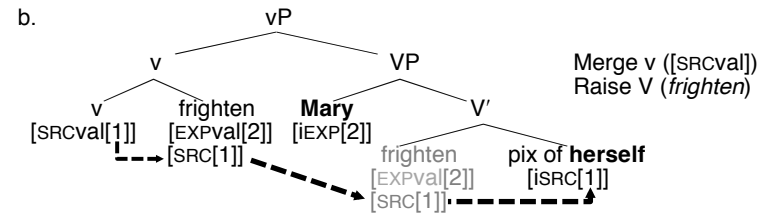
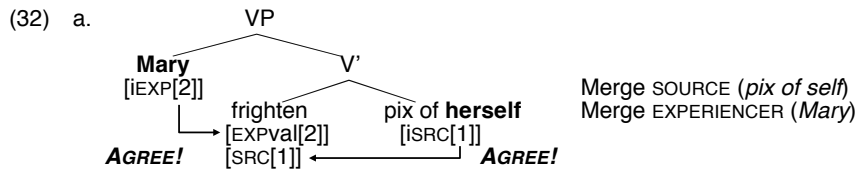
Features (Pesetsky & Torrego 2007):

- Three flavors iF, Fval, F
- Undergo agreement, denoted by shared index (F[1]...Fval[1])
- Every well-formed “chain feature” must have an interpretable instance and a valued instance (iF[1]...Fval[1], iF[1]...F[1]...Fval[1], etc).
- Only unvalued features probe for agreement

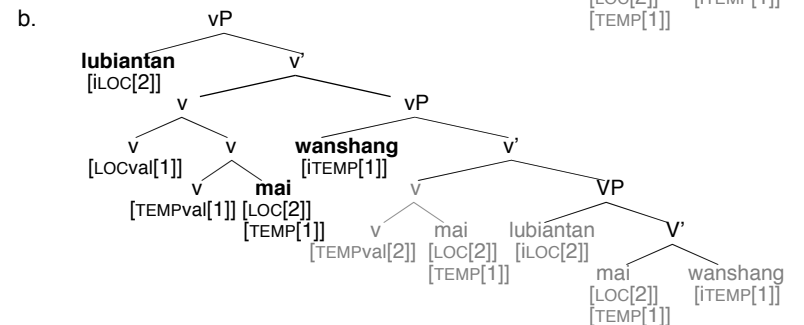
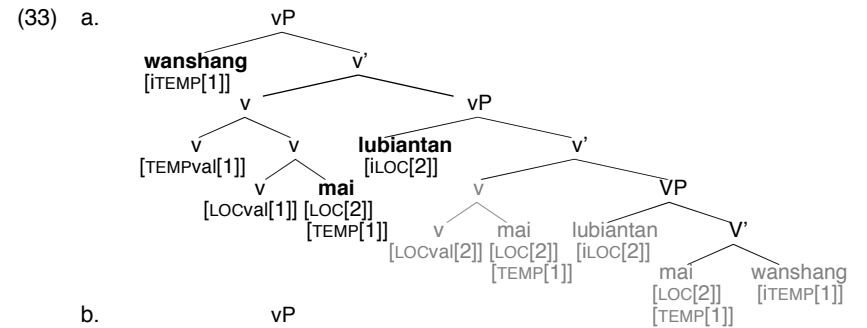


6.1 Subject Raisings

Psych Vs of the relevant sort involve SOURCE and EXPERIENCER arguments.

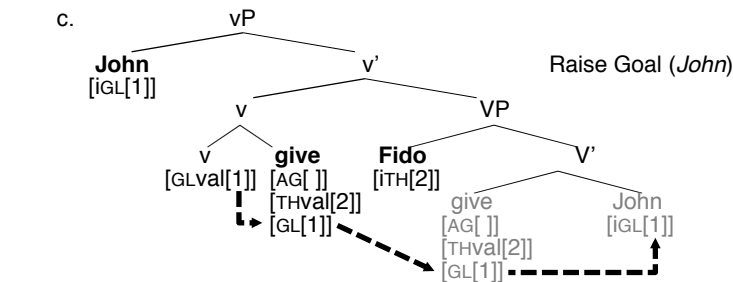
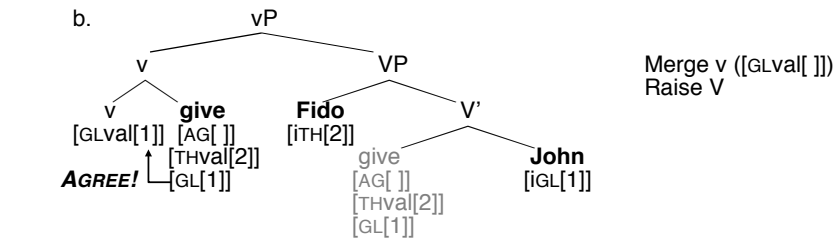
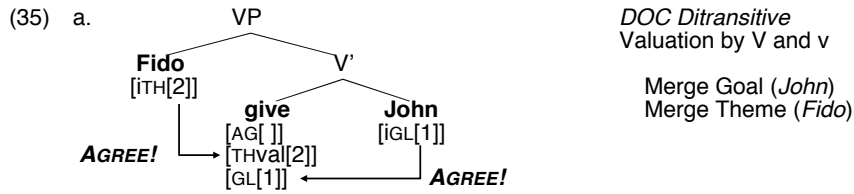
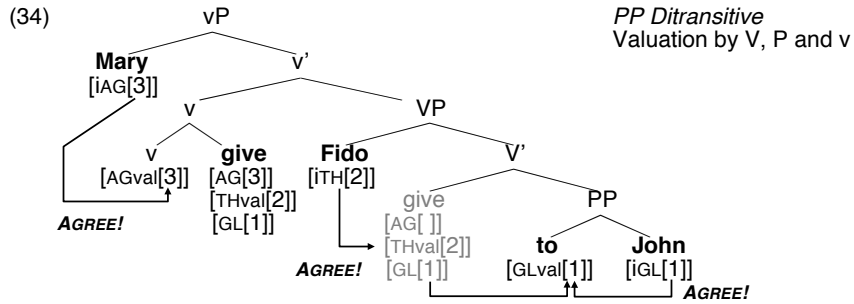


SOURCE subsequently raises to subject position. This account can be extended to instrumental alternations and to Mandarin non-canonical subject alternations.

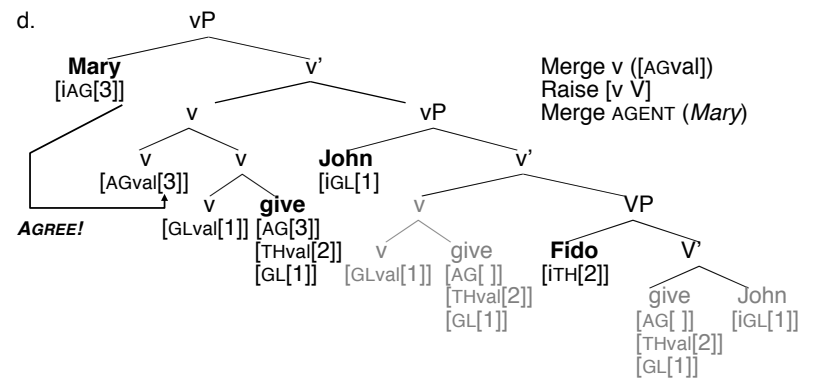


6.1 Object Raisings

Dative Vs involve AGENT, THEME and GOAL arguments.



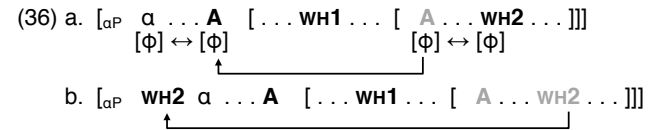
Little v agrees with GOAL *John* by transitivity, “underneath” *Fido*.



This account can be extended to all applicative alternations.

7.0 CP Cases Revisited

To extend these proposals to the CP cases, we need an analysis like (36a), with heads α/A that share features with *wh*'s in parallel to *v*/VP and their args, and with this relationship creating transitive agreement and raising (36b).



This is not the usual picture.

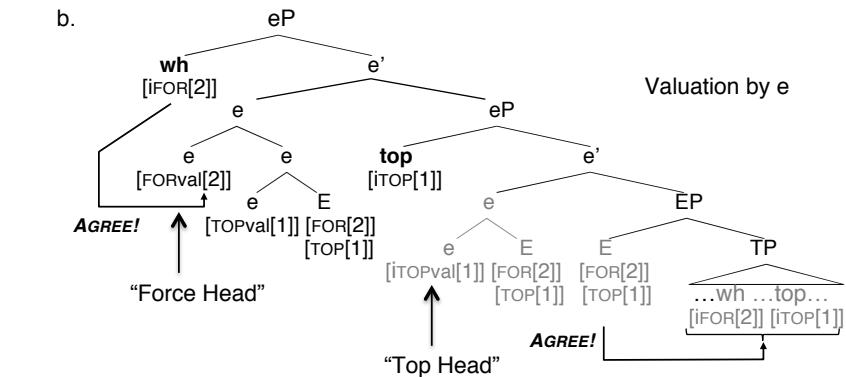
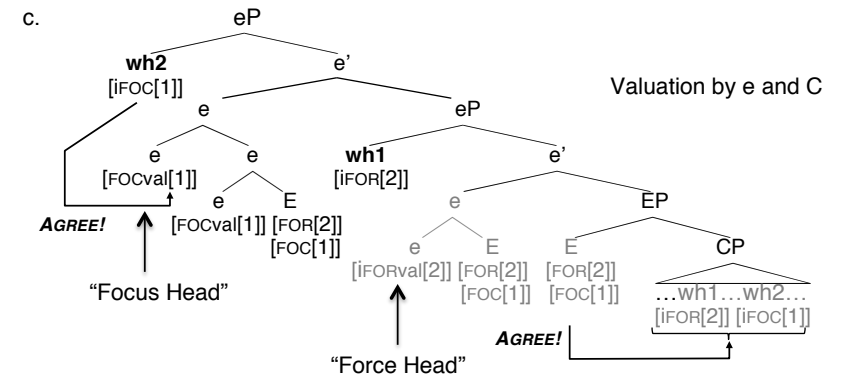
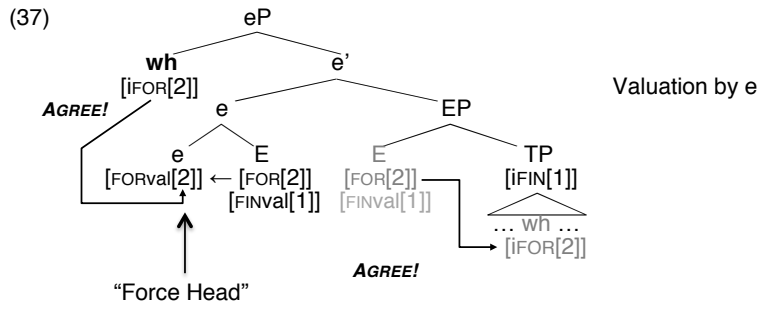
The left periphery is widely analyzed via a cartographic projection hierarchy:

$$[_{FORCE} [_{TOP} [_{FOC} [_{TOP} [_{FIN} [TENSE \dots]]]]]]] \quad (\text{Rizzi 1997})$$

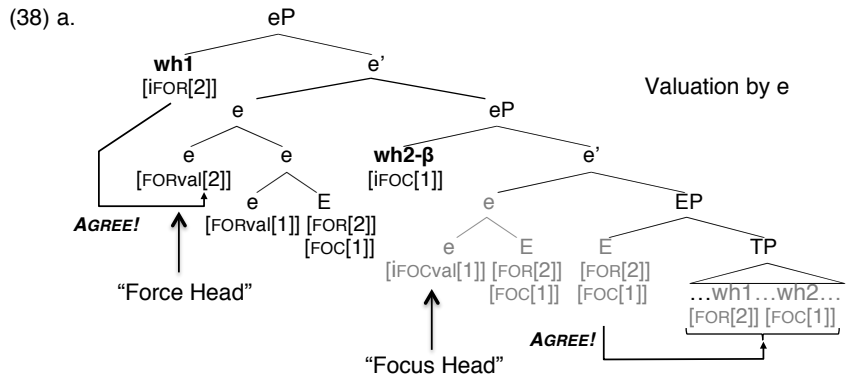
No single head (comparable to *v*/V) that coordinates elements of this domain, and no joint system of features that are shared.

Therefore, assume:

- a single head *e*/E (Banfield 1973) bearing features drawn from the set $\{[_{FOR}, [_{TOP1}, [_{FOC}, [_{TOP2}, [_{FIN}]]]]\}$ (in essence, “theta-features for E”)
- a feature hierarchy $[_{FOR}] > [_{TOP1}] > [_{FOC}] > [_{TOP2}] > [_{FIN}]$



How do we do multiple wh-movement? In this account it seems we must assume separate features are responsible:



This picture requires the two wh-s to bear independent features wrt e/E, parallel to the Mandarin non-canonical subject cases. This may simply be incorrect.

SUMMARY

- Minimality makes trouble for movement analyses in which one phrase would need to cross over another of the same type
- Problems arise is the vP/VP domain with argument inversions.
- Problems arise is the CP domain with wh- inversions (Russian).
- A potential solution lies in recognizing an alternative to direct probe-goal in establishing agreement relations: transitive agreement vis a raising head
- Application of this idea to the vP/VP domain looks possible/plausible.
- Application of this idea to the CP domain requires a radical revision of current cartographic ideas: elimination of projection hierarchies in terms of a set of features organized by a single head (e/E)
- Accommodating multiple wh- requires us to see the wh's as not having the same role after all. Not clear this is plausible/desirable/tenable, etc.

Thanks (especially to participants in my Fall 2015 seminar!)