# That's not how you agree: A reply to Zeijlstra

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#### 1. Introduction

In a recent paper, Zeijlstra (2012) argues that agreement should be uniformly construed as in (1):

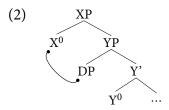
## (1) $\alpha$ can Agree with $\beta$ iff:

- a.  $\alpha$  carries at least one uninterpretable feature and  $\beta$  carries at least one matching interpretable feature
- b.  $\beta$  c-commands  $\alpha$
- c.  $\beta$  is the closest goal to  $\alpha$

The crucial innovation in (1) is a reversal in the direction of valuation: the element that contributes the value (e.g. in the case of predicate-argument agreement in  $\varphi$ -features, the nominal) is required to c-command the element that receives its value derivatively (e.g. the verb or tense/aspect/mood marker)—rather than the other way around, as standardly assumed (see, e.g., Chomsky 2000, 2001). In other words, (1) enforces *downward-valuation* in agreement relations.<sup>1</sup>

In this short reply, I wish to demonstrate that (1) is unsuitable as a theory of  $\varphi$ -agreement (i.e., of morpho-phonologically overt co-variance in  $\varphi$ -features between a verb or a tense/aspect/mood marker and a nominal argument). In Section 2, I survey two empirical cases of  $\varphi$ -agreement that cannot be handled in terms of (1): one from Polinsky and Potsdam (2001), and one from my own work (Preminger (2009, 2011b)). These data, and most of the discussion surrounding them, are not new; what I wish to demonstrate is their crucial importance to any discussion about the directionality of agreement.

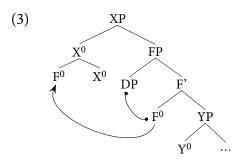
Before turning to the facts themselves, some discussion is in order regarding the nature of these data. While the current discussion is meant to challenge specifically Zeijlstra's position regarding the *directionality* of agreement (i.e., (1a–b)), the two empirical domains surveyed below share a property pertaining to the *distance* at which agreement takes place: they both involve Long-Distance Agreement (LDA). This is not because LDA relations are somehow outliers with respect to the directionality of agreement; rather, it is because they provide the most conclusive testing ground for that directionality. To see why, suppose that we have observed an agreement relation that—as far as the surface syntax is concerned—appears to hold between a head X<sup>0</sup> and the specifier of its complement, YP:



<sup>\*</sup>Thanks to Maria Polinsky, and three anonymous reviewers, for helpful comments and discussion. All remaining errors are my own.

<sup>&</sup>lt;sup>1</sup>A similar approach has been pursued recently by Wurmbrand (to appear).

As it stands, the agreement relation in (2) is an instance of *upward valuation*: the semantically-contentful feature values flow from the lower DP to the higher  $X^0$ . But if one were inclined to prefer downward valuation, as per (1), all one would need to do to bring this same hypothetical datum into compliance with (1) is to posit one more functional head—call it  $F^0$ —which enters into downward valuation with DP, and subsequently moves to the surface position we have identified as  $X^0$ :



Since very short movement of the kind shown in (3) is extremely hard to argue against (as is the existence of one more functional projection), what we have is essentially a recipe for reversing the directionality of an agreement relation such as (2). And the opposite recipe is similarly easy to construct, turning any *spec-head* agreement relation (see, e.g., Koopman 2006) into an upward valuation relation, by positing very short phrasal movement.

It is in avoiding this type of analytical "gray area" that LDA proves crucial: since the movement operations one would have to posit to invert a long-distance agreement relation would not be of the very short variety, they would necessarily have detectable consequences.<sup>2</sup>

# 2. Two case-studies in standard (i.e., upwards-valuation) $\varphi$ -agreement

### 2.1. Tsez (Polinsky and Potsdam 2001)

Polinsky and Potsdam (2001) discuss a pattern of LDA with embedded topics in Tsez, and provide several arguments that this pattern involves agreement between a given verb and a nominal contained within the verb's clausal complement. I present a subset of those arguments, here:

- (4) a. eni-r [uži ø-āy-ru-li] ø-iy-xo (Tsez) mother-DAT boy.I.ABS I-arrive-PAST.PRT-NMZ I-know-PRES 'The mother knows that as for the boy, he arrived.'
  - b. *eni-r* [*už-ā magalu b-āc'-ru-li*] *b-iy-xo* mother-DAT boy-ERG **bread.III.ABS III**-eat-PAST.PRT-NMZ **III**-know-PRES 'The mother knows that as for the bread, the boy ate it.' (Polinsky and Potsdam 2001: 606)

The noun-class morphology on the matrix predicates in (4a-b) is determined by the noun-class of the absolutive argument in the embedded clause (class 'I' in (4a), and class 'III' in (4b)).

<sup>&</sup>lt;sup>2</sup>The current discussion does not address the question of why it is that LDA relations appear to be typologically rather rare. Crucially, though, that is largely independent of the current discussion, since as discussed in the text, there is no claim being made here that LDA relations are in any way unique with respect to the directionality of agreement—only that they make that directionality easier to diagnose conclusively.

The word order in an example like (4b) already casts significant doubt on the idea that the absolutive *magalu* ('bread.III.ABS') has vacated the embedded clause and moved into a position c-commanding the matrix verb, which it would need to do to adhere to Zeijlstra's (1); but Polinsky and Potsdam provide additional arguments that the agreement target in a construction like (4a–b) is indeed within the embedded clause at every relevant level of representation.

First, they provide evidence against a "proleptic object" account, where a null object in the matrix clause would be anaphorically linked to the embedded absolutive argument, and it would be this matrix object that controls agreement in the matrix clause. (Under such an account, an example like (4b) would be translatable roughly as *The mother knows of the bread<sub>i</sub> that the boy ate it<sub>i</sub>*, but using cataphora instead of anaphora.) The evidence provided by Polinsky and Potsdam against such an account includes: (i) the availability of LDA even in the presence of a coreferential matrix subject (5), even though Tsez does not allow null reflexives; (ii) the impossibility of an overt proleptic object (6); (iii) the strict locality of LDA (which can go only "one clause up" (7)), which is unexpected if the transmission mechanism is anaphoric binding; (iv) the unavailability of matrix scope for embedded absolutives in LDA constructions (8); and (v) the unavailability of overt matrix reflexives bound by the hypothesized proleptic object (9).

- (5) "REFLEXIVE" LDA
  - a. [irbahin-er-no <sup>\(\gamma\)</sup> ali-r-no]<sub>1</sub> [**zedā zedu**<sub>1</sub> go\(\cdot\)'i-x-ānu-si-li]

    Ibrahim-DAT-and Ali-DAT-and **each other.ABS.I.PL** invite-PRES-NEG-PRSPRT-NMLZ] **b**-ix-yo

I.PL-know-pres

'[Ibrahim and Ali]1 know that they have not invited each other1.'

cf.:

- b. [irbahin-er-no pat'i-r-no]<sub>1</sub> [žedā žedu<sub>1</sub>] /\*[žedu<sub>1</sub>] b-eti-x

  Ibrahim-DAT-and Fatima-DAT-and each other.ABS /\* them.ABS I.PL-like-PRES

  'Ibrahim and Fatima like each other.'
- (6) IMPOSSIBILITY OF OVERT PROLEPTIC OBJECT enir Ø/\*magalu/\*že [užā magalu bāc'ruli] b-ix-yo mother Ø/\*bread/\*it boy bread.III.ABS ate III-know-pres 'The mother knows the boy ate the bread.'
- (7) LOCALITY OF LDA (CONTRA ANAPHORIC BINDING)

  babir [enir [užā magalu bāc'ruli] b-iyxosi-li] r/\*b-iy-xo

  father mother boy bread.III.ABS ate III-know-nmlz IV/\*III-know-pres

  'The father knows [the mother knows [the boy ate bread]].'
- (8) LACK OF MATRIX SCOPE FOR EMBEDDED QUANTIFIERS IN LDA sis učiteler [šibaw uži Ø-ik'ixosi-li] Ø-iy-xo one teacher every boy.I.ABS I-go-NMLZ I-know-PRES

  'Some teacher knows that every boy is going.': ✓ ∃teacher > ∀boy, ✗ ∀boy > ∃teacher

- (9) LACK OF MATRIX BINDING BY LDA TARGETS
  - a. \* enir [nesā.nesiz ɣutkā] [Ŷali Ø-āk'i-ru-li] Ø-iysi mother his.refl in.house Ali.I.ABS I-go-PSTPRT-NMLZ I-knew Intended: 'The mother found out in his1 house that Ali1 had already left.' compare:
  - b. babiy-ā [nesā.nesiz yutkā] <sup>s</sup>ali žek'si father-ERG his.REFL in.house Ali.I.ABS hit 'The father hit Ali<sub>1</sub> in his<sub>1</sub> house.' (Polinsky and Potsdam 2001: 616–620)

The last two facts (8–9) also militate against an account of Tsez LDA in terms of *raising*—i.e., movement of the LDA target from the embedded clause into the subordinating clause. Polinsky and Potsdam provide additional evidence to this effect, involving the ability of the entire embedded clause, including the LDA target, to move as a constituent:

- (10) MOVEMENT OF ENTIRE EMBEDDED CLAUSE, INCLUDING LDA TARGET, AS CONSTITUENT
  - a. enir **b**-iy-xo [užā magalu b-āc'ru-li] mother III-knows-PRES boy **bread.III.ABS** ate 'The mother knows the boy ate the bread.'
  - b. [užā magalu b-āc'ru-li] enir b-iy-xo boy bread.III.ABS ate mother III-knows-PRES 'The mother knows the boy ate the bread.'

A consistent picture thus emerges, whereby LDA with embedded topics in Tsez is an instance of the upstairs verb agreeing with an argument that has remained within the embedded clause, thus constituting evidence against Zeijlstra's (1).

## 2.2. "Substandard" Basque (Preminger 2009, 2011b)

This section deals with LDA constructions found in "substandard" Basque (their classification as "substandard" is a matter of both the pervading prescriptive attitude towards these constructions, and their distribution, which cuts across conventionally accepted dialectal boundaries; see Etxepare 2006). As discussed extensively in Preminger (2009, 2011b), Basque examples like (11) constitute an instance of the upstairs auxiliary agreeing with the absolutive argument of an embedded predicate:

(11) AGREEMENT WITH EMBEDDED ABSOLUTIVE ARGUMENT

[[Miren-entzat]<sub>PP</sub> [harri horiek]<sub>(ABS)</sub> altxa-tze-n] probatu [d-it-u-zte]<sub>aux</sub>

Miren-BEN stone(s) those<sub>pl</sub>ABS lift-NMZ-LOC attempted 3.ABS-pl.ABS-√-3pl.ERG

'They have attempted to lift those stones for Miren.'

(subject is pro <3pl.ERG>)

(Preminger 2009: 641)

Several facts demonstrate that the controller of absolutive agreement in a construction like (11) has indeed remained within the embedded clause. First, note that the absolutive argument in question is "sandwiched" between an unselected modifier (*Miren-entzat* 'Miren-BEN') and the embedded predicate (*altxa-* 'lift-'), neither of which is expected—on standard syntactic assumptions—to be movable out of the embedded clause (the former because it is adverbial in nature, and the latter because it is a head rather than a phrase).

Second, replacing the benefactive PP with a dative nominal, as in (12), results in intervention—precluding plural absolutive agreement on the matrix auxiliary irrespective of the features of the downstairs absolutive argument or the dative intervener:

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(12) DATIVE INTERVENTION IN BASQUE LDA

[[Lankide-e-i]<sub>DAT</sub> [liburu horiek]<sub>ABS</sub> irakur-tze-n] probatu

colleague(s)-ART<sub>pl</sub>-DAT book(s) those<sub>pl</sub>(ABS) read-NMZ-LOC attempted

[d-Ø/*it-u-(z)te]<sub>aux</sub>

3.ABS-sg/*pl.ABS-√-3pl.ERG

'They have attempted to read those books to the colleagues.'

(subject is pro <3pl.ERG>)

(Preminger 2009: 640)
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That agreement with the embedded absolutive argument is sensitive to changing the PP to a dative indicates that it has not moved across this element's position, at whatever level of representation is relevant to  $\varphi$ -agreement. Therefore, such data militates even against an account of (12) in terms of covert movement of the downstairs absolutive (cf. Bobaljik 2002), insofar as agreement is taken to rely on such covert movement to furnish its input (since such movement would bleed intervention by interveners contained in the embedded clause).

Thus, LDA in "substandard" Basque constitutes another instance of  $\varphi$ -agreement in which the nominal target could not have moved to a position c-commanding the agreeing head (in this case, the matrix auxiliary), therefore providing further evidence against Zeijlstra's (1).

## 3. Consequences

We have seen evidence against Zeijlstra's (2012) claim that the direction of agreement should be generally reversed, so that valuation would flow downwards (from a c-commanding bearer of values, to a c-commanded node seeking such values).<sup>3</sup>

<sup>&</sup>lt;sup>3</sup>From a purely technical standpoint, there are ways to shoehorn these facts into the framework represented by (1). For example, when the valuator seems to be buried within an embedded clause, one could posit that *feature percolation* (Chomsky 1973, Gazdar et al. 1985, inter alia) has taken place, endowing the clause itself with the features of the presumed valuator; and that moreover, the entire clause has undergone covert and obligatorily-reconstructing movement to a position c-command the element to be valued (cf. Koopman 2006). But it should be clear that such moves constitute conjecture that is nearly, if not entirely, unfalsifiable.

In fact, the mirror image of such shoehorning is also possible: any putative case of downward-valuation agreement, like those discussed by Zeijlstra (2012), could be recast in terms of standard, upward valuation, by positing that the valuator has undergone non-reconstructing overt movement from some position lower than the element to be valued—and that it is in this lower position that agreement took place.

The strength of either approach, then, depends on adducing facts that cannot be explained but for appeals to ad hoc maneuvers of this sort.

What are we to make of these results? Insofar as terms like "Agree" or "agreement" are to be understood as having anything to do with actual  $\varphi$ -agreement (i.e., morpho-phonologically overt co-variance in  $\varphi$ -features), these facts militate against a uniform theory along the lines of (1). In this respect, it is interesting to note that the vast majority of evidence put forth by Zeijlstra in favor of (1) comes not from  $\varphi$ -agreement itself, but from empirical domains such as sequence-of-tense, negative concord, and intermediate wh-movement. Even an empirical domain like the assignment of case, used by Zeijlstra to motivate the existence of *Multiple Agree*, is perhaps not a matter of agreement, either: contra some widely accepted assertions found in Chomsky 2000, 2001, there is evidence that the assignment of case occurs independently of, and is perhaps a precondition for,  $\varphi$ -agreement obtaining (see Bobaljik 2008, Preminger 2011a).

Crucially, there is no pre-theoretic reason to believe that any and all instances of correspondence between two expressions, or between two syntactic positions, or any restrictions on the distribution of morphemes, are necessarily a matter of "agreement" per se. That might very well be the null hypothesis; but if the results put forth by Zeijlstra are indeed correct, then given the facts surveyed in Sections 2.1–2.2, this hypothesis can no longer be maintained.<sup>4</sup> It might therefore be a good idea

(i) Vivek-ne [kitaab paṛh-nii] chaah-ii Vivek-Erg book.F read-Inf.F want-Pfv.FSg 'Vivek wanted to read the book.' (Bhatt 2005: 760)

The infinitival verb in the embedded clause in (i) (paṛh-nii 'read-Inf.F') already carries agreement morphology corresponding to the embedded nominal. Since this verb seems to be the head of the embedded clause, and features of the head are considered to be visible at every projection level of that head (Chomsky 1995, et seq.), it is conceivable that the entire embedded clause has come to bear, through whatever agreement mechanisms are operative within the embedded clause, the features of the target nominal. This would mean that agreement between the matrix verb and the embedded clause in its entirety would be sufficient to transmit these features to the matrix verb; and since that sort of agreement relation would be highly local, it would be subject to the analytical uncertainty outlined in Section 1 for such relations.

It is important to note that this two-step process is not Bhatt's (2005) actual analysis of this agreement pattern, and that Bhatt provides certain empirical arguments against it (e.g. from the co-dependence of infinitival agreement on LDA, and vice versa); but the fact that this "intermediate" agreement morphology arises suggests that the some version of the alternative sketched here may still be viable. Also worth pointing out is that alongside the Basque pattern discussed in Section 2.2, the same varieties of Basque have a second construction, termed the "case-marked construction" in Preminger (2009), which has a similar profile to these Hindi-Urdu data. In the Basque case-marked construction, one finds morphological evidence of an intermediate agreement step; and interestingly, the Basque case-marked construction inhibits the transmission of Person features, just as in Hindi-Urdu LDA (Bhatt 2005: 800) (and crucially, unlike the construction discussed in Section 2.2, which does allow the transmission of Person features; see Preminger 2009 for relevant examples).

One can of course posit such an intermediate agreement step even in constructions where there is no morphological evidence to support it, and no indirect evidence such as the inhibiting of PERSON agreement; but that clearly falls within the same set of unfalsifiable maneuvers addressed in fn. 3.

A second empirical domain suggested by the reviewer is the Locative Inversion construction (see Hoekstra and Mulder 1990, inter alia). In particular, the reviewer suggests juxtaposing it with Zeijlstra's (2012) analysis of agreement in the expletive-associate construction, since it reveals that the A-chain associated with nominative case and finite agreement need not pass through or occupy the finite subject position at all. While I am extremely sympathetic to this line of argumentation, I have decided not to include a discussion of Locative Inversion here, in the interest of

<sup>&</sup>lt;sup>4</sup>A reviewer suggests two additional sets of facts that may be adduced in support of this conclusion. First, the reviewer suggests Bhatt's (2005) work on LDA in Hindi-Urdu. Bhatt's analysis indeed relies crucially on upward valuation (contra (1)). However, the construction in question has a property not shared by the Tsez and Basque patterns discussed in Sections 2.1–2.2, one which might be viewed as a confound. Consider the following example:

for theorizers working on the formal relation underpinning phenomena such as negative concord and sequence-of-tense to find a new term for the formal mechanism they are researching, one that does not appeal to what traditional grammarians had termed "agreement".

Another possibility is that the two empirical domains,  $\varphi$ -agreement proper and the concord phenomena discussed by Zeijlstra, are an instance of the same process after all, and that the direction of valuation is intrinsically flexible. The latter is an idea that has been pursued, in different forms and with varying implementations, in recent work by Baker (2008), Béjar and Rezac (2009), and Carstens (2012).

In any event, it should be quite clear that  $\varphi$ -agreement is not subject to the constraint in (1).

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keeping this reply as concise as possible; doing justice to the literature on Locative Inversion and the expletive-associate construction would vastly expand the scope of the current paper.

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