## Morphosyntax values itself

We argue, based on data from "case-copying reflexives" in Telugu and elsewhere that the link between an anaphor and its antecedent must be at least partially morphosyntactic. The argument is simple: case-copying reflexives systematically match the case of their antecedent. Unlike other  $\phi$ -features which can be assigned some semantics, case is purely formal (uninterpretable). Therefore, the link between the anaphor and its antecedent must be able to trade in purely formal, in addition to semantically relevant, features.

**Background:** Anaphors, at-least in some languages, co-vary in their phonological form with their antecedents. Proposed sources for 'feature-matching' include  $\phi$ -agreement implemented via various mechanisms (Reuland, 2011; Rooryck & Wyngaerd, 2011; Kratzer, 2009), lower-copy pronunciation (Hornstein, 2001), and non-syntactic mechanisms (Preminger, 2019). Here, we adduce data from Telugu to argue for the presence of a morphosyntactic mechanism that establishes co-variation between an antecedent and local complex anaphors.

**Data:** In addition to a simplex anaphoric element or a pronoun, which can both act as reflexives (Balusu, 2019), Telugu has a complex anaphor in which the simplex anaphor or a pronominal is reduplicated (1). That the item being examined is an anaphor can be seen through its behaviour in standard diagnostics for anaphors: It only allows sloppy readings under ellipsis, cannot have deictic reference, or split antecedents, and require tautoclausal antecedents that c-command it (see Subbarao & Murthy 2000). As the examples (1-2) show, the case of the antecedent is matched by the second element of the anaphor, while the first element gets the morphological case a nominal in that position typically would be assigned. In (1a), the second element displays (unmarked) nominative case matching with the subject, but in (1b) & (2), the second element of the complex anaphor is marked dative, matching the case of the quirky subject & indirect object respectively. This behaviour is the reason behind calling them "case-copying" reflexives (Subbarao & Saxena, 1987).

- (1) a. akhil **tana-ni tanu** mečču-kun-aa-du akhil 3sg-ACC 3sg praise-vr-pst-3ms 'Akhil praised himself'
- b. pilla-la-ki **tama-miida tama-ku** koopam wacc-indi child-PL-**DAT** 3PL-ON 3PL-**DAT** anger come-3Ns 'The children became angry with themselves'
- (2) akhil ravi-ki **tana-ni tana-ku** paricayam cess-aa-du akhil ravi-**DAT** 3sG-ACC 3sG-**DAT** introduce do-PAST-3MS

'Akhil introduced Ravi<sub>i</sub> to himself<sub>i</sub>.' (Lit. 'Akhil introduced himself<sub>i</sub> to Ravi<sub>i</sub>')

One might suspect that NOM is assigned by the verbal reflexive (VR) -kun-, as both NOM and the VR co-occur in (1a), but not in (1b) & (2), however, as shown in (3), NOM occurs on the anaphor without the VR when the antecedent is NOM. One also cannot predict the case of the anaphor based solely on structural position. Compare (2) & (4). Although in the same structural position, the case is DAT in (2) & and NOM in (4), matching the case of the antecedent in both instances.

(3) tana-ni tanu marci pooyæædu
(4) akhil ravi-ki tana-ni tanu paricayam ces-kun-aa-du
akhil ravi-DAT 3sG-ACC 3sG introduce do-VR-PAST-3MS
(He) forgot himself.'
(Akhil<sub>i</sub> introduced himself<sub>i</sub> to Ravi.'

Other  $\phi$ -features on the anaphor must match its antecedent as well; we can replace *tanu* with a 3Ms pronoun, *vaadu*, as long as the antecedent matches these features (5). With first or second person antecedents—only reduplicated forms of those pronouns are used to create the complex reflexive (6).

- (5) akhil **vaadi-ni vaadu** mečču-kun-aa-du akhil 3Ms-ACC 3Ms praise-vr-PST-3Ms 'Akhil praised himself'
- (6) nenu nan-nu nenu mečču-kun-aa-nu
   1sg 1sg-acc 1sg praise-vr-pst-1sg
   'I praised myself'
- (7) [vaadi-ni \*(vaadu)] akhil \_\_ mečču-kun-aa-du
   3MS-ACC 3MS akhil \_\_ praise-VR-PST-3MS
   'Akhil praised himself'
- (8) \*akhil vaadi-ni čерри-too vaadu kottu-kun-aa-du akhil 3мs-асс slipper-wiтн 3мs hit-vr-pst-3мs 'Akhil hit himself with a slipper'

(7) shows that the anaphor is a constituent: One element of the complex anaphor cannot scramble by itself, whereas the whole complex can. While the two elements of the reduplicated complex can be separated by a case marker or an adposition, nothing else can intervene between the two (8).

**The problem:** Co-varying features between an antecedent and an anaphor might be given a semantic treatment as long as PERSON, NUMBER and GENDER are the only relevant features. For the anaphors described above, CASE, a purely formal feature is also involved, calling into question a wholesale semantic treatment. Furthermore, (9) and (10) discredit theories that treat anaphors as the spell-out of a lower copy in a movement chain (Hornstein, 2001), or theories that make crucial use of movement in other ways to account for the co-variation (Rooryck & Wyngaerd, 2011). In (9), the subject binds an anaphor inside a conjunction. For the anaphor to establish the relevant link via movement would be a violation of the coordinate structure constraint (NB: the coordinate structure constraint independently holds in Telugu). Lest one thinks that (9) is an example of conjunction reduction, (10) shows that the conjoined nominals form a syntactic constituent and may be scrambled together.

- (9) Ravi-ki [ tana-miida tana-ku mariyu Rani-miida ] koopam waccindi Ravi-DAT 3sG-on 3sG-DAT and Rani-on anger come.pst.3NsG 'Ravi became angry at himself and at Rani.'
- (10) [ tana-miida tana-ku mariyu Rani-miida ] Ravi-ki koopam waccindi
   3sG-on 3sG-DAT and Rani-on Ravi-DAT anger come.pst.3NsG
   'Ravi became angry at himself and at Rani.'

Furthermore, the data above poses problems for theories that rely on "mediated" agreement (Reuland, 2011), where the feature matching is achieved through a series of agreement links (subject– $T-\nu$ -anaphor). While the predicate agrees with the subject in general, experiencer verbs do not. When they are accompanied by a light verb that can host agreement the latter shows default 3Ns agreement (1b). So, the dative subject does not agree with T and yet, feature-matching is achieved, contrary to expectations of such theories.

**Analysis:** Recall that the case copying reflexive requires a local antecedent. We take the reduplication to be a reflex of the anaphor's locality. Following Safir (2014), we assume that anaphors enter the derivation with a special marking, D-BOUND. This marking triggers reduplication when the anaphor is in the same phase as its antecedent. This account predicts that in ECM contexts, just like in English, bound embedded subjects should surface like anaphors. As (11) shows, this prediction holds (Subbarao & Bhaskararao, 2004, p.178).

(11) akhil [tana-ni tanu]<sub>1</sub> [ <u>1</u> picci-vaaDu ani] bhaavinču-kun-aadu akhil 3sg-Acc 3sg <u>mad-3ms</u> comp considered 'Akhil considered himself a madman'

We follow the standard assumption that NPs begin the derivation with unvalued uninterpretable case features. We further claim that the complex anaphor is built via *syntactic* reduplication of the pronoun or the simplex anaphor *tanu* crucially before the case features are valued. By syntactic reduplication we simply mean doubling of abstract features as opposed to a doubling of items with phonological content. Since reduplication precedes case assignment, the anaphor now has two unvalued case features. One of these is assigned a value by the regular mechanism for structural case assignment. The other unvalued feature, we suggest, is assigned the case of the antecedent through binding mediated feature transmission (Kratzer, 2009). Crucially, feature-matching must be (at least partially) carried out in the morphosyntax to capture the case copying effect. We discuss the cross-linguistic and cross structural implications of the proposal by investigating other languages that have case-copying reflexives and comparing the Feature Transmission mechanism utilized here to the mechanism responsible for 'case transmission' in control structures (Landau, 2008).

**Conclusion**: From the lens of case-copying reflexives, this paper argues that feature-matching between an anaphor and an antecedent must have a morphosyntactic component, as CASE is a formal feature with no associated semantics. We argued that a theory that allowed for morphosyntactic Feature Transmission between antecedent and anaphor best handled the data.

**Selected References**: Subbarao & Saxena 1987: Reflexivization and Reciprocals in Dravidian; Subbarao & Lalitha Murthy 2000: Lexical anaphors and Pronouns in Telugu; Subbarao & Bhaskararao 2004: Non-nominative subjects in Telugu; Kratzer 2009: Making a pronoun; Safir 2014: One True anaphor