Upward Agree is Superior

Background: While the standard view (since Chomsky 1995) has been that abstract case is a reflex of φ-agreement, a recent alternative perspective has been that φ-agreement depends on prior case assignment (e.g. Bobaljik 2008). This debate intersects with another, concerning the direction of the operation Agree. Chomsky (2000) originally defined Agree to take place when a probe c-commands a goal, a version of Agree that has been dubbed Downward Agree (DA), in contrast to more recently proposed Upward Agree (UA), where an interpretable/value goal c-commands the probe (Wurmbrand 2011, Zeijlstra 2012). While UA has been used to account for phenomena such as negative concord and verbal inflection, Preminger (2013) has recently argued that UA cannot account for certain patterns of φ-agreement, specifically certain cases of long-distance agreement (LDA). Indeed, LDA presents a more general puzzle for theories of φ-agreement, whether in terms of UA or DA, because agreement with lower arguments is often defective (for instance, quirky φ-agreement in Icelandic restricted to number; post-verbal subject agreement in Arabic ignores number), while agreement with higher arguments is not.

Baker (2008) presents a generalization that links these two debates, claiming that φ-agreement is only possible with an argument lower than the agreeing head when that agreement is case dependent, i.e. only when the argument also receives case from the agreeing head. In all other cases, φ-agreement is possible only with arguments higher than the agreeing head. For Baker this generalization does not follow from a particular theory of Agree, however, but from an interaction between two parameters: one determining the direction of Agree and one determining whether agreement is dependent on case.

Proposal: This paper argues that a version of UA, slightly modified from Zeijlstra (2012), actually predicts the two directional asymmetries in φ-agreement identified above: Baker’s generalization concerning case and agreement, and the potential defectivity of agreement with low arguments (i.e. LDA). This modified version of UA is also able to accommodate the problematic instances of LDA presented by Preminger (2013) as general counterexamples to an upwards-probing theory of φ-agreement.

Details: Zeijlstra (2012) defines UA as a relationship between an uninterpretable feature [uF] that is commanded by a goal [g] such as negative concord and verbal inflection, and a commandable feature [iF] such as case. This modified version of UA is also able to accommodate the problematic instances of LDA (i.e. LDA) and can therefore be considered a more general version of UA.

We nonetheless argue that all cases of apparent downwards probing, including LDA, can in fact be accommodated within a stricter theory of UA, once we distinguish feature valuation from feature checking (following Pesetsky & Torrego 2007, and Arregi & Nevins 2013). More specifically, we take checking to be a precondition for valuation. The operation Agree is concerned only with checking: a probe must be checked by a goal that is commanded by an uninterpretable goal and that is in fact dependent on the probe, however, we argue that these features can be valued by some other element.

What then are potential valuers if the checker itself cannot act as a valuer? Under strict UA, probing features cannot “look down” to find a valuer, as this would simply re-introduce downward probing. If two elements already stand in an UA relation, however, we argue that their other features are visible to one another as a result of that link (i.e. they are members of the same Agree-chain). We call valuations that already stand in an UA relation to each other accessible, where accessibility is defined as in (2):

(2) Accessibility: A goal β is accessible to a probe α iff (a) β c-commands α (respecting additional locality restrictions), or (b) features occurring on α and β already stand in an Agree relation, or (c) β is accessible to an item γ, and γ is independently accessible to α.

LDA, we argue, arises when the element that checks a feature via UA, as in (1), is not able to completely value that feature (for example, because it is not itself fully valued for φ-features). In such configurations a feature can be checked and valued by different elements. By this condition, valuation of P by the lower goal G2 is not possible in (3a), but is possible in (3b): here the lower goal already stands in an Agree relation with P and therefore is part of a larger Agree chain.
Instances of φ-agreement with low arguments are thus not the direct result of DA, but instead the result of accessibility-restricted valuation on the basis of prior UA. This condition on valuation yields Baker’s generalization: only if a low argument is case-licensed by T⁰ via UA will it be accessible for subsequent φ-agreement.

The same proposal accounts for the (potential) defectivity of φ-agreement with low arguments. Because LDA on our proposal arises only when φ-features fail to be fully valued by their checker, we derive the fact that LDA can be defective, but upward agreement cannot. Defective φ-agreement will occur only when a checker in Spec-TP (e.g.) is partially valued for [iϕ] features, and a lower accessible DP provides the balance of valuation. Assuming that dative arguments have only 3rd person [iϕ] features (Rezac 2008), and no number feature, quirky agreement of the Icelandic type reflects the configuration in (3b). Partial agreement in VSO clauses in Arabic similarly arises due to a φ-defective null expletive that partially values [up] on T (for number but not gender).

Finally, this approach is also able to deal with the apparent counterexamples to UA raised by Preminger (2013), involving LDA between matrix T⁰ and an embedded absolutive argument in Tsez and “substandard” Basque; (4) is an example from Basque. Preminger demonstrates that the agreeing DP in these cases cannot move out of the embedded clause, and so cannot c-command matrix T⁰ (even if such a configuration were delayed to LF, as suggested for LDA in Zeijlstra 2012).

(4) [Miren entzat] [harr horiek altxa-tze-n] probate d-it-u-zte

‘(They) have attempted to lift those stones for Miren’

Closer examination of both Tsez and Basque, however, reveals that these cases of LDA can in fact be accounted for by UA. For Basque, Etxepare (2006) demonstrates that cases like (4) are possible only when the (nominalized) embedded clause is itself able to agree with the matrix auxiliary. We follow Etxepare in assuming that LDA as in (4) depends on a chain of Agree relations: the agreeing DP establishes a (UA-compliant) case relationship with a functional head in the embedded clause, a head that has its case feature checked in turn by the φ-agreeing head in the matrix clause. This sequence of UA relations renders the embedded DP (transitively) accessible to the matrix φ-agreement probe. Note that (4) is thus an exception to a strong version of Baker’s generalization, because the matrix probe does not directly case license the agreeing DP. Our proposal nonetheless naturally extends to this case.

For Tsez, Polinsky and Potsdam (2001) observe that LDA is possible only when the embedded absolutive argument is interpreted as a topic. We propose that here LDA is mediated not by an Agree chain but by topic doubling: the agreeing absolutive DP remains within the embedded clause, but is doubled by a null pronominal element in the embedded clause’s left periphery. It is this topic double that establishes a case relationship with the matrix clause, a relationship that renders the topic accessible for subsequent φ-valuation. This account avoids a structural problem with Polinsky and Potsdam’s own account, which requires morphological agreement to be dependent on covert topicalization-driven movement within the embedded clause.

Our approach renders LDA in both Tsez and Basque “exceptional”, arising from a coincidental confluence of several independent factors. This is in fact an advantage over a DA treatment of these cases: if agreement were generally downwards probing, we would not expect this type of cross-clausal LDA to be so typologically peripheral, to be either so restricted or so rare.

Conclusion: We have shown that rather than providing counterexamples to a uniform theory of UA, the typology of “downward” φ-agreement in fact supports our implementation of UA, which further predicts two important generalizations concerning agreement asymmetries (defectivity of LDA and Baker’s generalization), asymmetries that existing theories of DA cannot derive.