

AGREEMENT ASYMMETRIES IN MODERN STANDARD ARABIC AND THE ϕ -FEATURES OF TRACES

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The Problem. Modern Standard Arabic (henceforth MSA) shows two kinds asymmetries in subject verb agreement (see e.g. Fassi Fehri, 1988). The first asymmetry I will call the *Subject Type Asymmetry*. While pro and full pronominal subjects in postverbal position trigger verbal agreement in gender and number (henceforth *full agreement*), full DP subjects only trigger gender agreement (henceforth *partial agreement*), as illustrated in (1) vs (2).

- (1) qaraʔ{ -at/ *-na/ *-a } ʔal fatayæ:t -u ʔal dars -a
 read.PERF{ -3S.F/ *-3P.F/ *-3S.M } DEF girls -NOM DEF lesson -ACC
 ‘The girls read the lesson.’ (adapted from Soltan, 2007, 35)
- (2) ɖæ:ʔ -u: hum læ: ʔæ:bæ:ʔ -u -hum
 come.PERF -3.P.MA they NEG fathers -NOM -their
 ‘They came, not their fathers.’ (Soltan, 2007, 41)

I will argue for an account of these facts based on differences between pronouns and full DPs with respect to how number and gender are syntactically represented in them.

The second asymmetry concerns the the position of verb and subject with respect to each other: preverbal subjects, both pronouns and full DPs, trigger full agreement, as in (3).

- (3) ʔal ʔaulæ:d-u qadim{ *-a / -u: }
 DEF boys came{ -3SG.MASC / -3PL.MASC }
 ‘The boys came.’ (Harbert and Bahloul, 2001, 45)

That is the Subject Type Asymmetry disappears once the subject precedes the verb. I will call this the *Positional Asymmetry*.

One line of approaches attributes the Positional Asymmetry to clitic left dislocation (e.g. Plunkett, 1993; Soltan, 2007), assimilating the full agreement in (3) to that in (2) combined with pro-drop. A second line (Bahloul and Harbert, 1992; Aoun et al., 1994) attributes the positional asymmetry to properties of Specifier-Head agreement. I present empirical arguments from embedded contexts against both the clitic left dislocation approach and the specifier head approach, showing that not all preverbal subjects are left dislocated, not all preverbal subjects bind resumptive pronouns and not in all instances of preverbal subjects is there a specifier which they have plausibly moved through to agree with the verb. I argue

that when the subjects precede verbs as in (3), the ϕ -features on the verb come from an A'-trace of the subject below the verb, not from the preverbal DP. The Positional Asymmetry arises from different ϕ -features being available lexical DPs and in A'-traces, where A'-traces and pronouns share the same features.

The Subject Type Asymmetry. I assume that subject verb agreement is established by a functional head probing for a categorical D-feature. The exchange of ϕ -features between goal and probe is parasitical on this relation. Only the features present on the goal D-head are valued on the probe. The Subject Type Asymmetry arises from different sets of ϕ -features being present in the D-heads of pronouns vs full DPs. While pronouns are syntactically just D-heads and contain the full set of ϕ -features, the D-heads of full DPs acquire their ϕ -features via AGREE. I assume that D probes for a categorical N-feature, valuing of ϕ -features is again parasitical on this AGREE relation. I follow Ritter (1995, and earlier work) in assuming that number in NPs is associated with a separate projection (NUM), while gender specification is intrinsic to the head noun. Constructions where AGREE between D and N results in movement (construct states and names) show that the goal of the AGREE-relation is the head noun, excluding the number projection. It follows that the only feature present in the Ds of full DPs is gender. The different agreement relations are illustrated in (4)

- (4) a. Pronoun: $\overbrace{V \left[\begin{smallmatrix} \text{GEN} \\ \text{NUM} \end{smallmatrix} \right] \dots [D \left[\begin{smallmatrix} \text{GEN} \\ \text{NUM} \end{smallmatrix} \right]]}^{\rightarrow}$
- b. Full DP: $\overbrace{V \left[\text{GEN} \right] \dots [D \left[\text{GEN} \right] [\text{NUM} \left[\text{NUM} \right] [N \left[\text{GEN} \right]]]]]}^{\rightarrow}$

The Positional Asymmetry. The Positional Asymmetry arises from different features being available in full DPs and A'-traces. I follow (i) Fox (1999, 2002) and Sauerland (2004) in assuming that A'-movement involves a process of Trace Conversion, which replaces the D-head of the copy in the base position with an indexed determiner, and (ii) that syntactic indexes contain ϕ -features as argued in Kratzer (2002, 2008). The indexed determiner created by trace conversion has the full set of ϕ -features like a pronoun.

This account raises the question of why the ϕ -features on verbs are those after Trace Conversion, as opposed to those of the full DP that was the original goal. I present first steps towards an explanation that builds on fact that the operation AGREE consists of two steps: *match* and *value*. If *match* applies before Trace Conversion and *value* after it, it follows that the probe shows the ϕ -features of the trace.

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