On apparent pronominal feature contradictions: Shifty

agreement in Telugu and beyond\*

Troy Messick

Rutgers University<sup>†</sup>

Abstract

This paper investigates so-called monstrous agreement in embedded clauses in Tel-

ugu. It first demonstrates that Telugu has monstrous agreement much like the related

language Tamil. A novel theory of monstrous agreement is put forth. The key insight

of the analysis is that some pronouns in embedded environments have features that

make them appear to be both first person and third person simultaneously. I go on

to show that this combination of features has special licensing requirements so that

can only appear it certain well-defined environments. The discovery of these feature

combinations forces a rethinking of possible feature combinations allowed by UG.

**Keywords**: Agreement, Binding, Case, Dravidian, Features, Logophors, Person

Introduction 1

This paper explores so-called monstrous agreement in Telugu (Dravidian, South Asia), where

a non first person pronoun can control first person agreement morphology on the verb when

embedded under speech and attitude verbs. An illustrative example is given in (1). The

\*Acknowledgments to be added

†*E-mail*: troy.messick@rutgers.edu.

1

embedded subject tanu, which is a non indexical pronoun glossed here as 3sg, controls first person agreement morphology -nu on the embedded verb.

(1) Raju [tanu parigett-ææ-nu ani ] cepp-ææ-Du Raju 3SG run-PAST-1SG COMP say-PAST-M.SG 'Raju said that he ran.'

Despite previous work on such agreement patterns in the related language of Tamil (Sundaresan 2018) analyzing such agreement as occurring with a null pronoun in the left periphery in the clause, I will provide novel evidence that tanu itself is actually the controller of monstrous agreement in examples like (1). This discovery raises an immediate question: how can a non-first person pronoun control first person agreement within a theory of agreement that treats it as a feature copying operation (e.g., Chomsky's 2000, 2001 AGREE)? The main goal of this paper is to provide an answer to this question. I provide an analysis of the data in (1) that is able to preserve the current view of agreement. As a simplified preview of the analysis, I will argue that pronouns in embedded environments have a feature structure similar to one in (2). In other words, these pronouns are authors of a speech act, but are not authors of the matrix level speech act.

(2) 
$$[\langle -author, +C \rangle \langle +author, -C \rangle]$$

This allows us to account for the dual nature of such pronouns. They appear to both be third person (i.e, -author) and first person (i.e., +author) simultaneously. I go on to show that such a feature combination has special syntactic licensing conditions that limit its distribution to a certain class of environments. I also show how the analysis presented here can be extended to account for a number of cross-linguistically attested patterns.

In terms of the big picture contribution of this paper, the analysis presented here suggests that possible feature combinations that might seem impossible when only looking at the behavior of features within a single clause, are actually possible in some languages when we look at cases of embedded clauses, hence feature bundles like (2) need to be allowed by UG.

I will first present the basic data of Telugu and introduce monstrous agreement in the language. I will then present Sundaresan's previous analysis of monstrous agreement and present new arguments that the agreement controller is not a null pronoun. I then present my analysis and show how it can be extended to account for patterns found outside of South Asia. I then conclude with some discussion of future research and the connection of monstrous agreement to phenomenon of indexical shift.

### 1.1 Background on some relevant properties of Telugu

Telugu is a Dravidian language spoken by 74 million speakers mainly in the Indian states of Andra Pradesh and Telangana. Grammatically, Telugu exhibits SOV as the canonical word order with a nominative-accusative case alignment, scrambling of noun phrases, *pro-*drop and agglutinative verbal morphology. See Krishnamurti & Gwynn (1985) for a descriptive grammar.

For our purposes we will dive deeper into the pronominal and agreement systems of the language. Telugu verbal agreement morphology typically matches that of the nominative subject. There is some syncretism in the agreement paradigm. In the singular, the third person feminine and third person neuter are syncretic. In the plural, only first person and third person neuter plural have distinct forms, all others surface as the form -ru. Some illustrative examples are given below in (3) and (4).

- (3) a. neenu parigett-ææ-nu 1SG run-PAST-1SG 'I ran.'
  - b. nuvvu parigett-ææ-vu 2SG run-PAST-2SG 'You ran.'
  - c. Raju parigett-ææ-Du Raju run-PAST-M.SG 'Raju ran.'

- d. Rani parigett-in-di Rani run-PAST-F.SG 'Rani ran.'
- e. kukka parigett-in-di dog run-PAST-N.SG 'A dog ran.'

- (4) a. meemu parigett-ææ-mu 1PL.EXCL run-PAST-1PL 'We ran.'
  - b. miiru parigett-ææ-ru 2PL run-PAST-PL 'You(pl) ran.'
  - c. anna-lu parigett-ææ-ru elder.brother-PL run-PAST-PL 'The elder brothers ran.'

- d. peLLa-lu parigeț-ææ-ru wife-PL run-PAST-PL 'The wives ran.'
- e. aawu-lu pariget-ææ-yi cow-PL run-PAST-N.PL 'The cows ran.'

The agreement morphemes are summarized and organized into the table below.

Features	Morphology
1sg	-nu
2sg	-vu
3 Msg	-Du
3Fsg	-di
3Nsg	-di
1pl	-mu
2pl	-ru
3Mpl	-ru
3Fpl	-ru
3Npl	-yi

Table 1: Verbal agreement morphology

In addition to verbal agreement morphology, there is also agreement found on predicate nouns and adjectives sometimes called a pronominal suffix (Subbarao & Murthy 2000:228). This type of agreement is only found for first singular and plural and second person singular. It is absent or null throughout the rest of the paradigm. Relevant examples are given below in (5).

- (5) a. neenu vidyaardhi-ni 1SG student-1SG 'I am a student.'
  - b. nuvvu vidyaardhi-wi2sG student-2sG'You are a student.'

c. meemu vidyaardhu-la-mu
 1SG student-PL-1PL
 'We are students.'

This is summarized in the table below.

Features	Morphology	
1sg	-ni	
$2\mathrm{sg}$	-wi	
3sg	Ø	
1pl	-mu	
2pl	Ø	
3pl	Ø	

Table 2: Pronominal suffix for predicate nominals and adjectives

Let us now briefly discuss the pronominal system of Telugu (for more in depth discussion see Subbarao & Murthy 2000). For our purposes the element tanu is important. Traditionally, this element is glossed as self, i.e., an anaphoric element. It is also a cognate of ta(a)n found in other Dravidian languages Malayalam (Anand 2006) and Tamil (Sundaresan 2012). tanu(a)n in these languages is usually treated as a long-distance anaphor. I argue, following Wali & Subbarao (1991), that tanu should be treated as third person pronominal element that must be bound either intersentially or in the discourse. As we have seen already in (1), tanu can take a long distance antecedent. It is also, possible, however, that tanu can be locally bound as in (6), in such cases, it is also possible for tanu to be reduplicated. For local binding cases, it does require the presence of the verbal reflexive marker -tanu (7).

- (6) vanaja tana-ni (tanu) poguDu-kon-di vanja 3SG-ACC (3SG) praise-REFLEX-F.SG 'Vanja praised herself.'
- (7) \*vanaja<sub>i</sub> tana-ni<sub>i</sub> tiTTi-in-di Vanaja 3SG-ACC scold-PAST-F.SG 'Vanaja scolded herself.'

Evidence that tanu must be specified as third person comes from the fact it cannot take first

or second person pronouns as antecedents.

- (8) a. \*nuvvu [ tanu parigett-ææ-nu ] ani cepp-ææ-vu

  2SG 3SG run-PAST-1SG COMP say-PAST-2SG
  Intended: 'you said that you ran.'
  - b. \*neenu [ tanu parigett-ææ-nu ani ] cepp-ææ-nu 1SG 3SG run-PAST-1SG COMP say-PAST-1SG Intended: 'I said that I ran.'

Unlike anaphoric elements in English and other languages, tanu can be bound in the discourse, as shown in the examples in (9) from Subbarao & Murthy (2000:224). Subbarao & Murthy note that this type of use of tanu has the pragmatic effect of indicating empathy towards the referent.

- (9) a. tanu inkka raa-lee-Du 3SG-ACC yet come-NEG-M.SG 'He has not come yet.'
  - b. tana peLLi gurinci maaku cinta lee-Du 3SG.GEN marriage about 1PL.DAT worry NEG-M.SG 'Her marriage does not worry us.'

In the table below I give the nominative, accusative and dative forms of *tanu* as well as the first and second person pronouns.

It should also be noted that the descriptive grammar of Telugu notes that some younger speakers use *tanu* to refer to each other in the third person (Krishnamurti & Gwynn 1985: 73).

<sup>&</sup>lt;sup>1</sup>Deitetic use of tanu appears to be subject to cross-dialectal variation. One speaker I consulted accepted the sentence (i) with a pointing gesture picking out the referent, another did not, however. Subbarao & Murthy (2000:223) also claim that the deitetic use is ungrammatical.

<sup>(</sup>i) tanu parigett-ææ-Du 3SG run-PAST-M.SG 'He ran.'

Features	NOM	ACC	DAT
1sg	neenu	naanu	naaku
2sg	nuvvu	ninnu	niiku
3sg	tanu	tanani	tanaki
1pl (incl)	manam	manalani	manaki
1pl (excl)	meemu	mammalani	maaku
2pl	miiru	mimmalani	miiku
3pl	tamu	tamani	tamaki

Table 3: Pronouns of Telugu

With this background, now let us turn to embedded clauses where monstrous agreement rears its head.

## 1.2 The basics of Monstrous agreement

Telugu allows for monstrous agreement with pronouns embedded in attitude reports. When the report expresses an attitude about the attitude holder, the agreement on the embedded verb can be either third person (10a) or first person (10b).

- (10) a. Raju [ tanu parigett-ææ-Du ani ] cepp-ææ-Du Raju 3SG run-PAST-M.SG COMP say-PAST-M.SG 'Raju said that he ran.'
  - b. Raju [ tanu parigett-ææ-nu ani ] cepp-ææ-Du Raju 3SG run-PAST-1SG COMP say-PAST-M.SG 'Raju said that he ran.'

Monstrous agreement is only acceptable in embedded clauses. Mismatches are disallowed in matrix clauses, as in (11).

- (11) a. tanu parigett-ææ-Du 3SG run-PAST-M.SG 'He ran.'
  - b. \*tanu parigett-ææ-nu 3SG run-PAST-1SG 'He ran.'

To rule out the possibility that the embedded clause is partially quoted, I provide two diagnostics from matrix questions and NPI licensing.<sup>2</sup> As has been noted in the literature on indexical shift (e.g., Anand & Nevins 2004: 21), grammatical dependencies cannot cross quotation marks. This is shown for English in (12). In (12a), what is moved out of the quoted clause into the matrix clause and the resulting utterance is ungrammatical. Likewise, the ungrammaticality of (12b) is caused by matrix negation being unable to license the NPI in the quoted clause.

- (12) a. \*What<sub>i</sub> did Bob say, "I ate  $t_i$ "?
  - b. \*Bob didn't say, "I ate any bananas."

As is the case with monstrous agreement in Tamil, Telugu allows such dependencies between the embedded and matrix clauses in constructions under investigation, indicating that part of the embedded clause is not a quotation. This is shown in (13). In (13a), a wh-element eemi in the embedded clause can scope into the matrix clause and receive matrix question interpretation. In (13b), negation in the matrix clause can license the NPI in the embedded clause.

- (13) a. Raju [ tanu eemi tinn-aa-nu ani ] cepp-ææ-Du Raju 3SG what eat-PAST-1SG COMP say-PAST-M.SG 'What did Raju say he ate?'
  - b. Raju [ tanu ee aratipanD-lu tinn-aa-nu ani ] cepa-leedu Raju 3SG any banana-PL eat-PAST-1SG COMP say-NEG 'Raju did not say that he ate any bananas.'

Monstrous agreement can also be found when the attitude holder is second person: the embedded verb can show second person (14a) or first person (14b) agreement. The embedded clauses in (14) are scrambled to sentence initial position.<sup>3</sup>

 $<sup>^2</sup>$ It is impossible that the entire clause is a quotation due to the fact that in the intial utterance, the speaker would always use neenu and never tanu to refer to themselves. It is possible, however, that a smaller constituent (e.g., VP) is quoted.

 $<sup>^{3}</sup>$ This is done to avoid having redundant nuvvu pronouns directly adjacent to one another.

- (14) a. [ nuvvu parigett-ææ-vu ani ] nuvvu cepp-ææ-vu 2SG run-PAST-2SG COMP 2SG say-PAST-2SG 'You said that you ran.'
  - b. [ nuvvu parigett-ææ-nu ] ani nuvvu cepp-ææ-vu 2SG run-PAST-1SG COMP 2SG say-PAST-2SG 'You said that you ran.'

Note that the embedded pronoun in (14) is also second person and not *tanu*, this is because, as noted previously, first and second person pronouns cannot act as the antecedent for *tanu*, relevant examples are repeated in (15).

- (15) a. \*nuvvu [ tanu parigett-ææ-nu ani ] cepp-ææ-vu 2SG 3SG run-PAST-1SG COMP say-PAST-2SG Intended:'you said that you ran.'
  - b. \*neenu [ tanu parigett-ææ-nu ani ] cepp-ææ-nu 1SG 3SG run-PAST-1SG COMP say-PAST-1SG Intended:'I said that I ran.'

The first person agreement morphology should also not been seen as some sort of frozen form as it is also sensitive to the number of the subject. As we see in (16) a plural embedded pronoun controls first person plural agreement morphology -mu.

(16) peLLa-lu [ taamu parigett-ææ-mu ani ] cepp-ææ-ru wife-PL 3PL run-PAST-1PL COMP say-PAST-PL 'The wives said that they ran.'

We also see that the pronominal suffix found on predicative nouns and adjectives also takes part in monstrous agreement, as noted in Raghotham (2019). Example provided in (17).<sup>4</sup>

(17) Akhil [tanu manci-vaaDi-ni ani ] bhaavinc-ææ-Du Akhil 3SG good-3SG-1SG COMP consider-PAST-M.SG 'Akhil thought himself a good chap.'

<sup>&</sup>lt;sup>4</sup>Note that Telugu has few if any 'true' predicate adjectives. In order for an adjective to show up in predicative position, it must have a nominal host pronoun vaaDi, glossed in the example below as 3sg.

What sets monstrous agreement apart from languages with indexical shift is the fact that pronouns do not shift. In other words, first person pronouns must always refer to the current speaker and cannot refer to the attitude holder. This is shown in (18). The embedded first person pronoun, *neenu*, must refer to the current speaker.

(18) Raju [ neenu eemi tinn-aa-nu ani ] čepp-ææ-Du? Raju $_i$  1SG $_{*i/s}$  what eat-PAST-1SG COMP say-PAST-M.SG 'What did Raju say that I ate?'

Compare this to a "true" indexical shift language such as Zazaki (Anand & Nevins 2004; Anand 2006). Unlike *neenu* in (18), the indexical pronoun  $\varepsilon z$  in Zazaki can refer to the matrix subject when embedded in a speech report.

(19) Heseni<sub>j</sub> va ke  $\epsilon z_j$  dewletia Hesen.OBL said that I rich.be-PRES 'Hesen said that he was rich.'

A final note: monstrous agreement should also be seen as a separate phenomenon than conjunct/disjunct marking in languages like Newari (Zu 2018). In Newari, in declarative matrix clauses, a verbal marker glossed as conjunct is used when the subject is first person, but in embedded clauses the conjunct verbal marker is used on the embedded verb when the subject of the embedded clause is bound by the matrix subject. This is shown in (20) (Zu 2018: 68-70).

- (20) a. ji ana wan-ā
  1SG.ABS there go-PST.CONJ
  'I went there.'
  - b. wõ: [wa ana wan-ā dhaka:]dhāla 3SG.ERG 3SG there go-PST.CONJ that said 'She<sub>i</sub> said she<sub>i</sub> went there.'

One might wonder whether what I have been glossing as first person agreement morphology

-nu is actually a conjunct marker in Telugu. There is reason to believe that this not the case, however. In Newari, the conjunct marker is used in questions when the subject is second person as seen in (21) (Zu 2018: 69).

(21) cha ana wan- $\bar{a}$  l $\bar{a}$  2SG.ABS there go-PST.CONJ Q 'Did you go there?'

If -nu was a conjunct marker in Telugu, we would likewise expect it to surface in matrix questions when the subject is second person. This is not what we find, however, as shown in (22). In such cases, the second person agreement morphology -vu must be used.

(22) nuvvu parigett-ææ-v/\*n-aa 2SG run-PAST-2SG/\*1SG-Q 'Did you run?'

This indicates that monstrous agreement in Telugu should be treated as separate phenomenon than conjunct/disjunct marking.

# 1.3 Sundaresan (2011, 2018)

Sundaresan (2011, 2018) discusses and analyzes cases of monstrous agreement in Tamil. As shown in (23), just as in Telugu, Tamil shows monstrous agreement embedded under speech verbs.

(23) Murukeesan taan var-r-een-nnŭ so-nn-aarŭ Murugesan ANAPH come.PRES-1SG-COMP say-PAST-3MSG 'Murugesan said that he would come.'

Sundaresan assumes that the left periphery of complements of verbs of communication contains a perspective phrase that contains a null pronoun in its specifier. This pronoun shares features with antecedent of taan. When taan looks like it is controlling agreement, it is in

fact the null pronoun that shares features with *taan*'s antecedent that controls agreement. Because of this, Sundaresan puts forth the following generalization (Sundaresan 2018:13)

#### (24) Antecedence tracking generalization

Nominatives trigger agreement in Tamil. When the anaphor taan occurs in the nominative, the agreement on its clausemate verb tracks the antecedent of taan.

In the case of monstrous agreement, this null pronoun is said to have first person features, but otherwise tracks the features of the antecedent. This is expressed by the following passage (Sundaresan 2018:17, emphasis mine).

(25) " $\phi$ -agreement triggered under nominative taan always tracks the antecedent in different ways: in the clausal complement of a speech predicate, it is 1st-person, triggered by a shifted 1st-person pronoun, but still reflects the features of the agent of the speech predicate; everywhere else it matches the  $\phi$ -features of the antecedent."

Sundaresan further assumes an UPWARD AGREE mechanism, hence when  $\phi$ -probe on T undergoes upward search, it encounters taan; however, it will not agree with it due to it being defective because it is anaphoric. It continues to probe upwards until it reaches the null pronoun in the specifier of the Perspective projection in the clausal periphery. This null pronoun values the  $\phi$ -probe on T. This is shown schematically in (26).

(26) 
$$[P_{erP} \ pro_{\phi:1st} \ [P_{er'} \ [TP \ taan \ [T' \ [vP...] \ T_{\phi:}]] \ Per]]$$

Crucial to the analysis is the empirical Antecedence tracking generalization. In the next section, I show that this empirical generalization does not hold in Telugu. There are cases where the embedded agreement will differ from the features of the antecedent of tanu.

# 2 Arguments against a null pronoun account

I present four arguments that the controller of monstrous agreement is in fact the nominal element that typically controls agreement on the verb, i.e., normally a non-case marked subject (but also objects in certain circumstances, see below). The first three arguments come from situations where the antecedent of tanu and tanu itself differ in number features. The final argument comes from case. Telugu agreement tracks the unmarked case in the clause rather closely. The correlation between case on tanu and monstrous agreement suggests that tanu is in fact the element controlling agreement.

### 2.1 Split Antecedents

It is claimed that apparent agreement with <u>tanu</u> must perfectly match that of its antecedent because it in fact is controlled by a null pronoun that tracks the features of the antecedent, however there are several ways to tease apart the features of <u>tanu</u> from its antecedent. Consider first the case of split antecedents (Kratzer 2009; Rullmann 2004). It is known that plural pronouns can take split antecedents, i.e, two singular antecedents, as shown in the English example in (27).

(27) Every man that I date  $|_i$  tells me<sub>a</sub> that we<sub>i,a</sub> should get married.

This type of example can allow us to see if the agreement tracks the feature of embedded pronoun or that of the attitude holder. Consider (28) from Subbarao & Murthy (2000:282). The attitude holder is a singular individual Kamala, but the embedded pronoun is plural taamu taking both Kamala and Sarita (introduced by a postposition in the matrix clause) as antecedents. The prediction of the null pronoun account is that if monstrous agreement happens, the agreement should surface as first person singular -nu, matching the number features of the agent of the speech predicate. If taamu is the controller of the monstrous agreement, we expect to find the first person plural agreement marker -mu, matching number

features with the embedded subject. As shown in (28), the embedded agreement on the modal is -mu suggesting that it is in fact taamu that is controlling the agreement.

Kamala, Sarita, too [ taamu, tappaka pariik paas awwaagalmu ani Kamala Sarita with 3PL certainly exam pass can.1PL COMP cepp-in-di say-PAST-FSG 'Kamala told Sarita that they can certainly pass the exam.'

Subbarao & Murthy (2000:282)

## 2.2 Partial binding

(29) kofi kpɔ be yèwo-do go
Kofi see COMP LOG.PL-come out
'Kofi saw that they (including Kofi) had come out'

This type of example can be replicated in Telugu in (30). The agent of the speech predicate, Raju, acts as the antecedent for the plural pronoun *taamu*, once again creating a mismatch between the number features of the agent of the speech predicate and *taamu*. As we saw in (28), we find that the agreement morphology tracks the number features of *taamu*, once again suggesting that *taamu* itself is the controller of agreement.

(30) Raju<sub>i</sub> [  $taamu_{i+}$  bayaludeer-tauau-mu ani ] cepp-tauau-Du Raju 3PL leave-PAST-1PL COMP say-PAST-M.SG 'Raju said that they (including Raju) left.'

#### 2.3 Coordinations

Let us now consider another way to have the number features of the attitude holder and the embedded subjects features be distinct by investigating agreement with coordinated NPs in Telugu. As shown in the examples in (31), coordination of NPs in Telugu appears as two NPs adjacent to one another with the final vowel of the first NP undergoing an optional lengthening process (Krishnamurti & Gwynn 1985: 326). While there are many strategies for agreeing with conjunction cross-linguistically (see Nevins & Weisser 2019 for a recent overview), Telugu seems to only rely on resolved agreement: in the cases where two third person human NPs are coordinated, we find plural agreement on the verb (31a), the same agreement is found when a second person pronoun and third person human NP are coordinated (31b). When the coordination involves a first person pronoun, as in (31c-d), the verbal agreement is first person plural. Finally, when two non-human NPs are coordinated, we find the neuter plural marker as in (31e).

- (31) a. Ranii Raju bayaludeer-ææ-ru Rani Raju leave-PAST-PL 'Rani and Raju left.'
  - Ranii nuvvu bayaludeer-ææ-ru
     Rani 2SG leave-PAST-PL
     'Rani and you left.'
  - c. Ranii neenu bayaludeer-ææ-mu Rani 1SG leave-PAST-1PL 'Rani and I left.'
  - d. nuvvuu neenu bayaludeer-ææ-mu 2SG 1SG leave-PAST-1PL 'you and I left.'
  - e. Kukkaa pandi bayaludeer-ææ-yi dog pig leave-PAST-NEUT.PL 'A dog and pig left.'

With this background in mind, let us now examine cases with agreement with embedded

coordination. As with the examples from the previous sections, the attitude holder will be singular, but this time it will act as antecedent of a singular tanu. This tanu, however will be coordinated with another human NP as shown in (32a). In such situations, monstrous agreement is still possible, but the number agreement once again tracks the embedded subject (i.e., the coordination) and not the agent of the speech predicate. The same thing happens when the second person pronoun nuvvu is the attitude holder (32b). Recall that nuvvu cannot serve as an antecedent for tanu, instead we have another second person pronoun in the embedded clause that is once again coordinated with another third person NP. Just as in (32a), the agreement controlled by the embedded coordinated subject is first person plural.

- (32) a. Raju [ Ranii tanu bayaludeer-ææ-mu ani ] cepp-ææ-Du Raju Rani 3SG leave-PAST-1PL COMP say-PAST-M.SG 'Raju said that Rani and him left.'
  - b. nuvvu [ Ranii nuvvu bayaludeer-ææ-mu ani ] cepp-ææ-vu 2SG Rani 2SG leave-PAST-1PL COMP say-PAST-2SG 'You said that Rani and you left.'

# 2.4 Dative subjects and object agreement

The previous subsections showed that when the attitude holder and the embedded subject differ in features, it is the features of the embedded subject that appears on agreement, suggesting that that the subject itself is the controller of agreement and not a null pronoun that matches feature with the attitude holder. This section will now investigate how case interacts with monstrous agreement. Telugu agreement appears to be case discriminate (Bobaljik 2008; Baker 2008b; Preminger 2014), meaning that only NPs with certain cases may act as agreement controllers, as we have seen throughout the paper so far agreement typically occurs with nominative (unmarked) subjects. As seen in (33), however, we see that when the subject is dative, the verb does not show any agreement morphology (see Subbarao & Bhaskararao 2004 for discussion and evidence that the dative argument in such

structures is in fact the subject).<sup>5</sup>

- (33) a. Raju-ki annam i∫tam Raju-DAT rice like 'Raju likes rice.'
  - b. naaku annam i∫tam 1SG.DAT rice like 'I like rice.'
  - c. niiku annam i∫tam 2SG.DAT rice like 'You like rice.'

The same is true in embedded clauses, as shown in (34). If we have an embedded subject that bears the dative case, the embedded verb does not show agreement morphology.

(34) Raju [ tanaku annam iʃtam ani ] cepp-ææ-Du Raju 3sg.dat rice like COMP say-PAST-M.sg Raju said he likes rice.

This could perhaps be seen as a quirk of verbs that assign dative case to the subject; they simply do not agree. An interesting thing happens when such verbs are negated however. In order to negate a verb that takes a dative subject, the negative copular verb -lee- is used. The addition of -lee- introduces a new agreement probe, as agreement morphology now appears on the verb, but instead of agreeing with the subject, the agreement matches the features of the unmarked object, as shown in (35). In (35a) the the subject Rani-ki is in the dative case

<sup>&</sup>lt;sup>5</sup>That the dative argument is the subject of the clause can be demonstrated via crossover. A quantificational dative argument can bind a pronoun within the nominative argument, giving rise to the bound pronoun reading (ia). A quantificational nominative argument cannot bind a pronoun in the dative argument (ib) due to a weak crossover violation.

<sup>(</sup>i) a. prati abbaayi-ki $_i$  tana $_i$  tallidandru-lu i $\int$ tam every boy-DAT 3SG.GEN parent-PL like 'Every boy $_i$  likes his $_i$  parents.'

b. \*tana $_i$  tallidandru-lu-ku prati abbaayi $_i$  iʃtam 3SG.GEN parent-PL-DAT every boy like Intended: 'His $_i$  parents like every boy $_i$ '

and the object *neenu* is in nominative, and the verb matches features with the first person object. The same is true for second and third person objects in (35b) and (35c) as well: the agreement always tracks the features of the object.

- (35) a. Rani-ki neenu iſtam-lee-nu Rani-DAT 1SG like-NEG-1SG 'Rani does not like me.'
  - b. Rani-ki nuvvu i∫tam-lee-vu Rani-DAT 2SG like-NEG-2SG 'Rani does not like you.'
  - c. Rani-ki Raju iʃtam-lee-Du Rani-DAT Raju like-NEG-M.SG 'Rani does not like Raju.'

Even when we have an agreement probe on the verb, when such constructions are embedded with tanaku as the subject, monstrous agreement is not possible as shown in (36). Agreement must be with the nominative object.

(36) Raju [ tanaku Rani iʃtam-lee-du/\*-nu ani ] cepp-ææ-Du Raju 3SG.DAT Rani like-NEG-F.SG/\*-1SG COMP say-PAST-M.SG Raju said he does not like Rani.

We do find monstrous agreement once again if *tanu* is the nominative marked object. In (37a), we have an embedded *tanu* object anteceded by the attitude holder Raju and monstrous agreement is possible. In (37b), we see monstrous agreement controlled by a second person embedded object.

- (37) a. Raju [Rani-ki tanu iftam-lee-nu ani ] cepp-ææ-Du Raju Rani-DAT 3SG like-NEG-1SG COMP say-PAST-M.SG 'Raju said that Rani does not like him.'
  - b. nuvvu [Rani-ki nuvvu iftam-lee-nu ani ] cepp-ææ-vu 2SG Rani-DAT 2SG like-NEG-1SG COMP say-PAST-2SG 'You said that Rani does not like you.'

The interactions we see here follow naturally if we treat monstrous agreement as agreement with <u>tanu</u> (or <u>nuvvu</u>), as they behave just as they normally would throughout the rest of the grammar, i.e., they only control agreement if they appear in the unmarked case. If the controller of the agreement is a null pronoun in the left periphery, however, this pattern is rather mysterious because it is unclear why the case on a separate noun phrase would disrupt the agreement with this null pronoun without any additional stipulations.

#### 2.5 Summary

In this section, I provided several novel pieces of evidence that suggest tanu (or in some cases nuvvu) is in fact the controller of monstrous agreement. The crucial data comes from two types of sources. The first source is a set of three constructions (split antecedents, partial binding, and coordinations) where the embedded subject differs in number features from the attitude holder. It was shown that agreement morphology always tracks the features of the subject suggesting that it is in fact the controller of agreement. The second type of evidence came from case interactions with monstrous agreement. It was shown that agreement tracks the NP with the unmarked case in Telugu, and monstrous agreement showed the same pattern, only when the embedded pronoun beared the unmarked case was monstrous agreement possible once again diagnosing the pronoun itself as the controller of monstrous agreement.

# 3 An analysis of embedded pronouns

The conclusion of the last section is that monstrous agreement appears to be the result of agreement with the embedded pronoun *tanu* (or *nuvvu*). The question now becomes how can a pronoun that does not show any first person features control first person agreement

 $<sup>^6</sup>$ This data hence provides further evidence that the Dravidian ta(a)n(u), if treated as an anaphor, instantiates a counterexample to the Anaphor Agreement Effect (Rizzi 1990). I leave open why Dravidian seems to be exempt from such effects, though see Murugesan (2020) for a possible explanation for the absence of such effects in Tamil.

on the verb? In this section, I will propose an analysis of monstrous agreement. The basic idea is that when a pronoun refers to the attitude holder in embedded speech and attitude reports, it is simultaneously an author of some speech/attitude event and not the author of the current speech act, in other words it is simultaneously first person and third person. There are post syntactic morphological processes that obscure the first person features on the pronoun, but these processes occur after agreement has taken place resulting in the verb having features that do not surface on the pronoun itself.

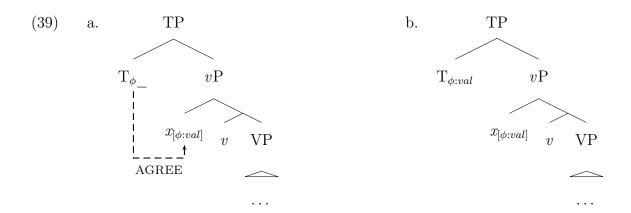
In the second half of this section, I propose that access to certain author features is only licensed when the pronoun carrying such features is bound by certain left peripheral operators, and explore the distribution and nature of such operators.

#### 3.1 The morphology and agreement

I assume the basic "Y-model" of grammar where the syntactic component creates legible interface objects through the use of the primitive operations Merge (both internal and external) and AGREE. For the purposes of the proposed analysis, the operations that underlie morphological agreement are particularly important. I assume that agreement morphology on the verb is the result of the operation AGREE (Chomsky 2000, 2001). In this system, the locus of the agreement probe for subject agreement is on the T(ense) head, furthermore,  $\phi$ -features on T are uninterpretable. I assume the locality of agree in (38) (Chomsky 2000, 2001).

- (38) AGREE is a relation that holds of a probe P and a goal G. To do so G must (at least) be in the domain D(P) of P and satisfy locality conditions. The simplest assumptions for the probe-goal system are shown below:
  - a. Matching is feature identity.
  - b. D(P) is sister of P.
  - c. Locality reduces to "closest c-command"

This is schematized in (39). The  $\phi$ -probe on T searches within its c-command domain for an active DP and undergoes match with the closest DP within that domain (39a). The value of the DP is then copied onto the probe (39b).



Representations created by the syntax are sent to the LF and PF interfaces for interpretation. Following work in Distributed Morphology (Halle & Marantz 1993; Embick & Noyer 2007; Arregi & Nevins 2012; Bobaljik 2017), I assume that the elements on which the syntax operates are abstract in that they lack phonological information. The abstract elements that will be important for the purposes of this analysis are person features. I assume an *author* feature and an *addressee* feature both of which can have either a positive (+) or negative (-) value. These features are manipulated in the syntax (i.e., they can be merged in, moved, and enter agree relations). In the mapping from the syntax to PF these feature bundles are given morphological form by rules of *vocabulary insertion* (VI). VI rules are guided by the following two principles (from Bobaljik 2017).

## (40) Rules Apply

A rule applies wherever its structural description is met.

#### (41) Elsewhere Condition

Where more than one mutually exclusive rule may apply, only the most highly specified rule applies.

To illustrate how these principles interact, consider the fragment of English present tense morphology in (42).

(42) a. [-author -addressee, -plural, +present] 
$$\leftrightarrow$$
 /-s/b. [+present]  $\leftrightarrow$  /- $\emptyset$ /

Imagine now that we have a first person plural subject, in the syntax after agreement has taken place the T node will have the feature [+author, -addressee, -singular +present]. The rule in (42a) cannot apply as its structural description is not met. (42b) would instead be used. Now imagine the subject is third person singular. In such an instance, the structural description for both VI rules in (42) is met, but due to the *Elsewhere Condition* in (41), (42a) must be used as it is the more specific rule.

I also assume that the mapping from syntax to PF involves operations that allow the morphology to manipulate the output of the syntax. The analysis proposed below will make use of one such operation: feature deletion or *impoverishment* (Bonet 1991, 1995; Nevins 2011; Noyer 1997). Impoverishment takes the feature structures of the syntax and deletes certain features before Vocabulary Insertion. In such cases, the morphology expresses fewer features than are present in the syntax (importantly, as this deletion happens during the mapping to PF, the features are still present during the syntactic derivation and at LF). Take as an illustration gender agreement with first person pronouns in Serbo-Croatian, as shown in (43). In (43), we see gender agreement controlled on the verb; however the apparent controller of the agreement, ja, does not morphologically express any gender.

- (43) a. Ja sam otišla no posao I am gone.FEM.SG to work 'I have gone to work' (said by a woman)
  - b. Ja sam otišao na posaoI am gone.MASC.SG to work'I have gone to work' (said by a man)

One way to capture this data is to have the gender feature of the controller be present in the syntax, and hence available for agreement operations, but have it later deleted from the representation via an impoverishment rule before vocabulary insertion takes place. This is schematized in (44). The features of the pronoun are fully specified for person and gender in the syntax (44a), hence the gender feature can enter into a syntactic agreement relation. In the mapping of the syntactic structure to PF, there is a rule of impoverishment that deletes the gender feature in the context of pronouns that have a +author feature (44b). With the gender feature removed, vocabulary insertion occurs, where the vocabulary item ja is inserted for the feature bundle in question.

- (44) a. Features in the syntax: [+author -addressee  $\pm$ masc]
  - b.  $Impovershiment\ rule: \pm {\rm masc} \rightarrow \emptyset \ / \ [+{\rm author} \ \_\_]_{pro}$
  - c. Vocabulary insertion: [+author -addressee]  $\leftrightarrow$  ja

#### 3.1.1 Features of embedded pronouns

It has sometimes been argued that our feature sets must be enriched to account for the behavior of pronouns and agreement morphology in embedded clauses. For instance, Schlenker (2003b) suggests a feature, [±C], that marks whether or not the pronoun is referring to the matrix or embedded context. The feature bundle in (45a) would refer to the author of the current context, i.e., the speaker of the current speech act. The bundle in (45b), on the other hand, would refer to author of a context that is not the current speech act context. Schlenker suggests that (45b) could be used to account for logophors and shifted indexicals cross-linguistically.

$$(45) \quad a. \quad [+author + C]$$

b. [+author -C]

In other work, Schlenker (2003a) suggests that there may be two different types of author

features: [author\*] that must refer to the current speech act context, and [author] that can potentially refer to non-current contexts. More recently, Deal (to appear) proposes that certain embedded pronouns in some languages can have a +author features that occurs when embedded under a special operator. She calls this feature author-i. I follow this line of research, but offer a new perspective on how to enrich our person system: I suggest that embedded pronouns, when referring to the author of an embedded speech or attitude context have the features in (46). Like Schlenker, I will use a  $[\pm C]$  feature to indicate whether the author feature is making reference to the current speech act context or an embedded one. I further assume that the person features are bundled with the  $[\pm C]$  feature and we can have complex person feature bundles that reference both the current speech act and the embedded speech act as well. The bundle below in (46), would indicate the referent for the pronoun below is not the author of the current speech act, but is an author of an embedded speech act.

(46) 
$$[\langle -author, +C \rangle \langle +author, -C \rangle]$$

I will show that expanding our possible feature bundles to include something like (46) will have welcome consequences for not just explaining monstrous agreement in Telugu, but also for logophoric pronouns as well and other agreement shifts.

Let us now turn back to Telugu. For Telugu, I assume the following VI rules for nominative pronouns given in (47) and (48). I follow standard practice and allow for the rules to be underspecified and be governed by the *Elsewhere principle*. As the first person pronoun in Telugu only ever refers to the speaker of the current context, it is specified as +C (47a) and (48a-b). Similarly the second person pronoun also is specified as +C (47b) and (48c). Recall that tanu does not allow for first or second person antecedents. This follows by having it specified as  $\langle$ -author -addressee  $+C\rangle$ . In addition to its  $\phi$ -features, tanu also has a tanu needs to be checked by being referentially dependent on another NP (e.g., intersententially

bound or discourse bound) (47c) and (47d).

- (47) VI rules for Telugu pronouns
  - a.  $[\langle +author, -addressee + C \rangle, -plural] \leftrightarrow neenu$
  - b.  $[\langle -author + addressee + C \rangle, -plural] \leftrightarrow nuvvu$
  - c.  $[\langle -author -addressee + C \rangle -plural, uD] \leftrightarrow tanu$
- (48) a.  $[\langle +author, -addressee, +C \rangle, +plural] \leftrightarrow meemu$ 
  - b.  $[\langle +author, +addressee, +C \rangle, +plural] \leftrightarrow manam$
  - c.  $[\langle -author, +addressee, +C \rangle, +plural] \leftrightarrow miiru$
  - d.  $[\langle \text{-author -addressee}, +C \rangle, +\text{plural}, uD] \leftrightarrow \text{gamu}$

The following VI rules govern the form of the agreement morphology in Telugu. Note that unlike in the pronoun VI rules, the VI rule for the first agreement morphology is underspecified in regards to  $[\pm C]$ . This will be important in capturing the shifty behavior of this agreement morphology. In the plural paradigm there is large amounts or syncretism with only 1pl and plural neuter having distinct forms.

- (49) VI rules for Telugu agreement
  - a.  $[+author -plural] \leftrightarrow nu / T$
  - b. [-author +addressee, -plural]  $\leftrightarrow$  vu / T
  - c. [-author, -addressee -plural, +Masc]  $\leftrightarrow$  Du / T
  - d. [-author, -addressee, -plural -Masc]  $\leftrightarrow$  di / T
- (50) a.  $[+author +plural] \leftrightarrow mu / T$ 
  - b.  $[+Neut + plural] \leftrightarrow yi / T$
  - c.  $[+plural] \leftrightarrow ru / T$

Finally, recall that Telugu also has the personal suffix agreement marker that occurs in

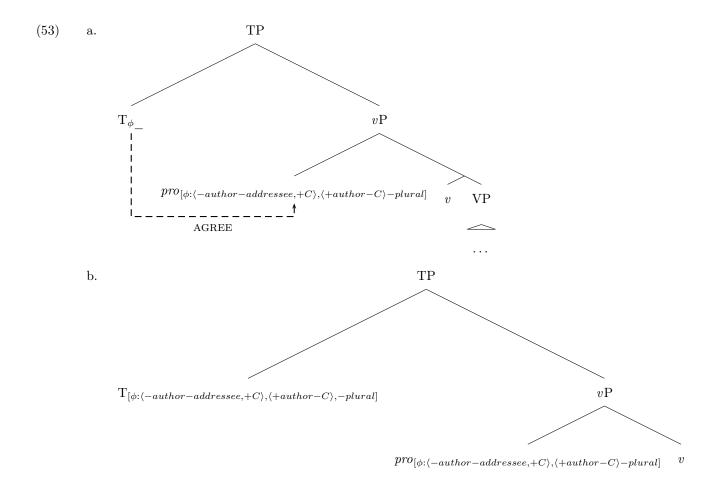
copula structures on predicate nouns and adjectives for first person singular and plural as well as second person singular. Just as with the agreement morphology on T, these VI rules are again underspecified in regards to  $[\pm C]$ 

(51) a.  $[+author -plural] \leftrightarrow ni / N$ b.  $[-author +addressee, -plural] \leftrightarrow wi / N$ c.  $[+author +plural] \leftrightarrow mu / N$ 

Take a derivation of the mapping of the feature bundle in (52) as an example. The agent of the speech predicate is third person, so the embedded pronoun will have the features  $\langle$ -author -addressee,  $+C\rangle$ , but it is also the author of the embedded speech act so it will also have  $\langle$ +author - $C\rangle$  in the syntax (52a). As the VI rule in (47a) is specified for  $\langle$ +author,  $+C\rangle$ , a first person pronoun cannot be inserted. The structural description for the rule in (47c) is met, however, so the feature can surface as tanu.

(52) a. Features in the syntax: [ $\langle$ -author -addressee, +C $\rangle$ ,  $\langle$ +author -C $\rangle$  -plural, uD] b. Vocabulary Insertion: [ $\langle$ -author -addressee +C $\rangle$  -plural, uD]  $\leftrightarrow$  tanu

As  $\langle +\text{author -C} \rangle$  is present in the syntax, it is available for syntactic agreement operations. This allows it to be copied onto the  $\phi$ -probe on T. This is demonstrated below in (53). Agreement occurs in the exact same way as we have seen before, where the  $\phi$  probe on T copies the features of the pronoun onto itself.



Once copied onto T, another set of morphological operations will take place to map those features to the surface agreement morphology. The features that are present in (54a) have been copied from the pronoun. In mapping of these features to vocabulary items, I assume that any and all person features bundled with the +C features are deleted via a rule of impoverishment leaving only the  $\langle +$ author -C $\rangle$  features. This rule captures the generalization in Telugu and cross-linguistically (see sections 4 and 5) that if agreement morphology appears to mismatch from its controller and only expresses one of the +C or -C features in embedded clauses, it is always the -C features that appear to surface. Once the features have been removed, the first person singular morpheme -nu may be inserted because the VI rule for first person agreement morphology is unspecified for  $[\pm C]$ ,

(54) a. Features in the syntax: 
$$[\langle -author -addressee, +C \rangle, \langle +author -C \rangle, -plural]$$
  
b. Impoverishment;  $\langle \alpha, +C \rangle \rightarrow \emptyset / [\underline{\hspace{1cm}} \langle +author -C \rangle]_T$ 

c. Vocabulary Insertion:  $[+author -plural] \leftrightarrow nu / T$ 

Let us now look at the case where there is a second person attitude holder. Recall that when the agent of a speech predicate is second person, the embedded pronoun is also second person, but it can control monstrous agreement. Example repeated in (55).

(55) [ nuvvu parigett-ææ-nu ani ] nuvvu cepp-ææ-vu 2SG run-PAST-1SG COMP 2SG say-PAST-2SG 'You said that you ran.'

Unlike the previous examples, the feature bundle would contain a +addressee feature because the referent is the addressee in the current speech act. Once again, the VI rule in (47a) cannot apply, but unlike the previous example, the feature bundle is specified as +addressee, so the rule in (47c) also cannot be used. The description for the rule in (47b) is met, so the pronoun surfaces as nuvvu.

- (56) a. Features in the syntax: [ $\langle$ -author +addressee, +C $\rangle$ ,  $\langle$ +author -C $\rangle$  -plural]
  - b. Vocabulary Insertion: [ $\langle$ -author +addressee +C $\rangle$ , -plural]  $\leftrightarrow$  nuvvu

Just as before, the features are copied onto T via AGREE and the features will be mapped to the morphology by the following operations.

- (57) a. Features in the syntax: [ $\langle$ -author +addressee, +C $\rangle$ ,  $\langle$ +author -C $\rangle$  -plural]
  - b.  $Impoverishment; \langle \alpha, +C \rangle \rightarrow \emptyset / [\_\_ \langle +author -C \rangle]_T$
  - c.  $Vocabulary\ Insertion$ : [+author -plural]  $\leftrightarrow$  nu / T

The system laid out here allows for account for why a pronoun that does not display any first person features can control first person agreement. The analysis, in a nutshell, is that the pronoun does in fact have (a type of) first person feature but this feature is obscured by later morphological operations. This system overcomes the shortcomings of the previous

analysis that relies on a null element controlling monstrous agreement, as it is the pronoun itself that is controlling the agreement morphology. This in turn explains why if there is a mismatch between the number features of the pronoun and the agent of the speech predicate, agreement unfailingly shows the features of the pronoun. Likewise, as the pronoun itself is the controller of agreement, this also explains why the morphological case of the pronoun influences whether agreement happens because as we have seen, agreement in Telugu is case discriminate.

In the next section, I will explore restrictions on the current system. Particularly, I will argue that there are restrictions on where  $\langle +\text{author}, -\text{C} \rangle$  features can appear. I will show that pronouns with these features must be bound by a local operator introduced by the complementizer ani in Telugu. I will also present novel data that show the morphological case of the matrix subject can influence the distribution of monstrous agreement.

## 3.2 Restricting the $\langle +author, -C \rangle$ features

The analysis presented in the last section relies on the availability of a feature  $\langle +$  author, -C $\rangle$  that can be present on a pronoun in the syntax, but obscured by later morphological operations. A question that now arises is what governs the availability of the  $\langle +$  author, -C $\rangle$  feature. In this section, I present evidence that pronouns that bear this feature must be licensed via binding by a clausal peripheral operator. This restricts the distribution of the feature, and hence also the distribution of monstrous agreement.

#### 3.2.1 The presence of a peripheral operator

As we saw previously, monstrous agreement is possible in embedded speech reports, but not in matrix clauses. Relevant examples are repeated below.

(58) a. Raju [ tanu parigett-ææ-nu ani ] cepp-ææ-Du Raju 3SG run-PAST-1SG COMP say-PAST-M.SG 'Raju said that he ran.' b. \*tanu parigett-ææ-nu 3SG run-PAST-1SG 'He ran.'

So far we have seen that monstrous agreement occurs under verbs of speech, however it occurs in many other attitude environments as well, as shown in (59). This includes verbs of belief (59a), thought (59b-c), direct perception (59d-e) as well as factive verbs like surprise (59f).

- (59) a. Raju [ tanu parigett-aa-nu ani ] nammut-ææ-Du Raju 3SG run-PAST-1SG COMP believe-PAST-M.SG 'Raju believed that he ran.'
  - b. Raju [ tanu parigett-ææ-nu ani ] anu-kon-Du Raju 3SG run-PAST-1SG COMP say-REFL-M.SG 'Raju thought that he ran.' (Lit: Raju said to himself that he ran.)
  - c. Raju [ tanu parigett-ææ-nu ani ]aločinč-ææ-Du
    Raju 3SG run-PAST-1SG COMP think-PAST-M.SG
    'Raju thought that he ran.'
  - d. Raju [ tanu parigett-ææ-nu ani ] vinn-aa-Du Raju 3SG run-PAST-1SG COMP hear-PAST-M.SG 'Raju heard that he ran.'
  - e. Raju [ tanu exam pass ajj-aa-nu ani ] čuis-ææ-Du Raju 3SG exam pass happen-PAST-1SG COMP saw-PAST-M.SG 'Raju saw that he passed the exam.'
  - f. Raju [ tanu exam pass ajj-aa-nu ani ] aasčarjapaDD-ææ-Du Raju 3SG exam pass happen-PAST-1SG COMP surprise-PAST-M.SG 'Raju was surprised that he passed the exam.'

We also find monstrous agreement in causal clauses as shown in (60) (Balusu 2018).

(60) Ravi [ tanu paDDaa-nu ani ] raa-lee-Du Ravi 3SG fell-1SG COMP come-NEG-3MSG 'Ravi did not come because/as he fell.'

Not all causall clauses allow for monstrous agreement. Compare (60) to (61a). The only

difference between the two is the element introducing the casual clause. in (60), this element is ani, the complementizer we have seen introduce the clause complements in (59) as well. In (61a), it is kaabati ('becuase'). As seen in (61a), monstrous agreement is no longer possible. Note that the (61a) is completely grammatical as long as monstrous agreement does not take place in the embedded clause (61b).

- (61) a. \*Ravi [ tanu paDDaa-nu kaabati ] raa-lee-Du Ravi 3SG fell-1SG because come-NEG-3MSG 'Ravi did not come because/as he fell.'
  - b. Ravi [ tanu paDDaa-Du kaabati ] raa-lee-Du Ravi 3SG fell-3MSG because come-NEG-3MSG 'Ravi did not come because/as he fell.'

One final note on the distribution of monstrous agreement. It appears to be sensitive to locality. Take for example, the sentence in (62). In this example, there are two clausal embeddings, with monstrous agreement occurring in the lowest clause. In such cases, tanu can only refer to the intermediate (more local) subject, it cannot refer to the more distant matrix subject.

(62) Ravi $_i$  [ Rani $_j$  [ tanu $_{j/*i}$  bayaludeer-ææ-nu ani ] cepp-in-di ani ] Ravi Rani 3SG leave-PAST-1SG COMP say-PAST-F.SG COMP cepp-ææ-Du say-PAST-M.SG 'Ravi said that Rani said that she left.'

To account for this distribution, I propose that the  $\langle +\text{author -C} \rangle$  is licensed only when it occurs on a pronoun bound by a clausal peripheral operator in the specifier of the CP headed by the complementizer *ani*. Such a restriction is inspired by previous works on embedded pronouns such as logophors and shifted indexicals that treat them as bound by clausal peripheral operators (Adesola 2005; Alok & Baker 2018; Anand 2006; Baker 2008b, 2018; Charnavel 2019a,b; Kinyalolo 1993; Koopman & Sportiche 1989; Pearson 2012). The

constraint for Telugu (+author -C) is given in (63). For the time being, I will leave the exact nature of the locality condition on the binding of the pronoun vague, but it will be sharpened following further discussion to come in the next section.

(63) \*[ $\langle +\text{author}, -\text{C} \rangle$ ] if occurs on a pronoun X such that X is not locally bound by  $Op_{ani}$ .

I will provide two arguments that the embedded pronoun that controls monstrous agreement is bound by an operator. The first comes from the interpretation of such pronouns. Binding by clausal peripheral operators is one mechanism that languages use to give rise to de se readings (see e.g., Anand 2006).<sup>7</sup>. A de se reading is one where the attitude holder is consciously aware that the expressed attitude is about his or herself. A prediction of the present analysis is that if the pronoun controlling monstrous agreement is bound by a clausal peripheral operator, then it should only result in a de se reading. As (64) shows, this prediction is correct. In the scenario in (64), Rani is not aware that she has an attitude about herself; the sentence with monstrous agreement cannot be used to accurately describe the situation while the sentence without monstrous agreement is judged to be acceptable.<sup>8</sup>

- (64) SCENARIO: Rani took an exam, and later saw the top 10 scores with the scorer's student ID numbers. She forgot her own ID number, so did not know who was who. Looking to the top score, she thinks: "This student definitely passed!" But it turned out she was that student.
  - a. #Rani [ tanu exam pass ajj-aa-n-ani ] nammu-tun-di Rani 3SG exam pass happen-PAST-1SG-COMP believe-NPST-F.SG 'Rani believes that she passed the exam.'
  - b. Rani [ tanu exam pass ajj-in-d-ani ] nammu-tun-di Rani 3SG exam pass happen-PAST-F.SG-COMP believe-NPST-F.SG

<sup>&</sup>lt;sup>7</sup>Though see Pearson (2015) for evidence that the logophoric pronoun in Ewe does not need to read de se <sup>8</sup>The judgments were collected from a non-linguistically trained consultant over the course of several in person elicitation sessions. The utterance containing monstrous agreement was first elicited, then the scenario was constructed and presented to the consultant as a truth value judgment task. The judgment that monstrous agreement is not acceptable in such a scenario was stable over multiple sessions. Anonymized and Anonymized (p.c.) also find monstrous agreement only possible with de se interpretation.

'Rani believes that she passed the exam.'

The next argument for a binding approach to the pronoun that controls monstrous agreement is the fact that it shows blocking effects in the sense of Anand (2006). In Anand's typology of de se elements, pronouns that are bound by left peripheral operators are subject to blocking effects. Observe the example in (65). We have previously seen that objects have the ability to control monstrous agreement. This example is repeated in (65a). Compare this to the example in (65b), which is minimally different: the embedded subject has been replaced by the first person pronoun naaku. This change results in the example becoming ungrammatical.

- (65) a. Raju [Rani-ki tanu iftam-lee-nu ani ] cepp-ææ-Du Raju Rani-DAT 3SG like-NEG-1SG COMP say-PAST-M.SG 'Raju said that Rani does not like him.'
  - b. \*Raju [ naaku tanu iftam-lee-nu ani ] cepp-ææ-Du Raju 1sg.dat 3sg like-NEG-1sg comp say-Past-M.sg 'Raju said that I do not like him.'

It is not merely the presence of first person element that causes the ungrammaticality. The intervention is sensitive to c-command. Compare (65b) to (66) which is again minimally different. This time the subject is the phrase naa kukka-ku (my dog-DAT). In such cases, the genitive first person embedded in the larger NP does not trigger the blocking effect. This suggests that the intervention is sensitive to c-command.

(66) Raju [ naa kukka-ku tanu iʃtam-lee-nu ani ] cepp-ææ-Du Raju 1sg.gen dog-DAT 3sg like-Neg-1sg comp say-PAST-M.sg 'Raju said that my dog does not like him.'

This is similar to what we find in Amharic first person cltics/agreement morphology that can only get shifted interpretation if it is not c-commanded by another first person element (Anand 2006: 101-103). This explains why the following sentence is unambiguous in Amharic. In (67), as evidenced by the agreement morphology, there are two first person pro-

nouns. In principle, as Amharic is an indexical shift language, we might expect that either of the two pronouns receive the "shifted" reading such that it refers to the matrix subject John. This is not the case, however. As indicated by the judgments, it appears only the reading where the embedded subject has the shifted interpretation is possible. The reading where the object receives the shifted interpretation is not available.

(67) John al-ittazzəzəññ alə
John NEG.1S-obey-MKIMPERF-1SO say.PERF.3SM
'John said he won't obey me.'

'\*John said that I won't obey him.'

For Anand, the second reading of the sentence is ruled out, because the indexical subject of the embedded clause intervenes and blocks the binding by the operator needed to achieve the shifted interpretation of the object, similar to our Telugu example in (65b). Just as in Telugu (66), the effect goes away if the higher first person element is embedded in a larger phrase and no longer c-commands the object.

(68) John lij-e ay-ittazzəzəññ alə
John son-my NEG.3S-obey-MKIMPERF-1SO say.PERF.3SM
'John said the my son won't obey him.'

'John said that his son won't obey me.'

This data suggests a unification of the Amharic and Telugu data, and such a unification is possible if we take both *tanu* in Telugu and the cltics/agreement morphology in Amharic to be bound by an operator that is sensitive to intervention by first person indexical pronouns.

The above discussion also sheds light on the optionality of monstrous agreement in Telugu. Note that (65b) becomes grammatical when the embedded pronoun controls regular third person agreement, as shown in (69).

(69) Raju [ naaku tanu iftam-lee-Du ani ] cepp-ææ-Du Raju 1SG.DAT 3SG like-NEG-M.SG COMP say-PAST-M.SG

'Raju said that I do not like him.'

What the lack of the intervention in (69) indicates is that when the pronoun does not control monstrous agreement, it is not bound by the operator and hence would not be able to license  $\langle +\text{author}, -\text{C} \rangle$ . Although not bound by the operator, it does not preclude the pronoun from being co-referent with the matrix subject. This also explains why it is compatible with non-de se construals as seen in (64b).

#### 3.2.2 The relation between the matrix subject and $Op_{ani}$

In this section I want to explore the relationship between the matrix subject and the  $Op_{ani}$  that licenses the  $\langle +\text{author}, -\text{C} \rangle$  feature. So far we have seen that monstrous agreement is possible in most attitude contexts, one exception to this appears to be under the verb telusu ('know'). As shown in (70a), monstrous agreement is not possible embedded under this verb. Normal agreement is still possible (70b).

- (70) a. \*Ravi-ki [ tanu parigett-ææ-nu ani ] telusu Ravi-DAT 3SG run-PAST-1SG COMP know 'Ravi knew that he ran.'
  - b. Ravi-ki [tanu parigett-ææ-Du ani ] telusu Ravi-dat 3sg run-past-m.sg comp know 'Ravi knew that he ran.'

One might be tempted to stipulate that the operator that licenses the  $\langle +\text{author}, -\text{C} \rangle$  feature is just absent under this verb. Such an analysis runs into issues when we consider the data in (71). As seen in (71), monstrous agreement is possible in the embedded clause even though the verb stem for the matrix verb is *telusu*, the same as in (70).

(i) #kaani Ravi parigetta-leedu but Ravi run-NEG 'but Ravi did not run.'

<sup>&</sup>lt;sup>9</sup>Note that both (70b) and (71) are factive, as demonstrated by the fact that the continuation in (i) leads to a contradiction if uttered after either example.

(71) Ravi [ tanu parigett-ææ-nu ani ] telusu-kon-Du
Ravi 3SG run-PAST-1SG COMP know-REFL-M.SG
'Ravi found out that he ran.' (Lit. Ravi knew for himself that he ran)

So in principle it seems possible that monstrous agreement is possible under telusu, but how do we account for the impossibility of monstrous agreement in (70a)? A clear distinction between (71) and (70a) is the morphological case of the subject: dative in (70a) and nominative in (71). Another piece of evidence that the case of the matrix subject plays a role comes from causal clauses. Recall that monstrous agreement is possible in causal clause as shown again in (72). Compare this to (73a) which is once again a caussal clause this time with a dative subject in the matrix clause. As we seen in (73a) monstrous agreement is once again impossible. Note that the matrix verb agrees with the object koopam which results in feminine agreement. Regular third person agreement is still possible in the embedded clause, as seen in (73b).

- (72) Ravi [ tanu paDDaa-nu ani ] raa-lee-Du Ravi 3SG fell-1SG COMP come-NEG-3MSG 'Ravi did not come because/as he fell.'
- (73) a. \*Ravi-ki [ tanu paDDaa-nu ani ] koopam wac-in-di Ravi-DAT 3SG fell-1SG COMP angry become-PAST-F.SG 'Ravi became angry because/as he fell.'
  - b. Ravi-ki [tanu paDDaa-Du ani ] koopam wac-in-di Ravi-DAT 3SG fell-M.SG COMP angry become-PAST-F.SG 'Ravi became angry because/as he fell.'

A final argument that case in the matrix clause matters for the licensing of monstrous agreement comes from causatives. Observe the examples in (74). (74a) is a familiar example we have seen before, where the agent of the speech predicate is Raju in the unmarked nominative case, and *tanu*, which refers back to Raju, controls monstrous agreement in the embedded clause. (74b) involves a causative structure. In the causative in the matrix

clause, a nominative causer argument Ravi and causative morpheme -inc- on the verb are introduced. Raju now surfaces with instrumental case. In this structure, if tanu controls monstrous agreement, it must refer to the nominative Ravi. It is no longer able to refer to Raju.

- (74) a. Raju [ tanu parigett-ææ-nu ani ] čepp-ææ-Du Raju 3SG run-PAST-1SG COMP say-PAST-M.SG 'Raju said that he ran.'
  - b. Ravi $_i$  Raju-to $_j$  [ tanu $_{i/*j}$  parigett-ææ-nu ani ] cepp-inc-ææ-Du Ravi Raju-INSTR 3SG run-PAST-1SG COMP say-CAUSE-PAST-M.SG 'Ravi $_i$  made Raju $_i$  say that he $_{i/*j}$  ran.'

So it appears that only nominative marked arguments can license monstrous agreement in the embedded clause. Why might this be? In this respect, I think, it is important to note that only nominative subjects can license the verbal reflexive marker -kon- in Telugu. Compare (75a) and (75b). (75a) has a nominative subject and the verbal reflexive is grammatical. If the subject is dative, however, as in (75b), the use of the verbal reflexive is ungrammatical (Subbarao & Murthy 2000: 228-229).

- (75) a. Vanaja tana-ni poguDu-kon-di Vanaja 3SG-ACC praise-REFLEX-F.SG 'Vanaja praised herself.'
  - b. \*Vibha-ki tana miida koopam waccu-kon-di Vibha-DAT 3SG on angry become-REFLEX-F.SG 'Vibha got angry at herself.'

I propose that the operator that binds the pronoun that controls monstrous agreement has the same licensing conditions as the verbal reflexive marker. This is intuitive as they have very similar functions in the grammar: the verbal reflexive makes a predicate reflexive, and the operator is used in cases where the attitude is de se (i.e., a self reflexive attitude). Non-nominative arguments in both cases appear unable to license such elements, this leads to the incompatibility with the verbal reflexive in (75), and also the lack of monstrous agreement

in (70) and (73a), as well as why Raju in the instrumental case cannot license monstrous agreement in (74b).

The fact that dative subjects do not license the use of  $Op_{ani}$  allows us to probe the nature of the locality condition on monstrous agreement. Recall from the previous section, that only the most local attitude holder can act as an antecedent to tanu when it controls monstrous agreement, example repeated below.

(76) Ravi $_i$  [ Rani $_j$  [ tanu $_{j/*i}$  bayaludeer-ææ-nu ani ] cepp-in-di ani Ravi Rani 3SG leave-PAST-1SG COMP say-PAST-F.SG COMP cepp-ææ-Du say-PAST-M.SG 'Ravi said that Rani said that she left.'

This indicates that tanu cannot be bound by the higher operator. There are at least two ways to block such binding: we could restrict the binding to the most local CP phase or we could block it via relativized minimality where binding by an operator is only possible if there is not a more local operator intervening. With these two options in mind, observe the example in (77). This example is minimally different from (76). All that has changed is the second embedding verb has been changed to telusu and the intermediate subject now bears the dative case. With these changes, it is now possible for tanu to refer to the matrix subject while controlling monstrous agreement, indicating that it can be bound by the high operator immediately embedded under the matrix verb.

(77) Ravi<sub>i</sub> [Rani-ki<sub>j</sub> [tanu\* $_{ij/i}$  bayaludeer-ææ-nu ani ] telusu ani ] Ravi Rani-DAT 3SG leave-PAST-1SG COMP know COMP cepp-ææ-Du say-PAST-M.SG 'Ravi said that Rani knew that he left.'

The contrast in judgments between (76) and (77) seems to provide evidence for a relativized minimality approach to the locality of binding. The binding by the higher operator is in principle possible across an intervening CP phase, but the difference between in (76) and

(77) is that the intermediate subject in (76) can license  $Op_{ani}$  as it is in nominative case. The intermediate subject in (77) on the other hand is in the dative case and hence cannot license the presence of  $Op_{ani}$ . As  $Op_{ani}$  is not present in the lowest clause, the  $Op_{ani}$  embedded under the matrix verb can bind the pronoun in the most embedded clause without crossing another operator. With this discussion, let us now modify our licensing condition on  $\langle +$  author,  $-C \rangle$ .

- (78) \*[ $\langle +\text{author}, -\text{C} \rangle$ ] if occurs on a pronoun X such that X is not locally bound by  $Op_{ani}$ .
  - a. Local binding between  $Op_{ani}$  and a pronoun occurs iff  $Op_{ani}$  c-commands the pronoun and there is no other  $Op_{ani}$  that intervenes between the operator and the pronoun
  - b. An element X intervenes between elements Y and Z iff X c-commands Y and does not c-command Z.

### 3.3 Summary

The analysis presented in this section accounts for the possibility and distribution of monstrous agreement in Telugu. There are two components: a syntactic component and a morphological component.

In the syntax, the pronoun that controls monstrous agreement is bound by a left peripheral operator, this is in fact similar to Sundaresan (2012, 2018) who has taan in Tamil bound by a null pronoun in the left periphery. Where our analyses diverge is in the locus of the agreement controller. In the current system, the embedded pronoun controls agreement, but Sundaresan (2012, 2018) treats a null pronoun as the agreement controller. These differences are highlighted schematically in (79) and (80). The representation in (79) is Sundaresan (2012, 2018)'s analysis where the null pronoun simultaneously binds the embedded subject and controls agreement. (80), on the other hand, is the current proposal. The embedded subject is bound by the clausal peripheral operator, but it itself is the controller of agreement.

(79) 
$$[P_{erP} \ pro_{\phi:1st} \ [P_{er'} \ [TP \ taan \ [T' \ [vP...] \ T_{\phi:}] \ ] \ Per] ]$$

$$BINDING$$

(80) 
$$[CP \ Op \ [C' \ [TP \ tanu \ [T' \ [vP...] \ T_{\phi:}] \ ] \ ] \ C] ]$$

$$BINDING$$

The data in section 2 showed that the representation in (80) had superior empirical coverage because the agreement always tracked the features of the embedded pronoun, even when they mismatched from its antecedent.

I proposed that binding by the operator licensed a special feature which I called  $\langle +$  author, -C $\rangle$ . The binding was subject to a locality condition repeated in (81). This locality condition made it so that only the most local operator could bind the pronoun, but does allow for apparent long distance binding in certain defined circumstances (cf. (76) and (77) in the previous section)

- (81) \*[ $\langle +\text{author}, -\text{C} \rangle$ ] if occurs on a pronoun X such that X is not locally bound by  $Op_{ani}$ .
  - a. Local binding between  $Op_{ani}$  and a pronoun occurs iff  $Op_{ani}$  c-commands the pronoun and there is no other  $Op_{ani}$  that intervenes between the operator and the pronoun
  - b. An element X intervenes between elements Y and Z iff X c-commands Y and does not c-command Z.

I also showed that this operator has its own licensing conditions. Namely it cannot be licensed by non-nominative marked arguments in Telugu. I argued that this licensing condition should be analyzed along the same lines as the reflexive marker, which likewise is only licensed by nominative subjects.

Once the  $\langle +\text{author}, -\text{C} \rangle$  feature is licensed and agreed with in the syntax, the structure is mapped to PF via a set of defined morphological rules. In this analysis,  $\langle +\text{author}, -\text{C} \rangle$  does not surface on the pronoun due to the rules of vocabulary insertion in Telugu.

- (82) a. Features in the syntax: [ $\langle$ -author -addressee, +C $\rangle$ ,  $\langle$ +author -C $\rangle$  -plural, uD]
  - b. Vocabulary Insertion: [ $\langle \text{-author -addressee } + \mathbb{C} \rangle \text{ -plural}, u\mathbb{D}] \leftrightarrow \underline{\text{tanu}}$

The features on the agreement probe on T on the other hand, delete the features that are bundled with +C, and since the VI rules for Telugu agreement morphology are underspecified in regards to  $[\pm C]$ , the first person agreement morpheme -nu may be inserted (83).

- (83) a. Features in the syntax:  $[\langle -author -addressee, +C \rangle, \langle +author -C \rangle, -plural]$ 
  - b.  $Impoverishment; \langle \alpha, +C \rangle \rightarrow \emptyset / [\_\_ \langle +author -C \rangle]_T$
  - c. Vocabulary Insertion: [+author -plural]  $\leftrightarrow$  nu / T

The result of these PF mappings is the appearance of a mismatch between the features of the pronoun and the features of the agreement probe on T. This analysis argues, however, that underlyingly, these two elements do share the same features in the syntax, but it is later obscured by post-syntactic morphological operations.

The combination of the syntactic constraints and morphological operations, allows to account for the observed distribution of monstrous agreement in Telugu. Before concluding, I explore two potential extensions to this analysis, logophoric pronouns and other agreement shifts.

### 4 Extensions: Logophors

The last section presented an analysis of monstrous agreement in Telugu. I would like now to consider the cross-linguistic implications of the proposal. First, while this monstrous agreement is found in many languages of South Asia, It has been noted before in descriptive works of several African languages. Noveli (1985), for example, notes the same pattern in Karimonjong (84a) and Curnow (2002) also cites this phenomenon in Lotuko (84b).

(84)àbù papà tlim ɛbè àlózì inèz morotó. AUX father say that 1sg-go-npst 3sg Moroto 'The father said that he was going to Moroto.'

b. 'dan xul ojori 'tə jojo xobwok. aati  $\epsilon ra$ REL say PRT COMP 1PL.be they PRT kings

'Those who say that they are kings.'

While more detailed work should be done on such languages, at the moment, it seems likely

that the analysis put forth here can easily be extended to these data as well.

Another implication for this analysis I would like to explore further is the extension of

this analysis to logophoric pronouns. In many languages a special logophoric pronoun is

used in such structures to refer back to a speech or attitude holder. This is shown for Ewe

in (85) (Clements 1975; Pearson 2015). When the logophor yè is used, as in (85), it must

obligatorily refer to the attitude holder.

(85)kofi be yè-dzo

Kofi say Log-leave

'Kofi $_i$  said that he $_i$  left'

Logophors can only occur in embedded environments. Thus, they are disallowed in out-of-

the-blue matrix positions, as shown in (86).

(86)\*yè dzo

LOG leave

Intended: 'He left'

Following a similar idea put forth by Schlenker (2003a,b), the analysis presented here al-

lows us to treat so-called logophoric pronouns as the spell out of the a feature combination

 $\langle +\text{author}, -C \rangle$  and  $\langle -\text{author}, +C \rangle$ .

 $[\langle +\text{author}, -C \rangle, \langle -\text{author}, +C \rangle] \leftrightarrow \text{Log}$ (87)

The intuition behind the analysis is that logophoric pronouns mark the author of an embed-

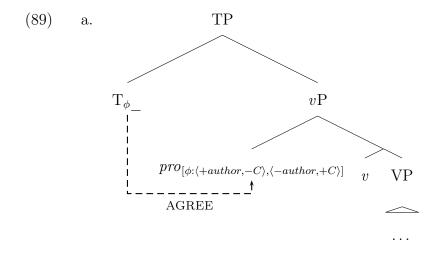
42

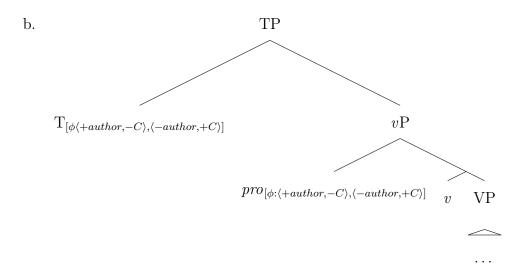
ded speech context, but a non-author of the current speech act context. This can be done by a simple parameter in this system. Languages with logophors have a relevant vocabulary item that can be the spell out of the features in (87).

This allows for an extension to languages with logophors that appear to control first person agreement. This is shown for Donno So (Culy 1994) in (88).

(88) Oumar inyemɛ jɛmbɔ paza bolum miñ tagi Oumar LOG sack.DF drop left.1SG 1SG.OBJ informed 'Oumar told me that he had left without the sack'

Below I give a sample derivation of how the present system can account for such a construction. In the syntax, the logophor is bound by clausal operator hence licensing the  $\langle +$ author, -C $\rangle$  features, and the  $\phi$  probe on T searches within its c-command and finds the logophor. The logophor's features are copied onto the probe as shown in (89).





Once the structure is sent to the morphological component, an impoverishment rule will delete the  $\langle$ -author, +C $\rangle$  feature from the representation on the probe leaving only the  $\langle$ +author, -C $\rangle$  remaining to be spelled out by the vocabulary insertion rules.

(90) Impoverishment; 
$$\langle \alpha, +C \rangle \rightarrow \emptyset / [\_\_ \langle +author -C \rangle]_T$$

After the impoverishment operation, vocabulary insertion occurs. The relevant VI rules for Donno Sɔ are given in (92). Unlike Telugu, Donno Sɔ has a vocabulary item that is fully specified for  $\langle +\text{author}, -\text{C} \rangle$ ,  $\langle -\text{author}, +\text{C} \rangle$ , namely the logophor *inyeme*, so that pronoun is inserted via the VI rule in (91a). Similar to Telugu, however, I assume the first person agreement morphology is underspecified in regards to  $[\pm\text{C}]$ , so the agreement morphology can be inserted via the rule in (91b).

(91) a. 
$$[\langle +author, -C \rangle, \langle -author, +C \rangle] \leftrightarrow inyeme$$
  
b.  $[+author] \leftrightarrow -um / T$ 

Compare this to languages like Ewe and Ibibio. As we have seen previously, Ewe has a logophoric pronoun; however, it completely lacks agreement morphology. The relevant example is repeated in (92).

(92) kofi be yè-dzo Kofi say LOG-leave 'Kofi<sub>i</sub> said that he<sub>i</sub> left'

The analysis presented here accounts for Ewe by once again having the logophor be the spellout of the [ $\langle +\text{author}, -\text{C} \rangle$ ,  $\langle -\text{author}, +\text{C} \rangle$ ]; however as there is no agreement morphology in Ewe, there is no  $\phi$ -probe on T.

Ibibio on the other hand does have both logophors and verbal agreement morphology. In the case where a logophor controls agreement, a special logophoric agreement morphology is used (Baker 2008a; Newkirk 2014). Relevant examples are provided in (93).

- (93) a. álé bò ké ènyé á-mà kòt ńgwèt 3SG-PST say C 3SG 3SG-PST read book 'He; said that he/she; read the book.'
  - b. álé bò ké ímO ì-mà kòt ńgwèt 3SG-PST say C LOG LOG-PST read book 'He $_i$  said that he $_i$  read a book'

The difference between Donno So and Ibibio is Ibibio lacks the impoverishment rule that we have previously seen and instead, has the relevant logophoric vocabulary items to insert for the feature bundles on the pronoun and T. In Ibibio, I assume that the logophoric pronoun and agreement morphology is spelled out via the VI rules in (94).

(94) a. 
$$[\langle +\text{author}, -\text{C} \rangle, \langle -\text{author}, +\text{C} \rangle] \leftrightarrow \text{imO}$$
  
b.  $[\langle +\text{author}, -\text{C} \rangle, \langle -\text{author}, +\text{C} \rangle] \leftrightarrow i / T$ 

Under this type of analysis, logophors can always be seen as the spell out of the  $[\langle +author, -C \rangle, \langle -author, +C \rangle]$  feature bundle, I would like to present additional evidence for this type of analysis outside the realm of agreement.

### 4.1 First person antecedents

Treating logophors as the spell out of the feature bundle [ $\langle$ +author, -C $\rangle$ ,  $\langle$ -author, +C $\rangle$ ] has a number of welcome consequences. The first was noted in Schlenker (2003). Schlenker notes that logophors cannot take first or second person pronouns as antecedents. He demonstrates this with an example from Gokana. While in most logophoric contexts, the logophoric marker is obligatory, in the case where the attitude holder is first person, the utterance with logophoric marking is degraded.

- (95) a. mm kə mm də I said I fell 'I said I fell.'
  - b. ??mm̀ kɔ mm̀ dɔ̀-è I said I fell-LOG 'I said I fell.'

This can be replicated in a number of languages. This is demonstrated in (96) for Danyi Ewe (O'Neill 2016).

- (96) a. Kofí gbl´ə bə́ yi du dzi Kofi say COMP LOG course win 'Kofi says that the he won.'
  - b. \*Mə gbl´ə bə́ yi du dzi I say COMP LOG course win Intended: 'I say that the I won.'

This follows from the vocabulary insertion rule in (87). Logophors can only be inserted for the feature bundle [ $\langle +\text{author}, -\text{C} \rangle$ ,  $\langle -\text{author}, +\text{C} \rangle$ ]; in other words, in cases where the features pick out the author of the embedded context, but the non-author of the current utterance context. The embedded pronouns in (95) and (96) do not meet this requirement as they pick out the author of the embedded context, but they also pick out the author of the current utterance context (i.e., they have the feature bundle [ $\langle +\text{author}, -\text{C} \rangle$ ,  $\langle +\text{C} \rangle$ ,

+C)]), hence the vocabulary insertion rule in (87) cannot be used.

### 4.2 Morphological transparency

Under the above analysis, the abstract feature bundle that is morphologically realized as a logophor is  $[\langle +\text{author}, -\text{C} \rangle, \langle -\text{author}, +\text{C} \rangle]$ . We might then expect that the morphological realization of a pronoun will sometimes express both first and third person exponence. In other words, we may expect some language to have a logophoric pronoun look something like he-me, where this is a combination of [-author] pronoun and [+author] pronoun. This is surprisingly indeed found in the language Fongbe.<sup>10</sup> The personal pronoun system of Fongbe is given in the table below (Lefebvre & Brousseau 2002).

Features	Personal Pronouns	Clitics (+NOM)	Clitics (-NOM)
1sg	nyè	ùn	mì
2sg	hwè	à	wè
$\begin{array}{c} 1\mathrm{sg} \\ 2\mathrm{sg} \\ 3\mathrm{sg} \end{array}$	é(yè)	é	è
$1/2\mathrm{pl}$	mí	mí	mí
3pl	yé	yé	yé

Table 4: Pronouns of Fongbe

Fongbe also has a logophoric pronoun that behaves in a similar manner to the other logophors described above: it is only found in embedded environments, obligatorily refers to the attitude holder, and cannot be antecededed by a first person pronoun (Kinyalolo 1993). An example from Lefebvre & Brousseau (2002) is given in (97).

(97) É d`ɔ é-mì m`ɔ é-mì-déè 3SG say LOG see LOG-ANA 'She said that she saw herself.'

The logophoric pronoun in (97) is  $\acute{e}$ - $m\grave{i}$ , which contains both the third person personal pronoun  $\acute{e}(y\grave{e})$  and the first person clitic  $m\grave{i}$ . I assume that the feature bundle in Fongbe has undergone fission and both the features are spelled out via the rules in (98).

<sup>&</sup>lt;sup>10</sup>Thanks to Anonymized (p.c.) for bringing this data to my attention.

- (98) a.  $Fission: [\langle +author, -C \rangle, \langle -author, +C \rangle] \rightarrow [\langle +author, -C \rangle] \text{ and } [\langle -author, +C \rangle]$ 
  - b. Vocabulary Insertion:  $[\langle -author, +C \rangle] \leftrightarrow \acute{e}(y\grave{e})$
  - c. Vocabulary Insertion:  $[\langle +author, -C \rangle] \leftrightarrow mi$

This is expected under the analysis proposed here as logophors are abstractly made up of [+author] features and [-author] features, hence it is unsurprising that some languages wear these abstract features on their sleeve. Fongbe thus provides strong evidence for the analysis adopted here.

## 5 Extensions: Other agreement shifts

One of the core proposals of the analysis presented was that pronouns in certain languages in attitude environments have complex person feature values:  $[\langle +\text{author}, -\text{C} \rangle, \langle -\text{author}, +\text{C} \rangle]$ . The intuition behind this analysis is that the pronoun denotes the author of the embedded attitude/speech act, but is not the author of the current speech act. With this in mind, let us now examine (99). In (99), a speaker is reporting an attitude John has about him or her. Since the pronoun refers to the author of the current speech act, a first person form is used.

(99) John believes that I am rich.

In our system, however, the embedded pronoun could also have complex person features in some languages. As the pronoun is referring to the author of the current speech act context, it does not refer to the author of the embedded attitude context, so we expect it to have [ $\langle$ -author, -C $\rangle$ ,  $\langle$ +author, +C $\rangle$ ] person features. A question then arises whether languages ever morphologically indicate that this pronoun has such a feature set.<sup>11</sup> Surprisingly, there are languages that do morphologically mark this feature combination. Although not commonly reported, there are language where the first person pronoun can optionally control third

 $<sup>^{11}</sup>$ Schlenker (2003a) briefly acknowledges that such languages are predicted by his system as well.

person (i.e., -author) agreement in such cases. The Golin (Papuan) example in (100) and the Mishar Tatar example in (101) illustrate this.

- (100) yal i na na si-m-u-a di-n-g-w-e man TOP 1SG 1SG strike-3-REP-DIST say-3-AS-3-PROX 'He $_i$  said I hit him $_i$ ' (Lounghnane 2005: 147)
- (101) Roza min kit-te diep bel-ä
  Roza 1SG leave-PAST C know-ST.IPFV
  'Roza knows that I left.' (Podobryaev 2014)

In (100) we see two embedded first person pronouns. The one in subject position (i.e., agreement controlling position) refers to the current speaker. The other first person pronoun is shifted and refers to the attitude holder. The agreement controlled by the non-shifted first person pronoun, however, is third person. Likewise, in (101), the embedded pronoun does not control first person agreement, but rather controls (null) third person agreement.

This type of data can be integrated into the current system. The pronouns in (100) and (101) have the feature bundle [ $\langle$ -author, -C $\rangle$ ,  $\langle$ +author, +C $\rangle$ ], which is the mirror image of the feature bundle we used for pronouns in Telugu and logophors ([ $\langle$ +author, -C $\rangle$ ,  $\langle$ -author, +C $\rangle$ ]). This feature bundle indicates that the pronoun refers to the author of the current speech act, but not the author of the embedded speech act. Following the analysis from the previous section, we can model this apparent mismatch in agreement as follows. Let us use Mishar Tatar as our exemplar. First, agreement in the syntax copies the feature bundle of the pronoun onto the  $\phi$ -probe on T. As in Telugu, pronouns are underspecified for [-C] features and hence the first person pronoun can surface via a VI rule like the one in (102b).

(102) a. Features in the syntax:  $[\langle -author, -C \rangle, \langle +author, +C \rangle]$ b. Vocabulary Insertion:  $[\langle +author, +C \rangle] \leftrightarrow min$ 

Again, similar to Telugu, in mapping the agreement morphology to PF, there is an impover-

ishment rule that will remove the features bundled with +C, leaving only the person features bundled with [-C] behind (103b). The features are then spelled out via the VI rule in (103).

- (103) a. Features in the syntax:  $[\langle -author, -C \rangle, \langle +author, +C \rangle]$ 
  - b. Impoverishment:  $\langle \alpha, +C \rangle \rightarrow \emptyset / [\_\_ \langle -author -C \rangle]_T$
  - c. Vocabulary Insertion: [-author]  $\leftrightarrow \emptyset$

This analysis also accounts for why the third person agreement option disappears when the attitude holder is a first person pronoun, as shown in (104).

(104) \*Min Maratka [min kit-te diep] at'γ

1SG Marat.DAT [1SG leave-PST C] tell-PST

Intended: 'I told Marat that I left.'

Since the attitude holder is both the author of the embedded attitude and the matrix speech act, the embedded pronoun is not [ $\langle$ -author, -C $\rangle$ ,  $\langle$ +author, +C $\rangle$ ], but rather [ $\langle$ +author, -C $\rangle$ ,  $\langle$ +author, +C $\rangle$ ]. Since the pronoun does not have a [-author] feature, the impoverishment rule in (103b) is not active and cannot delete the [ $\langle$ +author, +C $\rangle$ ] feature, hence the pronoun in (104) can never control third person agreement.

Note that when the agreement shift data from languages like Mishar Tatar and monstrous agreement data in languages like Telugu are taken together, a pattern begins to emerge. In the languages sampled here, the generalization in (105) appears to hold.

(105) If a pronoun and agreement morphology mismatch in embedded environments, the [+C] features are expressed on pronoun, while the [-C] features are expressed on the agreement morphology.

I am currently unaware of any language where this generalization does not hold, but more cross-linguistic work should be done on a larger sample of languages. I leave such an endeavor for future research.

# 6 Open Questions and Conclusion

Before concluding, let us address one final issue: the relationship between monstrous agreement and indexical shift. Recall from earlier, that unlike languages with monstrous agreement, in indexical shift languages, the indexical pronouns themselves can receive the shifted interpretation.

(106) Heseni<sub>j</sub> va ke  $\epsilon z_j$  dewletia Hesen.OBL said that I rich.be-PRES 'Hesen said that he was rich.'

Despite the similarity between the two, in the Anand (2006) and Deal (to appear) typology, they make a clear distinction between the two phenomenon and claim the two phenomenon arise from two different mechanisms. Indexical shift is caused by a context overwriting operator and monstrous agreement (what Deal calls indexiphoricity) is subject to binding by an operator similar to the analysis presented here. In fact, the analysis presented in this paper fits within the Anand/Deal typology quite well. There is something unsatisfying about having two distinct mechanisms for indexical shift and monstrous agreement, however, because the two phenomenon seem so similar.

In light of this, I will discuss two points that I think are suggestive that monstrous agreement and indexical shift should be more closely related than the current typology predicts. The first comes from the distribution of the two phenomenon. I will highlight this with data from the Turkic language family. Within this family, the languages Uyghur (Shklovsky & Sudo 2014) and Sakha (Vinokurova 2011) have indexical shift. This is shown for Uyghur in (107).

(107) Ahmet [ men ket-tim ] di-di Ahmet 1sg leave-Past.1sg say-Past.3 'Ahmet, said that he, left.' Mishar Tatar, on the other hand, does not shift overt indexical pronouns; only agreement morphology is allowed to have the shifted interpretation (Podobryaev 2014) similar to what we find in Telugu and Tamil, so in the Anand/Deal typology, Mishar Tatar does not have indexical shift, it has monstrous agreement/indexiphors. This is shown in (108). In (108a) the embedded subject is null, but controls first person agreement morphology on the verb and the shifted interpretation is possible. in (108b), a overt indexical pronoun is used as the embedded subject and the only interpretation is the non-shifted one.

- (108) a. Alsu [ pro kaja kit-te-m diep ] at'-tv?

  Alsu pro where go.out-PAST-1SG COMP say-PAST
  'Which place did Alsu; say that she; went?'
  - b. Alsu [min kaja kit-te-m diep ] at'-tv?
    Alsu 1SG where go.out-PAST-1SG COMP say-PAST
    'Which place did Alsu say I went?'

Interestingly, both in Uyghur and Mishar Tatar, there is no shifting of any kind in nominalized embedded clauses. In (109a), we have a Uyghur nominalized clause and unlike the example in (107), the shifted interpretation is impossible. Similarly, in Mishar Tatar (109b), shifting goes away even if the pronoun is covert in the embedded nominalized clause.

- (109) a. Ahmet [ mening kit-ken-lik-im-ni ] di-di Ahmet 1sg.gen leave-rel-nmlz-1sg-acc say-past.3 'Ahmet said that I left.'
  - b. Marat Alsu-ga [ (minem) kil-gän-em-ne ] t'-tv?

    Marat Alsu-DAT (1SG.GEN come-NMLZ-1SG-ACC say-PAST 'Marat told Alsu that I came.'

Under the theory that treats indexical shift and monstrous agreement as arising from two distinct mechanism, this similarity in distribution is not predicted. It must be viewed as an accident that monstrous agreement and indexical shift both are unavailable in nominalized clauses. If, however, indexical shift and monstrous agreement had a single underlying mechanism, then we would rightly predict that they will have identical distributions.

The second piece of data that suggests a unified account comes from allocutive agreement in Tamil as described by McFadden (2020). As McFadden notes, Tamil has an agreement suffix that marks the politeness that the speaker expresses towards the addressee. This is shown in (110). The agreement marker indicates a polite form of address from the current speaker to the current addressee.

(110) Naan daangiri vaang-in-een-ŋgæ.

I Jangri buy-PAST-1SG.SBJ-ALLOC
'I bought Jangri'

This interacts with monstrous agreement in a very interesting way when embedded, as shown in (111). When we have monstrous agreement and allocutive agreement in the embedded clause, then the allocutive marker does not indicate politeness from the current speaker to the current addressee, but rather politeness from Maya, the agent of the speech predicate, to the addressee of the embedded speech act.

(111) Maya [ taan pooTTi-le & dejkkæ-poo-een-ngæ-nnu ]
Maya 3G.ANAPH contest-LOC win-go-PRES-1SG-ALLOC-COMP
so-nn-aa
say-PAST-3SG.FEM
'Maya said that she would win the contest.'

Alok & Baker (2018) argue that in another South Asian language, Magahi, this type of allocutive agreement shift should be analyzed as a type of indexical shift of a 2nd person indexical. If this is the case and monstrous agreement as discussed here is seen as separate from indexical shift of first person, Tamil could be seen as a language that has indexical shift for second person but not first person. This would then instantiate a counterexample to a robust cross-linguistic generalization that if languages have indexical shift of the second person that entails it has indexical shift of the first person, see e.g., Deal (to appear:72)'s generalization given in (112).

(112) Within and across languages, the possibility of indexical shift is determined by the hierarchy 1st > 2nd > Loc. Indexicals of a certain class undergo shift in a particular verbal complement only if indexicals of classes farther to left undergo shift as well.

This generalization can be salvaged in light of the Tamil data if monstrous agreement is seen as a type of first person indexical shift. This again is suggestive that monstrous agreement and indexical shift should be unified. I leave for future research, however, how such a unification can be achieved while still preserving the insights and data coverage of the Anand (2006) and Deal (to appear) theories.

### 6.1 Concluding Remarks

In this paper, I have analyzed monstrous agreement in Telugu. I first showed that previous analysis of monstrous agreement failed to account for the full range of data in Telugu and put forth a novel analysis where it is the embedded subject that is the controller of monstrous agreement. I argued that embedded pronouns in Telugu have complex person features that indicate speech act roles for the current and embedded speech act. These features are available in the syntax, but can be obscured in the morphology by post-syntactic operations. I also showed that there are strict requirements on the licensing such features and put forth conditions that limit their distribution. The theory was then extended to account for a number of other cross-linguistic phenomenon such as logophors and other types of agreement shifts.

Zooming out, the big picture take away of this analysis is that UG makes use of more complex feature combinations than is obvious if we just investigate matrix clauses. It is only by investigating embedded clauses, that we see that feature combinations that would seem to be impossible when in a single clause are in fact sanctioned by UG.

### References

- Adesola, Oluseye. 2005. Pronouns and null operators: A-bar dependencies and relations in Yuroba. New Brunswick, NJ: Rutgers University dissertation.
- Alok, Deepak & Mark C. Baker. 2018. On the mechanics (syntax) of indexial shift: Evidence from allocutive agreement in Magahi. Ms. Rutgers Universityy.
- Anand, Pranav. 2006. De De Se. Cambridge, Massachusetts: Massachusetts Institute of Technology dissertation.
- Anand, Pranav & Andrew Nevins. 2004. Shifty operatos in changing context. In Robert B Young (ed.), Semantics and Linguistic Theory 14, 20–37.
- Arregi, Karlos & Andrew Nevins. 2012. Morphotactics: Basque auxilaries and the structure of spellout. Springer.
- Baker, Mark C. 2008a. On the nature of the antiagreement effect: Evidence from wh-in-situ in Ibibio. *Linguistic Inquiry* 39(4). 615–632.
- Baker, Mark C. 2008b. *The syntax of agreement and concord*. Cambridge: Cambridge University Press.
- Baker, Mark C. 2018. Toward a shared syntax for shifted indexicals and logophoric pronouns. In Laura Kalin, Ileana Paul, Jozina Vander Klok & Francesco Gentile (eds.), *Heading in the right direction: Linguistic treats for Lisa Travis*, vol. 25 1, Montreal: McGill Working papers in Linguistics.
- Balusu, Rahul. 2018. Grammaticalization of self-ascription. Talk given at Jawaharlal Nehru University, Delhi, India.
- Bobaljik, Jonathan David. 2008. Where's phi? Agreement as a post-syntactic operation. In Daniel Harbour, David Adger & Susana Bejar (eds.), *Phi theory: Phi-features across modules and interfaces*, 295–328. Oxford: Oxford University Press.
- Bobaljik, Jonathan David. 2017. Distributed morphology. In Mark Arnoff (ed.), Oxford research encyclopedia of linguistics, Oxford University Press.
- Bonet, Eulàlia. 1991. Morphology after syntax. Cambridge, Massachusetts: Massachusetts

- Institute of Technology dissertation.
- Bonet, Eulàlia. 1995. Feature structure of Romance clitics. Natural Language and Linguistic Theory 13(607-647).
- Charnavel, Isabelle. 2019a. Locality and logophoricity: A theory of exempt anaphora Oxford Studies in Comparative Syntax. Oxford: Oxford University Press.
- Charnavel, Isabelle. 2019b. Perspectives in causal clauses. Natural Language & Linguistic Theory 37(2). 389–424.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Urigareka (eds.), Step by step; Essays on minimalist syntax in honor of howard lasnik, 89–115. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), Ken Hale: A life in language, 1–52. MIT Press.
- Clements, G. N. 1975. The logophoric pronoun in Ewe: Its role in discourse. *Journal of West African Languages* 2, 141–177.
- Culy, Christopher. 1994. Aspects of logophoric marking. Linguistics 32(6). 1055–1094.
- Curnow, Timothy Jowan. 2002. Three types of verbal logophoricity in African languages. Studies in African Linguistics 31(1/2).
- Deal, Amy Rose. to appear. A theory of indexical shift: meaning grammar and crosslinguistic variation. Cambridge, Massachusetts: MIT Press.
- Embick, David & Rolf Noyer. 2007. Distributed morphologyy and the Syntax-Morphology interface. In Gillian Ramchand & Charles Reis (eds.), *The oxford handbook of linguistic interfaces*, 289–234. Oxford University Press.
- Halle, Morris & Alec Marantz. 1993. Distributed morphologyy and the pieces of inflection. In Kenneth Hale & S. Jay Keyser (eds.), *The view from building 20*, 111–176. MIT Press.
- Kinyalolo, Kasangati K. W. 1993. The logophoric pronoun 'emi as a LF operator/anaphor. In *Proceedings of the north east linguistics society 23*, vol. 23, 223–237.
- Koopman, Hilda & Dominique Sportiche. 1989. Pronouns, logical variables, and logophoricity

- in Abe. Linguistic Inquiry 20. 555–589.
- Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40(2). 187–237.
- Krishnamurti, BH. & J.P.L. Gwynn. 1985. A grammar of modern Telugu. Delhi: Oxford University Press.
- Lefebvre, Claire & Anne-Marie Brousseau. 2002. A grammar of Fongbe. Berlin: Mouton de Gruyter.
- Lounghnane, Robyn. 2005. Reported speech constructions in Golin. In Nicholas Evans, Jutta Besold, Hywel Stoakes & Alan Lee (eds.), *Materials on Golin: Grammar, texts and dictionary*, 129–147. Melbourne: Melbourne.
- McFadden, Thomas. 2020. The morphosyntax of allocutive agreement in Tamil. In Peter W. Smith, Johannes Mursell & Katharina Hartmann (eds.), Agree to agree: Agreement in the minimalist programme, vol. 6 Open Generative Syntax, Berlin: Language Science Press.
- Murugesan, Gurujegan. 2020. Deriving the Anaphor Agreement Effect and its violations.

  Ms., Indira Gandhi National Tribal University.
- Nevins, Andrew. 2011. Marked targets vs. marked triggers and impoverishment of the dual.

  \*Linguistic Inquiry 42. 413–444.
- Nevins, Andrew & Philipp Weisser. 2019. Closest conjunct agreement. Annual Review of Linguistics 5. 219–241.
- Newkirk, Lydia. 2014. Description of logophors in Ibbibio. In *Kansas working papers in linguistics*, vol. 35, 112-128: University of Kansas.
- Noveli, Bruno. 1985. A grammar of the Karimonjong language. Berlin: Dietrach Reimar Verlag.
- Noyer, Rolf. 1997. Feature positions and affixes in Autonomous Morphological Structure.

  New York: Garland Press.
- O'Neill, Teresa. 2016. The distribution of the Danyi Ewe logophor yi. Talk given at the LSA

- Annual Meeting.
- Pearson, Hazel. 2012. The sense of self: Topics in the semantics of De Se expressions.

  Cambridge, Massachusetts: Harvard University dissertation.
- Pearson, Hazel. 2015. The interpretation of the logophoric pronoun in Ewe. *Natural Language Semantics* 23(2). 77–118.
- Podobryaev, Alexander. 2014. Persons, imposters, and monsters. Cambridge, Massachusetts: Massachusetts Institute of Technology dissertation.
- Preminger, Omer. 2014. Agreement and its failures. Cambridge, Massachusetts: MIT Press.
- Raghotham, Sreekar. 2019. Telugu: An accusative case study. Handout from FASAL 9.
- Rizzi, Luigi. 1990. On the anaphor-agreement effect. Rivista di Linguistica 2. 27–42.
- Rullmann, Hotze. 2004. First and second person pronouns as bound variables. *Linguistic Inquiry* 35(1). 159–168.
- Schlenker, Philippe. 2003. A plea for monsters. Linguistics and Philosophy 26. 29–120.
- Sells, Peter. 1987. Aspects of logophoricity. Linguistic Inquiry 18(3). 445–479.
- Shklovsky, Kirill & Yasutada Sudo. 2014. The syntax of monsters. *Linguistic Inquiry* 45(3). 381–402.
- Subbarao, Karumuri Venkata & B. Lalitha Murthy. 2000. Lexical anaphors and pronouns in Telugu. In Barbara C. Lust, Kashi Wali, James Gair & K.V. Subbarao (eds.), *Empirical approaches to language typology*, 217–276. Berlin: Mouton de Gruyter.
- Subbarao, K.V. & Peri Bhaskararao. 2004. Non-nominative subjects in telugu. In Peri Bhaskararao & K.V. Subbarao (eds.), *Non-nominative subjects*, vol. 2, 209–222. Amstedam/Philadelpia: John Benjamins.
- Sundaresan, Sandhya. 2011. A plea for syntax and a return to first principles: monstrous agreement in Tamil. In *Semantics and Linguistic Theory 21*, 674–693.
- Sundaresan, Sandhya. 2012. Context and (co)reference in the syntax and its interfaces:

  University of Stuttgart dissertation.
- Sundaresan, Sandhya. 2018. Perspective is syntactic: evidence from anaphora. Glossa 3(1).

- 1-40.
- Vinokurova, Nadya. 2011. Shifting indexicals in Sakha. In *Proceedings of the 10th Seoul International Altaistic Conference*, .
- Wali, Kashi & K.V. Subbarao. 1991. On pronominal classification: Evidence from Marathi and Telugu. *Linguistics* 29. 1093–1110.
- Zu, Vera. 2018. Discourse participants and the structural representation of the context. New York, NY: New York University dissertation.