

Non-Agreement in Western Armenian

Alexandros Kalomoiros
University of Pennsylvania

NELS 51, 6-8 November 2020, UQAM

We argue for a model of agreement where the copying of features can happen either in the narrow syntax or at PF; when in the narrow syntax, Agree has access to interpretable features and can only look upwards (following Smith 2017, contra the standard assumption about downwards Agree). This upwards Agree is bounded by the maximal projection, i.e. it is limited to Spec-Head agreement (contra Bjorkman & Zeijlstra 2019 who allow upwards Agree past a maximal projection). Our evidence comes from Western Armenian (WA) where subjects of the form ‘Num(eral) NP_{sg}’ (covert plurals) trigger either singular (‘nonagreement’) or plural (‘full agreement’) agreement on passives and unaccusatives. The same type of subject requires obligatory plural agreement with transitives and unergatives. We demonstrate that the optionality in agreement with passives and unaccusatives is only apparent: when the agreement is singular, the subject is inside the VP; when the agreement is plural, it is in [Spec, TP]. This fact, together with our model of Agree, derives the pattern.

The pattern: Passives, (1), and unaccusatives, (3), allow either singular or plural agreement with covert plurals. Transitives, (2), and unergatives, (4), only plural agreement:

- | | |
|--|--|
| <p>(1) hink zinvor əsbann-ve-ts-av/-an
 five soldier.SG kill-PASS-PST-3SG/-3PL
 ‘Five soldiers were killed’</p> <p>(2) hink zinvor ayn kyuɤ-ə kante-ts-in/*-∅
 five soldier-PL that village-DET destroy-PST-3PL/*-3SG
 ‘Five soldiers destroyed that village’</p> | <p>(3) jerek əfagerd inga-v/-n
 three student fall-PST.3SG/-3PL
 ‘Three students fell’</p> <p>(4) jerek fun hatse-ts-in/*-∅
 three dog bark-PST-3PL/*-3SG
 ‘Three dogs barked’</p> |
|--|--|

A previous account (Sigler 1997) attempted to capture the absence of full agreement in (1) and (3) by claiming that subjects of fully-agreeing verbs are in [Spec, AgrSP], whereas subjects of non-agreeing verbs are in [Spec, TP] and cannot raise to [Spec, AgrSP] because they have no person feature to check. Against this, we argue that agreeing covert plurals are [Spec, TP], while non-agreeing covert plurals are inside of the VP. We now turn to data from scope and adverbs to support this.

Position of covert plurals: We provide two arguments that non-agreeing covert plurals are inside the VP, whereas agreeing covert plurals are outside. (i) Scope: Non-agreeing covert plurals obligatorily take scope below operators like negation, (5). Conversely, agreeing covert plurals, obligatorily scope above negation, (6):

- | | |
|---|---|
| <p>(5) jerek əfagerd tʃ-inga-v
 three student neg-fall-PST.3SG
 ‘Three students did not fall’ ($\neg > \exists$, $*\exists > \neg$)</p> | <p>(6) jerek əfagerd tʃ-inga-n
 three student neg-fall-PST.3PL
 ‘Three students did not fall’ ($*\neg > \exists$, $\exists > \neg$)</p> |
|---|---|

Taking negation to mark the left edge of the VP, we conclude that a non-agreeing covert plural must be inside the VP, while an agreeing covert plural must be outside the VP (presumably in [Spec, TP]). (ii) Adverbs: The adverb ‘quickly’ can have both a VP- and TP-modifying interpretation (the former meaning ‘quickly’, while the latter ‘soon after’). Consider a clause with a covert plural subject and an adverb like ‘quickly’ appearing above that subject. We predict that if the subject appears with singular agreement both TP- and VP-modifying interpretations of ‘quickly’ should be possible, since the subject is VP-internal and the adverb thus scopes above it. Subjects with plural verbal agreement are predicted to allow only the TP-modifying interpretation, as the subject is in [Spec, TP] and the adverb is forced to be higher than the subject. These predictions are borne out:

- (7) jereg gajan-i-n mech arakoren jergu afagerd jega-v/-n
 yesterday train.station-DAT-DEF in quickly two student arrive-PST.3SG/-PST.3PL
 ‘Yesterday in the train station, two students arrived quickly’ (VP-modifying; ✓sg, ✗pl)/‘Yesterday
 in the train station, two students arrived soon after’ (TP-modifying; ✓sg, ✓pl)

Agree: We model the phenomena above by assuming a bipartite Agree: Agree-Link, which establishes a probe-goal relation, and Agree-Copy, which copies features from the probe to the goal (Arregi and Nevins 2012). Agree-Link happens in the syntax, whereas Agree-Copy happens either at PF or at spell-out (Smith 2017). When Agree-Copy happens at spell-out, it has access to both uFs and iFs and is restricted to Spec-Head agreement; at PF, it can look either upwards or downwards, but it only has access to uFs, since iFs have been deleted. We take the number probe to be located on T and propose that covert plurals have uSG since the NP is morphologically singular, but iPL because of the numeral (cf. Wechsler and Zlatić 2003 on Index/Concord). We take agreeing covert plurals to be the result of agreement with this iPL. Crucially, we propose that the iPL and uSG features of covert plurals are structured: The numeral occupies a NumP that always comes with a #P, where the interpretable features of the numeral are hosted (cf. Scontras 2013), (8) (we do not take covert plurals to be full DPs as evidenced by their inability to QR, (5), or reconstruct, (6)):

- (8)
$$\begin{array}{c} \#P[iPL] \\ \swarrow \quad \searrow \\ \# \quad \text{NumP} \\ | \quad \swarrow \quad \searrow \\ [iPL] \quad \text{Num} \quad \text{NP}[uSG] \end{array}$$
- (9) jerek afagerd-ner inga-n/*-v
 three student-PL fall-PST.3PL/*-PST.3SG
 ‘Three students fell’

Since T is restricted to Spec-Head relations in the syntax, when the covert plural is VP-internal, T probes into its specifier and finds nothing. At PF it looks downwards inside the VP and finds the covert plural. But since the iFs are absent, T only finds uSG, which leads to singular agreement. Now assume that the covert plural is in [Spec, TP]. T probes its specifier and finds the iPL first, (8). T can only find uSG if it probes deeper, and economy considerations suggest that the probe agrees with the first feature it finds, in this case iPL. This ensures that only plural agreement will occur when the covert plural is in [Spec, TP]. Thus, plural agreement is the result of agreement with iPL in the syntax, while singular agreement the result of agreement with uSG in the post-syntax. This analysis predicts the uPL feature of full plurals will always be found at PF. This is borne out, (9).

Transitives and Unergatives: Finally, we consider the restriction against non-agreement in transitives and unergatives. We propose that the subject of passives and unaccsuatives stays low because it pseudo-incorporates (Massam 2001). Since agents typically do not pseudo-incorporate, we expect them to fully agree (which is what we observe in transitives and unergatives). This predicts that in cases where the agent pseudo-incorporates, non-agreement should be possible. This is borne out:

- (10) mariam-i-n kəsan meyu xajte-ts (11) Ali-yi ari soktu
 mariam-DAT-DEF twenty bee sting-PST.3SG Ali-ACC bee stung
 ‘Twenty bees stung Mary’ ‘Ali got bee stung’

(10) is a transitive that shows non-agreement (contrast this with (2)). Crucially, the same predicate has been claimed to allow agent pseudo-incorporation in Turkish, (11), (Öztürk 2007). While pseudo-incorporation explains the low position, it cannot explain the lack of agreement. If pseudo-incorporation means that an NP is left low inside the VP, then a solely downwards probing T, should find this iPL and agree. Even if we take VPs to be phases and hence invisible to Agree, agents are on the edge and thus accessible. But then, the pseudo-incorporated agent in (10) should

trigger plural agreement because T would be able to see its iPL. On our approach, Agree never finds a pseudo-incorporated NP because it is restricted to Spec-Head agreement in the syntax. It can find the NP at PF, but the iF are then absent and no agreement with them is possible.

References

- Arregi, K. & Andrew Nevins. 2012. *Morphotactics: Basque auxiliaries and the structure of spell-out*. Dordrecht: Springer.
- Bjorkman, B. & Hedde Zeijlstra. Checking up on (Phi-) Agree. *Linguistic Inquiry* 50(3): 527-569
- Massam, D. 2001. Pseudo Noun Incorporation In Niuean. *Natural Language & Linguistic Theory* 19(1), 153–197.
- Öztürk, B. 2007. Incorporating Agents. *Lingua* 119(2), 334-358.
- Scontras, G. 2013. A unified semantics for number marking, numerals, and nominal structure. In Emmanuel Chemla, Vincent Homer & Gregoire Winterstein (eds.), *Sinn und Bedeutung* 17, 545–562
- Sigler, M. 1997. *Specificity and Agreement in standard Western Armenian*. PhD Thesis, MIT.
- Smith, P. 2017. The syntax of semantic agreement in English. *Journal of Linguistics*, 823-863.
- Wechsler, S. & Zlatić, Larisa. 2003. *The many faces of agreement*. Stanford, CA: CSLI.