The directionality of agreement and nominal concord in Zazaki

Maziar Toosarvandani and Coppe van Urk
Massachusetts Institute of Technology

We investigate two issues in the theory of agreement from the perspective of nominal concord in Zazaki. First, does Agree operate downward, upward, or in both directions (Adger 2003, Baker 2008, Zeijlstra 2012, Preminger 2012)? Second, does nominal concord make use of the same mechanism as agreement in the verbal domain (Carstens 2000, Baker 2008, Kramer 2009, Norris 2011)? Using our own fieldwork data, we argue that nominal concord in Zazaki (Northwest Iranian, Indo-European) is bidirectional, because it first operates downward with features inside nominal dependents and then upward with features in the extended nominal projection. In addition, we argue that it is derived by the same mechanism as verbal agreement, because it is sensitive to the same barriers for agreement. This suggests that, if agreement in the verbal domain is derived by Agree, nominal concord also uses Agree and that Agree is bidirectional, with downward Agree taking precedence over upward Agree (cf. Béjar & Rezac 2009).

Nominal concord in Zazaki. In Zazaki, nominal concord is realized on the *ezafe* morpheme that introduces dependents of the noun, i.e. adjectives and possessors. Though *ezafe* cliticizes to its left, it forms a constituent with the adjective (1a) or the possessor (1b) to its right at some stage in the derivation (cf. Samiian 1983, den Dikken & Singhapreecha 2004, Larson & Yamakido 2009). Its form *always* varies with the φ-features of the head noun — (1a) vs. (2a) and (1b) vs. (2b).

(1) a. [$_{DP}$ ju kutık [**=o** gırs]]
one dog **=EZ.M.NOM** big
'a big dog (m.)'

b. [$_{DP}$ ga [**=ê** Alik=i]]
ox **=EZ.M.OBL** Alik=OBL.M
'Alık's ox (m.)'

(2) a. [$_{DP}$ a mang [**=a** spi]]=e
that.F goat **=EZ.F** white=F
'that white goat (f.)'

b. [$_{DP}$ bız [**=a** Alik=i]]
goat **=EZ.F** Alik=OBL.M
'Alık's goat (f.)'

With masculine nouns, which have a nominative-oblique case distinction, *ezafe* also agrees in case — but only when it introduces adjectives (3a–b). When it introduces possessors — which receive oblique case realized as the marker *=i* — *ezafe* invariably takes the oblique form *=ê* (4).

(3) a. [$_{DP}$ kutık [**=o** gırs]]
dog **=EZ.M.NOM** big
'the big dog (m. nom.)'

b. [$_{DP}$ kutik [**=ê** gırs]]=i
dog **=EZ.M.OBL** big=OBL.M
'the big dog (m. obl.)'

(4) [$_{DP}$ Kutik [**=ê** Alik=i] [=o gırs]] goşt wen-o.
dog **=EZ.M.OBL** Alık=OBL.M =EZ.M.NOM big meat eat.PRS-3SG.M
'Alık's big dog (m. nom.) is eating meat.'

The proposal. Our proposal has two parts. First, we propose that the *ezafe* marker agrees first downward with its dependent and then upward with a head in the extended nominal projection. This accounts for the difference in possible case realizations when *ezafe* introduces possessors and adjectives. With possessors, *ezafe* is always oblique because it agrees downward in case with the possessor, which is always oblique case marked. No such effect arises when *ezafe* introduces an adjective, however, since adjectives do not have their own case. Second, we propose that nominal concord in Zazaki employs the same mechanism as verbal agreement, since neither allows φ-agreement with obliques (cf. Rezac 2008, Bobaljik 2008, Preminger 2011). *Ezafe* never agrees in φ-features with the possessor (1b, 2b), even though it has its own φ-features (unlike an adjective). In the verbal domain, φ-agreement with obliques is also banned. Zazaki is split ergative: the oblique case marks objects in the present tense and transitive subjects in the past tense. The verb never agrees with an oblique argument, even with transitive verbs in the past tense. T agrees with the (nominative) object, skipping the oblique subject (5).

(5) Kutik=i **ez** guret-**a**.
dog=OBL.M **1SG.NOM** bite.PAST-**1SG**
'The dog bit me.'

To derive this restriction, we assume that obliques — in both the nominal and verbal domains — are introduced by a null P, which is a phase head. This phase boundary shields the φ-features of the oblique DP from agreement. The oblique case feature on P is, however, still available.

Formal implementation. If verbal agreement is derived by Agree, this means that nominal concord is too (Mallen 1997, Carstens 2000, Baker 2008). To account for nominal concord in Zazaki, we posit two sets of features on the *ezafe* head: unvalued φ-features and an unvalued case feature. In addition, we assume, abstracting away from different analyses of *ezafe*, that it is a functional head (Ez) that takes a nominal dependent as its complement (e.g. an AP or a PP, such as a possessor). The resulting EzP merges with or adjoins to a nominal projection. When Ez is merged with AP (6a), it first probes downward into AP. But since adjectives have neither φ- nor case features, Ez must probe upward. Once EzP merges with or adjoins in the extended nominal projection, it can Agree with the functional heads Num(ber) and Gen(der) and is valued with the φ-features of the head noun; and, it can Agree with D to get its case feature valued (either nominative or oblique). When, however, Ez merges with a possessor (6b), it can successfully Agree downward with the case feature on the P introducing the possessor, so that the form of *ezafe* is invariantly oblique with possessors. Since φ-agreement with oblique PPs is blocked, Ez must probe upward to Agree with Gen and Num, so that with possessors *ezafe* still varies with the φ-features of the head noun.

(6)

a. $[_{DP}$ D Gen/Num $[_{EzP}$ Ez $[_{AP}$ A]]]
φ
case

b. $[_{DP}$ D Gen/Num $[_{EzP}$ Ez $[_{PP}$ P Poss]]]
φ
case

Further consequences. We have proposed that nominal concord makes use of bidirectional Agree. This accounts for simpler cases of nominal concord that are all upward. In Icelandic (7), nominal concord in φ-features only operates upward because the dependents (adjectives and numerals) do not themselves have the right kind of features. It also accounts for why possessors agree with the possessee. In Swahili (8), nominal concord on the preposition introducing a possessor must be upward with the features of the (possessed) head noun, rather than with the possessor, since φ-features inside obliques are inaccessible.

(7) Icelandic (Norris 2011:3)
$[_{DP}$ $[_{NumP}$ fjór-**ir**] snigl-**ar**]
four-**NOM.PL** snail-**NOM.PL**
'four snails'

(8) Swahili (Carstens 2000:334)
$[_{DP}$ kiti $[_{PP}$ **cha** mtoto]]
7chair **7of** 1child
'the child's chair (7)'

Unlike the markers of concord in either Icelandic or Swahili, *ezafe* in Zazaki introduces both adjectives and possessors. Because of this unique syntactic configuration, and because *ezafe* agrees in both case and φ-features, we see that Agree can operate both downward and upward in the nominal domain. Crucially, however, Agree is triggered as soon as a licit goal is available. In a bottom-up derivation, this means that downward Agree is *preferred* when a choice arises, because this configuration is established first. As such, downward Agree takes precedence over upward Agree (Béjar & Rezac 2009).

Selected references. Baker, M. 2008. *The syntax of agreement and concord*. Cambridge University Press. □ Béjar, S. & M. Rezac. 2009. Cyclic Agree. *Linguistic Inquiry* 40:35–73. □ Kramer, R. 2009. *Definite markers, phi-features, and agreement: A morphosyntactic investigation of the Amharic DP*. Ph.D. dissertation, University of California, Santa Cruz.