# Anaphora vs. agreement\*

# Sandhya Sundaresan

August 22, 2015

#### Abstract

This paper presents new data pertaining to the Anaphor Agreement Effect (the observation, originally noted in Rizzi, 1990, that anaphors in many languages seem incapable of triggering  $\phi$ -covarying agreement) from the Dravidian language, Tamil. On the one hand, this data will be seen to further support the AAE as a robust crosslinguistic generalization. On the other hand, it will be shown to yield new insight on the theoretical principles underlying this descriptive one, and to question the possible loci for parametric variation – by virtue of employing a hitherto unreported strategy to obey the AAE. Specifically, it will be argued that the verbal agreement triggered in the scope of the anaphor is triggered, not by the anaphor itself, but by a different DP in the local phase.

### 1 Introduction

It has long been noted in the literature (Borer, 1989, a.o.) that, despite their obvious categorial differences, pro-forms (i.e. pronouns and anaphors) and  $\phi$ -agreement have much in common: at their core, they both denote referentially deficient grammatical objects. Interestingly (though perhaps unsurprisingly), interactions between the two are often anomalous in some way. The relationship between pronouns and agreement has been well-studied with respect to the phenomenon of pro-drop, the original observation, due to Taraldsen (1978) and simplifying greatly, being that languages with rich agreement allow pro-drop to a greater degree than do ones with poor agreement. The interaction between anaphora and agreement has merited less attention in the literature. The data that we do have amassed suggests, however, that there is something irregular happening here as well. This irregularity, termed the "Anaphor Agreement Effect" in Rizzi (1990) and developed since (Woolford, 1999; Tucker, 2011, among others), is the observation that, overwhelmingly across languages, anaphors cannot trigger "regular" (i.e.  $\phi$ -covarying) agreement. Languages have been observed to display a range of interesting strategies to avoid a violation of the AAE. When an anaphor does

<sup>\*</sup>I am grateful to Gillian Ramchand, Hedde Zeijlstra, and especially Tom McFadden for discussing aspects of this work with me on multiple occasions, and to the editors for putting this volume together. Thanks also go to the audiences at the Pronouns at Tübingen Workshop at the University of Tübingen, at the Colloquium Series at the University of Leipzig, at the Agreement Workshop in Recife, Brazil, and at the University of Cambridge, where variants of this paper were presented, for insightful feedback. Any errors are mine alone.

occur in agreement-position, the sentence either crashes, or the triggered agreement takes on one of two non-covarying forms: a morphophonological default or "special" anaphoric form. The various parametrized instantiations of the AAE are significant and useful, not only because they stand testimony to the presence of a highly irregular relationship between two linguistic objects, but also because they serve as a potential window into the  $\phi$ -featural make-up of anaphors and into the mechanism of agreement.

In this paper, I report on a new type of AAE in the Dravidian language, Tamil, a language that has, in fact, been singled out in the literature (Kayne, 1994; Woolford, 1999; Selvanathan and Kim, 2008) as being a possible counterexample to the AAE. The theoretical import of the evidence presented in this paper is multifold. First, it shows that Tamil does indeed obey the AAE, contra previous claims. Second, and relatedly, it bolsters the robustness of the AAE as a potentially universal principle of language. Third, it adds to the typological variety of parametrized strategies languages have been observed to employ to avoid a violation of the AAE – since it will be shown that Tamil employs a hitherto unattested method to do so. Toward the end of the paper, I speculate on the possible theoretical underpinnings of the AAE as a potential principle of UG.

## 2 A brief history of the AAE

The original observation that led to the formulation of the Anaphor Agreement Effect, as well as the moniker itself, go back to Rizzi (1990). Rizzi's observation was motivated by minimal pairs like (1) and (2) in Italian, and analogous sentences in Icelandic (not listed here), where the anaphor occurs in a position typically associated with agreement in that language:

- (1) A loro import-a solo di se-stessi. to them matters-3sg only of them-selves "They, only matter to themselves,."
- (2) \* A loro interess-ano solo se-stessi. to them interest-3PL only them-selves.NOM "They<sub>i</sub> only interest themselves<sub>i</sub>." (Intended)

The THEME object of interessano in (1) is in the genitive case, which in turn results in the verb's surfacing with default 3SG agreement. In (2), the object is in the nominative case and does trigger  $\phi$ -covarying (3PL) agreement on the verb. What is significant is that this distinction seems to directly regulate the grammaticality of these sentences. The genitive-marked anaphoric object in (1) is licit, whereas the nominative marked one in (2) is not. However, sentences like (2) become marginally acceptable if the agreement on the verb is replaced with default (non-)agreement:

(3) ? A loro interess-a solo se-stessi. to them interest-3sg only them-selves.Nom "They, only interest themselves,."

Additionally, the same patterns as in (1)-(2) obtain if the 3rd-person se is replaced with 2nd-person voi, yielding a bound 2nd-person form:

- (4) A voi import-a solo di voi-stessi. to you matters-3sg only of you-selves "You, only matter to yourselves,."
- (5) \* A voi interess-ate solo voi-stessi. to you interest-2PL only you-selves.NOM "Only yourselves interest you." (Intended)

In addition to corroborating the patterns in (1)-(2), the sentences in (3)-(5) show that the problem with the ungrammatical sentences above has to to with agreement, not with some paradigmatic gap having to do with the absence of nominative anaphors in the morphology (as has been claimed for Icelandic, for instance, by Maling, 1984, among others).

On the strength of such data, Rizzi postulated the existence of an Anaphor Agreement Effect, formulated as below:

(6) "[T]here is a fundamental incompatibility between the property of being an anaphor and the property of being construed with agreement" (Rizzi, 1990, 28).

### 2.1 Parametric strategies to avoid an AAE-violation

Subsequent analyses (e.g. Woolford, 1999; Haegeman, 2004; Deal, 2010; Tucker, 2011) have tested the validity of the AAE against a wider range of languages. Woolford (1999) extends the investigation to languages with object agreement, predicting that the existence of the AAE, defined as in (6), in these languages should rule out anaphors in object position – a prediction that is indeed borne out, for the languages tested. In addition to confirming the systematicity of the AAE, this showed that the occurrence of the AAE has nothing to do with properties that distinguished subjects from objects: e.g. due to the absence of nominative-marked anaphors in subject position, the EPP, or licensing by the ECP. In other words, what matters for the AAE in subject-agreement languages is not that the agreement-controller in such cases is a subject, but that it is an anaphor. Tucker (2011) expands on Woolford's work, discussing in particular the various parametric strategies employed by the world's languages to avoid a violation of the AAE. What emerges is an interesting typology that reflects both the robustness of the AAE as a general crosslinguistic phenomenon and the scope of variation in the language-specific strategies used to avoid its violation. I discuss these findings in brief below.

#### 2.1.1 Detransitivization

The predicate detransitivization strategy is attested in some languages with object agreement. In these languages, an AAE violation in a clause containing an object anaphor is avoided by detransitivizing the main predicate, thereby obviating its need to agree with the object altogether. Inuit is a language that employs this strategy. In Inuit, the verb is (portmanteau-)marked for both subject and object agreement (7). But when the direct object is an anaphor, object marking on the verb is no longer licit (8) (examples taken from Bok-Bennema, 1991, 51):

- (7) Angutip arnaq taku-vaa.
  man.erg woman.abs see-ind.3sgs.3sgO
  "The man sees the woman."
- (8) \* Hansi-up<sub>i</sub> immi $_{\{i,*j\}}$  asap-paa. Hansi-ERG himself.ABS wash-IND.3SGS.3SGO "Hansi<sub>i</sub> washed himself $_{\{i,*j\}}$ ." (Intended)

The structure can be redeemed by suppressing the anaphoric object entirely: in this case, the verb behaves like an intransitive, marking subject agreement alone, as illustrated in (9):<sup>1</sup>

(9) Asap-puq. wash-IND.3SGS

"He<sub>i</sub> washed himself<sub>{i,\*i}</sub>."

A variant of the detransitivizing strategy, used in certain other languages, involves cliticizing the anaphor to the clausal predicate such that the anaphor no longer counts as an argument (thus no longer counts as a potential agreement controller): Tucker (2011) proposes that French is such a language.

#### 2.1.2 Default agreement

In languages that employ this strategy, the anaphor shows up in agreement triggering position (often though not always marked with some oblique case), but the verb shows up with non- $\phi$ -covarying, default agreement. This version of affairs is also attested in Inuit. In (10), the anaphoric object is marked with oblique case, and the verb surfaces with default agreement:

(10) Angut<sub>i</sub> immi-nut<sub>{i,\*j}</sub> taku-vuq man himself-DAT see.IND-3SG "The man<sub>i</sub> sees himself<sub>{i,\*j}</sub>."

Notice that this is essentially the same strategy that was observed at the outset with Italian (1), repeated below:

(11) A loro import-a solo di se-stessi. to them matters-3sg only of them-selves "They, only matter to themselves,."

In (11), the anaphoric subject is marked with oblique case and thus triggers default agreement on the verb. Regardless of this difference between the two languages, the effect is the same: the presence of oblique case on the anaphor (either in subject or object position) ensures that it triggers no  $\phi$ -covarying agreement on the verb, thereby preserving the AAE.

In other languages, the anaphor surfaces with nominative case-marking but nevertheless doesn't trigger  $\phi$ -covarying agreement on the verb; i.e. the verb still shows invariant agreement. Albanian seems to be such a language (the example below reformatted from Massey, 1990, 135):

<sup>&</sup>lt;sup>1</sup>The pronominal subject in (9) is presumably *pro-*dropped.

(12) Drites  $i_i$  dhimset vetja $_{\{i,*j\}}$ .

Drita.DAT=3SG.DAT pity.3SG.PAST.NACT ANAPH.NOM

"Drita $_i$  pities herself $_{\{i,*j\}}$ ."

Given that Albanian has a nominative-accusative case system, one might think that the agreement marking on the verb in (12) is triggered by the nominative-marked anaphor. However, as also observed in Woolford (1999), the agreement marking on the verb remains invariant at 3sg, even when the nominative object is in the first-person. The sentence below essentially constitutes a (scrambled) minimal variant to that in (12) (Hubbard, 1985, 191):

(13) Vetja $_{\{i,*j\}}$ me $_i$  dhimset. ANAPH.NOM=1SG.DAT pity.3SG.PRS.NACT "I $_i$  pity myself $_{\{i,*j\}}$ ."

In effect, then, the Albanian strategy is also a default agreement strategy, similar to those attested in Inuit and Italian.

#### 2.1.3 Protected anaphora

This is a sub-variant of the default agreement strategy. In some languages, the anaphor is embedded inside another DP. The agreement on the verb is triggered by the complex DP and not directly by the anaphor: thus a violation of the AAE is avoided (Tucker, 2011, dubs this "the protected anaphora strategy"). Since the structural conditions required for the anaphor to trigger agreement on the verb aren't met, the verb surfaces with default agreement instead.

The protected anaphora strategy has been observed for the Malayo-Polynesian language Selayerese (Woolford, 1999). Selayarese examples like that in (14) initially seem to represent a counter-example to the AAE, since the anaphor seems to be triggering verbal agreement:

(14) La-janjang-i kalen-na. 3.ERG-see-3.ABS ANAPH-3

"He<sub>i</sub> saw himself<sub>{i,\*j}</sub>."

However, Woolford (1999) shows that the verbal agreement remains invariant at 3rd-person even if the anaphoric object is 1st- or 2nd-person. Woolford presents independent evidence to show that reflexives in Selayerese look superficially similar to possessives, arguing on the strength of this, that Selayarese utilizes a protected anaphora strategy, wherein the anaphor is prevented from triggering agreement by itself being a part of a larger DP structure: it is this complex DP that triggers agreement on the verb. Similar protected anaphora strategies have been observed for the Indo-Aryan language Hindi, Modern Greek (Woolford, 1999) and West Flemish Haegeman (2004).

#### 2.1.4 "Anaphoric" agreement

In yet other languages, the presence of an anaphor in agreement-position doesn't lead to ungrammaticality: rather, the anaphor triggers a special form of agreement on the verb. Since this agreement form is not a part of the  $\phi$ -agreement paradigm for the language in question, it cannot be characterized as  $\phi$ -covarying agreement.

This strategy is demonstrated for Swahili below (Woolford, 1999):

- (15) Ahmed a-na-ji/\*m-penda mwenyewe. Ahmed 3SBJ-PRS-REFL/\*3OBJ-love himself "Ahmed<sub>i</sub> loves himself<sub>i</sub>." (emphatic)
- (16) Ahmed a-na-m/\*ji-penda Halima Ahmed 3SBJ-PRS-3OBJ-love Halima. "Ahmed loves Halima."

Crucially, the special ji marking on the verb in (15) does not  $\phi$ -covary, nor is it attested elsewhere in the agreement paradigm of the language. Baker (2008, pp. 150-151) provides parallel examples from the Bantu language Chicheŵa, adapted below (formatting mine):

- (17) Ndi-na-i/\*dzi-khal-its-a pro[-anaph] y-a-i-kali.

  1SS-PAST-CLIV.O-BECOME-CAUS-FV (them) CLIV-ASSOC-CLIV-fierce

  "I made them (e.g. lions) fierce."
- (18) Ndi-na-**dzi/\*i**-khal-its-a pro[+anaph] w-a-m-kali. 1SS-PAST-REFL-BECOME-CAUS-FV (myself) CLII-ASSOC-CLI-fierce "I made myself fierce."

In (17), the causativized 'become' verb shows overt agreement both with the subject and the non-coreferent pro object. In the minimally varying (18), the verb again agrees with the subject, but the usual object agreement marking is replaced by a special reflexive form, namely the infix -dzi.

### **2.1.5** Summary

To sum up, the following crosslinguistic strategies are attested, which avoid a violation of the AAE:

- **Detransitivization:** The reflexive in agreeing position is deleted altogether yielding an intransitive with inherently reflexive interpretation. Inuit is a language that supposedly exhibits this strategy.
- **Default agreement:** The verb surfaces with default agreement, either because the anaphoric subject or object is marked with oblique case (Italian and Inuit) or due to some other mechanism (Albanian).
- **Protected anaphora:** The anaphor appears inside a PP or possessor DP and is thus unable to trigger agreement: Greek, West Flemish, and the Malayo-Polynesian language Selayarese supposedly employ this "protected anaphora" strategy (see also Haegeman, 2004).
- Anaphoric agreement: The verb is marked with a special, "anaphoric" agreement which is different from the regular agreement marking within the  $\phi$ -paradigm of the language in question (e.g. Swahili, Hindi, Modern Greek, Selayarese, West Flemish).

It is valid to ask how languages that lack agreement-marking altogether fare with respect to the AAE. Based on Woolford (1999)'s investigation of a sample of such languages, anaphors seem to be freely allowed in all argument positions in these languages.

Languages with nominative-accusative case systems lacking in overt agreement – like Khmer, Vietnamese, Thai, Chinese and Malayalam – allow nominative anaphors in subject (as well as object) position. The following Khmer example from Huffman (1970) via Woolford, 1999, (formatting mine) illustrates this:

(19) Mit [tešŋ-pii nešq]<sub>i</sub> kit thaa kluən<sub>{i,\*j}</sub> ciə kounsəh. friend both person think that self be student "[The two friends]<sub>i</sub> resonated that they(self)<sub>{i,\*j}</sub> are students."

Similar behavior is also observed in languages with ergative-absolutive case systems that lack overt marking for object agreement. In such languages, the anaphor may licitly occur in object position without incurring a violation of the AAE. The following example from the Papua New Guinea language, Enga, illustrates this (Lang, 1973; Woolford, 1999):

(20) Baa-mé tánge pi-ly-á-mo. he-ERG self hit-PRES-3SG.SUBJ-AUGMENT "He<sub>i</sub> is hitting himself<sub>{i,\*j}</sub>."

It is tempting to conclude from this data that the AAE is really about the overt marking of agreement, and not about its underlying presence. However, the range of agreement-less languages tested is still rather sparse, so such a conclusion would be premature: i.e. it may just as well be the case that the languages considered here also happen to lack agreement underlyingly (or, put another way, that these languages show no agreement marking because they lack agreement underlyingly).

Given these considerations, the following updated generalization of the AAE emerges (Tucker, 2011, p. 30, ex. 40):

(21) "Anaphors do not occur in syntactic positions construed with covarying  $\phi$ -morphology."

## 3 Enter Tamil

The Dravidian languages have been singled out in the literature for their recalcitrant behavior with respect to the AAE. Kayne (1994, 54) first observed that Dravidian languages are potentially problematic for Rizzi's AAE, noting that in Tamil, a language where nominatives typically trigger  $\phi$ -agreement, a nominative anaphor may licitly occur with a  $\phi$ -covarying clausemate verb. Kayne's claim has been contested in Woolford (1999) on the grounds that the agreement triggered under the nominative anaphor is in fact not  $\phi$ -covarying: it is either invariant default agreement marking a gerundival clause (22) or is a clearly mismatched (thus also not co-varying) 1sG agreement, as in (23):<sup>2</sup>

(22) [Seetha var-r-ad-aagæ] Murugeesan so-nn-aarŭ.
ANAPH.NOM.SG come-PRES-3NSG-NMLZ Murugeesan say-PST-3MSG
"Murugeesan spoke [of Seetha's coming]."

<sup>&</sup>lt;sup>2</sup>Notably, the Dravidian anaphor ta(a)n cannot take 1st- or 2nd-person antecedents, which makes it difficult to argue that this agreement is triggered by the anaphor directly.

(23) Murukeesan<sub>i</sub> [ $_{CP}$  taan $_{\{i,*j\}}$  var-r-een-nnŭ] so-nn-aarŭ. Murugesan.NOM ANAPH.NOM come.PRS-1SG-COMP say-PST-3MSG "Murugesan<sub>i</sub> said [that he $_{\{i,*j\}}$  would come]."

Woolford's account has since been contested by (Selvanathan and Kim, 2008), who point out that structures like (22) and (23) don't exhaust the possibilities for agreement under ta(a)n in Tamil. For a non-trivial range of native speakers, sentences like that in (24) are licit as well – the verbal agreement under ta(a)n is 3MSG, makes it harder to dismiss the idea that the agreement is triggered directly by ta(a)n, in apparent violation of the AAE:

(24) Murukeesan<sub>i</sub> [taan<sub>{i,\*j}</sub> varu-gir-aar-ŭnnŭ] so-nn-aarŭ. Murugesan.NOM ANAPH.NOM come-PRES-3MSG-COMP say-PST-3MSG "Murugesan<sub>i</sub> said [that he<sub>{i,\*j}</sub> would come]."

Below, I take a closer look at these kinds of Tamil sentences to see whether they really are problematic for the AAE. On the strength of this investigation, I will conclude that such structures do not, in fact, constitute counter-examples to the AAE. However, Tamil employs a new logical possibility to avoid a violation of the AAE. In particular, although the agreement triggered in the scope of the (nominative) anaphor is  $\phi$ -covarying, it is not triggered directly by the anaphor itself. Rather, it is triggered by a different nominal in the local phase. Tamil (and potentially other languages, as I briefly discuss below) thus instantiates a different strategy for preserving the AAE from those discussed earlier which in turn warrants a revision of our understanding of this generalization.

## 4 "Anaphoric agreement" in Tamil

In Tamil,  $\phi$ -agreement on the verb is typically triggered by a local nominal in the nominative:

(25) [Nii paris-æ tookkapoo- r-æ-nnŭ] Raman namb-in-aan. you[NOM] prize-ACC lose.go- PRS-2SG-COMP Raman believe-PST-3MSG "Raman believed [ $_{CP}$  that you would lose the prize]."

The Tamil anaphor ta(a)n may occur with various case-markings depending on its syntactic position (subject vs. direct or oblique object). When ta(a)n occurs with a non-nominative case, covarying  $\phi$ -agreement on the verb is triggered by the (non-anaphoric) clausemate nominative DP in the local domain, just as expected. But when ta(a)n occurs in the nominative, the nature of the covarying  $\phi$ -agreement triggered on its clausemate verb is less straightforward. What is striking is that this agreement seems to covary, not with ta(a)n itself, but with the antecedent of ta(a)n. In the examples below, the  $\phi$ -agreement triggered on the clausemate verb of ta(a)n is marked in boldface:

(26) Mia<sub>i</sub> [Sri<sub>j</sub> [taan<sub>{i,\*j}</sub> too-pp-aa]-ŭnnŭ] nene-tt-aan-nŭ] Mia.Nom Sri.Nom anaph.sg.nom lose-fut-3fsg-comp think-pst-3msg-comp paar-tt-aa]. see-pst-3fsg

"Mia<sub>i</sub> saw [ $_{CP}$  that Sri<sub>j</sub> thought [ $_{CP}$  that she<sub>i</sub>/\*he<sub>j</sub> would lose]]."

- (27) Mia $_i$  [Sri $_j$  [taan $_{\{j,*i\}}$  too-pp-aan-ŭnnŭ] nene-tt-aan-nŭ] Mia.Nom Sri.Nom anaph.sg.nom lose-fut-3msg-comp think-pst-3msg-comp paar-tt-aa]. see-pst-3fsg
  - "Mia<sub>i</sub> saw [ $_{CP}$  that  $Sri_{j}$  thought [ $_{CP}$  that  $he_{j}$ /\*she<sub>i</sub> would lose]]."
- (28) Kozendæ<sub>i</sub> nadandadæ-patti joosi-čč-adŭ. Taan<sub>i</sub> een child[sg.nom] happening-ACC-about reflect-PST-3NSG. ANAPH[NOM] why kaštappatt-iru-kk-adŭ? suffer-PRF-PRS-3NSG

"[The child]<sub>i</sub> reflected about what had happened. Why had it<sub>{i,\*j}</sub> suffered so?"

When the intended antecedent is 3FSG Maya (26), the agreement under ta(a)n is also 3FSG. But in the minimally varying (27), the agreement under ta(a)n is 3MSG, with the only possible antecedent being Raman. Finally, in (28), ta(a)n refers "logophorically" to the extra-sentential attitude-holder Seetha, but the agreement under ta(a)n must still reflect the  $\phi$ -features of this antecedent: if 3NSG  $ko\chi xndx_i$  ('the child') were replaced by masculine or feminine DPs (like Raman or Seetha, respectively), the agreement-marking would be correspondingly 3MSG -aan or 3FSG -aal instead. The following descriptive generalization thus emerges:

(29) The verbal agreement tracks the antecedent of the anaphor ta(a)n.

### 4.1 Unviable analytic options

There are (at least) three possible ways to interpret the generalization in (29) above. Here, I show why two of these three options are unviable.

The first option, given that Tamil is elsewhere a uniformly nominative-agreement language (see again (25)), would be to propose that the source of agreement under nominative ta(a)n is ta(a)n itself. In this case, structures like (26)-(28) would necessarily constitute an exception to the AAE. Thus, such an analytic option, is to be dispreferred on grounds of theoretical economy (pending independent empirical evidence to the contrary). Furthermore, since the agreement triggered under ta(a)n may vary, this would be tantamount to proposing, with no independent evidence to support it, that ta(a)n has three different sets of  $\phi$ -features in each of the examples above: i.e. that there are three underlyingly distinct anaphors that all happen to be pronounced "ta(a)n". Additionally, as noted earlier with respect to structures like (23), the verbal agreement triggered under nominative ta(a)n may be 1st-person. This is illustrated below:

(30) [Sai<sub>i</sub> [taan<sub>{i,\*j}</sub> & jej-pp-een-nnŭ] so-nn-aan-nnŭ] Sri<sub>j</sub> Sai ANAPH[NOM]<sub>i</sub> win-FUT-1SG-COMP say-PST-3MSG-COMP Sri nene-čč-aan. thought-PST-3MSG "Sri<sub>j</sub> thought [ $_{CP}$  that Sai<sub>i</sub> said [ $_{CP}$  that he<sub>{i,\*j}</sub> would win]"

Under the assumption that the source of agreement is ta(a)n, we would be forced to posit a fourth variant of ta(a)n to account for such sentences – one in which ta(a)n a 1st-person

indexical.<sup>3</sup> Finally, under such an approach, the fact that the features on the verb track those of ta(a)n's antecedent would still have to be explained separately.

The second analytical option would be to claim that the agreement on the verb under ta(a)n is triggered by ta(a)n's antecedent – e.g. via some form of long-distance agreement. Such agreement may be transmitted to the verb via ta(a)n, but ta(a)n itself wouldn't be the actual source of agreement, so the AAE wouldn't be violated. Such an approach would also automatically capture the antecedent tracking effect outlined in (29).

But there are (at least) two independent reasons to reject this option. The first piece of evidence against this view comes from structures involving logophoric dependencies, like that in (28) and from "backward binding" structures (not shown here, but see Sundaresan, 2012) where the antecedent doesn't c-command the anaphor or its clausemate verb: it is difficult to see how feature-transmission from the antecedent could be made to work intersententially or from a non-c-commanding position, respectively. The second piece of counterevidence comes from structures like (23) (discussed earlier) and (30) below. These are special structures involving the clausal complement of a speech predicate. The anaphor ta(a)n is the nominative subject of this complement; but the  $\phi$ -agreement triggered under it is 1sG (see again the example in (30) above). The agreement pattern in these sentences seems superficially dissimilar to those seen in (26)-(28), where the verbal agreement simply matches the  $\phi$ -features of the antecedent of ta(a)n. But if we look closer, we see that the sentences in (30) and (23) are actually parallel to these others and, in fact, also obey the antecedent tracking generalization described in (29). This is because the 1sG agreement only obtains when the antecedent is the AGENT of a speech-predicate; if the antecedent were Krishnan, antecedent-matching 3MSG agreement would obtain instead. Additional evidence supporting this conclusion comes from number marking on the verb. When the agent of the speech predicate (which also serves as the antecedent of the anaphor) is marked plural, the agreement on the verb under ta(a)n is 1PL not 1SG:

(31) Pasaŋ-gal<sub>i</sub> [taaŋ-gal<sub>{i,\*j}</sub> dej-pp-oom/\*aangal-ŭnnŭ] so-nn-aaŋ-gal. boy-Pl.NOM [ANAPH-Pl.NOM<sub>i</sub> win-FUT-1Pl/\*3MPl-COMP] say-PST-3M-Pl "The boys said [ $_{CP}$  that they $_{\{i,*j\}}$  would win]"

Such considerations show that the agreement "tracks" the anaphor's antecedent even in cases where its  $\phi$ -features don't match those of the antecedent. A simple long-distance feature-transmission account of agreement triggered by the antecedent would be hard put to explain such a mismatch. Sundaresan (2012) argues that the 1st-person agreement under ta(a)n instantiates Kaplanian indexical shift for 1st-person (Kaplan, 1989; Schlenker, 2003) – where the 1st-person refers to the Speaker of the context introduced by the speech predicate in the sentence, and not to the Speaker of the utterance context. In other words, the lack of antecedent  $\phi$ -matching in structures like (30) and (31) is not because the agreement doesn't track the antecedent – but because the evaluation context against which  $\phi$ -features are evaluated is different in the embedded and matrix clauses in these sentences.

To sum up, the data and discussion in this section show that the source of agreement on the verb under ta(a)n must be a nominal that is local to it in the syntactic structure – one

<sup>&</sup>lt;sup>3</sup>See Anand (2006) for an analysis along these lines for Malayalam ta(a)n, and Sundaresan (2012) for detailed discussion of why this won't work for the Tamil counterpart.

that is, furthermore, distinct from ta(a)n itself.

### 4.2 A viable option: a mediating pro

Under a standard Minimalist understanding of agreement, our current analytic state-ofaffairs may be summarized as follows:

**Assumption:**  $\phi$ -feature agreement is locally implemented as an Agree operation. I.e. verbal agreement (realized on the T head) is triggered by an element that is (phase-)local to T.<sup>4</sup>

**Observation I:**  $\phi$ -feature agreement on T under nominative ta(a)n is not directly triggered by ta(a)n.

**Observation II:**  $\phi$ -feature agreement on T under nominative subject ta(a)n is not directly triggered by the antecedent of ta(a)n (which is not local to the T head, in any case).

**Observation III:** But  $\phi$ -feature agreement on T nevertheless tracks the antecedent of ta(a)n.

This in turn leads us to the following conclusions. There must be a third element  $(\neq$ antecedent, and  $\neq$  the anaphor), local to both ta(a)n and the T head, which triggers  $\phi$ agreement on T. This element must, of course, have valued  $\phi$ -features at the point at which it checks those on T: we might thus envision it as a kind of (null) pronoun, i.e. as a pro. The antecedent-tracking effect of agreement would follow naturally from the assumption that this pro and the antecedent corefer. If the  $\phi$ -features of the antecedent and of pro are computed against the same evaluation context (the default scenario), they would necessarily match. The verbal agreement triggered by pro would thus also match the  $\phi$ -features of the antecedent by transitivity, as observed for (26)-(28). But in cases where these evaluation contexts differ – as in the examples in (23), (30), and (31) – the  $\phi$ -features would not match, although the pro and the antecedent would crucially continue to corefer. Rather, the pro in such cases would be an obligatorily shifted 1st-person indexical denoting the same entity as the antecedent; it would thus trigger 1st-person agreement on the T head. The antecedent tracking effect on verbal agreement, given in (29), would thus hold in different ways in both types of structures: in one instance, yielding  $\phi$ -matching between the antecedent and the agreement, and in the other, yielding 1st-person agreement under indexical shift (see Sundaresan, 2012, for detailed further motivation and discussion of these points, which lie beyond the scope of this paper).

An important question that this raises is why the *pro* is present in the first place (after all, triggering agreement could not be its sole reason for being). What I propose, again in line with prior work in Sundaresan (2012), is that this *pro* plays a central role in mediating long-distance anaphoric dependencies in languages with perspectival anaphoric systems

<sup>&</sup>lt;sup>4</sup>It is less pertinent to this account whether Agree for  $\phi$ -features happens in the narrow syntax, as is more standardly assumed, or in the post-syntactic morphology, as has been argued by Bobaljik (2008). I assume that it happens in the narrow syntax, but nothing crucial rests on this choice, at least for the cases of  $\phi$ -agreement discussed here.

like Tamil (and also others, like Icelandic and Italian). In such languages, the antecedent of the anaphor always denotes an individual who holds a mental and/or spatio-temporal perspective toward some extended projection containing the anaphor. As such, I contend that this null pronoun is also associated with a perspectival feature which allows it to pick out a perspective-holder individual in the context of evaluation. The perspectival pronoun mediates the relationship between the anaphor and its antecedent: it binds ta(a)n at LF and is non-obligatorily controlled by its antecedent. All three nominals thus corefer in different ways and end up denoting the same perspective-holder individual. Finally, following analogous data and discussion in Koopman and Sportiche (1989); Bianchi (2003); Speas (2004), among others, on similar logophoric operators in the clausal left-periphery in other languages – I propose that this perspectival pronoun occupies the specifier of a perspectival phrase (PerspP) in the left periphery of the local clause containing ta(a)n.

Under this account, valuing the  $\phi$ -features of the clausemate verb of nominative ta(a)n is just an incidental by-product of this perspectival pronoun's presence in ta(a)n clauses. As a pronoun, I assume uncontroversially, that this pro is born with fully valued  $\phi$ -features: it is thus eligible to serve as a potential  $\phi$ -agreement controller for the probing T head in such structures.

### 4.3 Formally deriving anaphoric agreement in Tamil

We can now see how the two types of antecedent-tracking agreement patterns in Tamil – the first involving  $\phi$ -matching and the second involving 1st-person agreement under indexical shift – may be formally derived. Consider again the  $\phi$ -matching sentence in (26), repeated below:

(32) Mia $_i$  [Sri $_j$  [taan $_{\{i,*j\}}$  too-pp-aa[-ŭnnŭ] nene-tt-aan-nŭ] Mia.Nom Sri.Nom anaph.sg.nom lose-fut-3fsg-comp think-pst-3msg-comp paar-tt-aa]. see-pst-3fsg

"Mia $_i$  saw [ $_{CP}$  that Sri $_i$  thought [ $_{CP}$  that she $_i$ /\*he $_i$  would lose]]."

In the model developed here, the antecedent and the anaphor are not directly related in the syntax in any way: the antecedent-anaphor relation is mediated by the perspectival pronoun in [Spec, PerspP], in the manner outlined above. Recall, too, that Agree for  $\phi$ -features is assumed to happen under phase locality in the syntax or post-syntactic morphology. This means that, as far as the syntax of anaphora is concerned, the only relevant piece of structure is the local phase (CP) containing the anaphor and the perspectival *pro* in [Spec, PerspP].

The derivation is fairly straightforward. Given the current model, the various players in the Agree relationship are born with the following features: in addition to the  $\phi$ -features on the nominals, there is also a DEP-feature, which is the featural marker of perspective. The perspectival pro is born with a valued DEP-feature, but the anaphor is born with an unvalued DEP-feature. The pro values the DEP-feature on ta(a)n which in turn trigger

variable binding of ta(a)n by pro at LF:<sup>5</sup>,<sup>6</sup>

pro in [Spec, PerspP]	Anaphor $(ta(a)n)$	$\mathbf{T}$
[Dep: $x, \phi$ : $3fsg$ ]	[Dep: _, φ: _]	[φ:]

I assume, furthermore, that Agree for both  $\phi$ - and DEP-features happens in an upward fashion in these cases: i.e. that the Goal (perspectival pro) c-commands the Probe (ta(a)n and T) (see e.g. Zeijlstra, 2012; Bjorkman and Zeijlstra, 2014; Wurmbrand, 2012b).

The derivation for (32) proceeds bottom-up as follows:

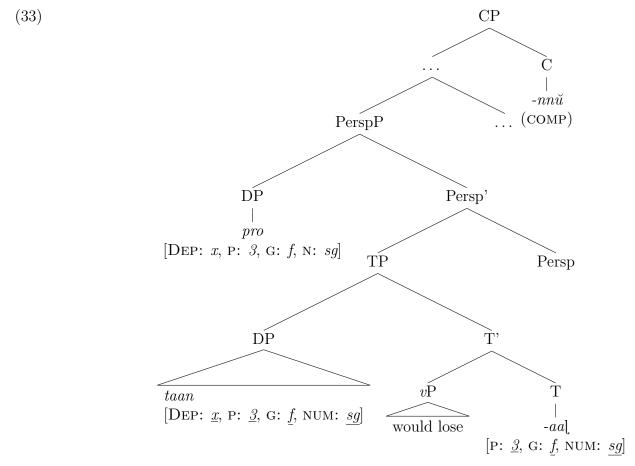
- 1. Merge(vP, T)  $\rightarrow T$
- 2.  $Merge(DP_{ta(a)n}, T') \rightarrow TP$
- 3. AGREE(T  $[\phi: \_]$ , DP<sub>ta(a)n</sub>  $[\phi: \_]$ )  $\rightarrow$  {T  $[\phi: \__i]$ , DP<sub>ta(a)n</sub>  $[\phi: \__i]$ }
- 4. Merge(Persp, TP)  $\rightarrow$  Persp'
- 5. Merge(DP<sub>pro</sub>, Persp')  $\rightarrow$  PerspP
- 6. AGREE({T  $[\phi: \_i]$ ,  $DP_{ta(a)n} [\phi: \_i]$ },  $DP_{pro} [\phi: 3fsg]$ )  $\rightarrow$  {T  $[\phi: 3fsg]$ ,  $DP_{ta(a)n} [\phi: 3fsg]$ }
- 7. AGREE( $DP_{ta(a)n}$  [DEP: \_],  $DP_{pro}$  [DEP: x])  $\rightarrow DP_{ta(a)n}$  [DEP: x]

Step 3 involves an Agree relation between two sets of unvalued  $\phi$ -features, on T and the anaphoric subject DP, respectively. Following Pesetsky and Torrego (2007), I assume that this yields feature sharing for  $\phi$ -features on T and DP such that these essentially function as a joint probe to get these  $\phi$ -features valued. I indicate this notationally by the coindexation of the values that  $\phi$ -Agree will result in.<sup>7</sup> The tree structure for this CP after Agree and before Spell-Out, thus looks like this: note that underlining is just a visual mnemonic to distinguish inherent features from inherited ones.

<sup>&</sup>lt;sup>5</sup>Unlike the Agree relation for φ-features between pro, the T head and potentially also ta(a)n, the Agree relation for DEP between pro and ta(a)n must take place in narrow syntax, since its output must feed operations at both LF and PF.

<sup>&</sup>lt;sup>6</sup>In addition to the features listed below, I assume that both ta(a)n and the perspectival pronoun are endowed with a categorial D feature and case features. These are not included here for reasons of perspicuity.

<sup>&</sup>lt;sup>7</sup>A different possibility may be that ta(a)n doesn't lack just the values for  $\phi$ -features, but lacks  $\phi$ -features altogether. In this case, ta(a)n would simply bear a categorial feature, case feature, and an unvalued DEP-feature, and the T head alone would serve as a  $\phi$ -probe, getting these features valued by the perspectival pro. It is a matter of ongoing research which of these alternatives is the correct one.



At LF, the matching of the DEP-values on  $DP_{ta(a)n}$  and  $DP_{pro}$  triggers binding of the former by the latter (the latter is construed as the binder since it asymmetrically c-commands the former): the two DPs are now targeted to refer to the same entity in the evaluation context; thus, the assignment function maps these elements to a salient perspective-holder in this context, one that is also a female individual, since pro was born with 3FSG  $\phi$ -features, and now ta(a)n does too.<sup>8</sup> In (32), the chosen referent is thus Mia (not Sri), who is both a female and a perspective-holder. This individual is represented by the DP Mia in the linguistic structure in (32): this DP corefers with the pro and, by transitivity, to ta(a)n, and thus in effect serves as the antecedent of ta(a)n, as discussed earlier. Since the  $\phi$ -features of the antecedent are also evaluated against the same evaluation context (i.e. the utterance context), such coreference furthermore entails  $\phi$ -matching between these elements, all of which thus bear 3FSG features. The perspectival pro has already triggered 3FSG agreement on the probing T head in its clause, as we've seen – explaining the antecedent tracking effect of verbal agreement described in (29).

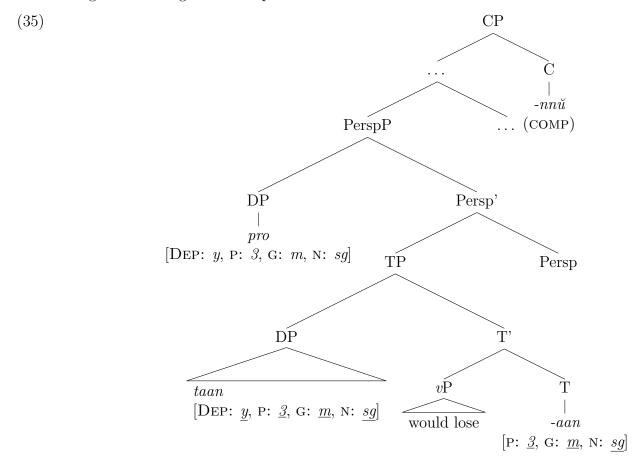
The derivation of the minimally varying sentence in (27), repeated below, is very similar, yielding the following structure post-Agree and pre-SpellOut:

<sup>&</sup>lt;sup>8</sup>I.e. the  $\phi$ -features on these nominals set up presuppositional restrictions on their reference assignment at LF, along the lines discussed in Heim and Kratzer (1998).

(34) Mia $_i$  [Sri $_j$  [taan $_{\{j,*i\}}$  too-pp-aan-ŭnnŭ] nene-tt-aan-nŭ] Mia.Nom Sri.Nom anaph.sg.nom lose-fut-3msg-comp think-pst-3msg-comp paar-tt-aa]. see-pst-3fsg

"Mia<sub>i</sub> saw [ $_{CP}$  that  $Sri_j$  thought [ $_{CP}$  that  $he_j$ /\*she<sub>i</sub> would lose]]."

The only difference between this and the structure in (33) has to do with the  $\phi$ -feature values on  $pro.^9$  As illustrated below, the perspectival pronoun in (27) is born with 3MSG  $\phi$ -values: it thus values the features on T and ta(a)n as 3MSG (yielding 3MSG rather than 3FSG agreement on its clausemate T), and also values the DEP-feature on ta(a)n. This yields the following structure right before Spell-Out:



At LF, the masculine gender feature on these nominals ensures that they are both mapped onto a male (rather than female) perspective-holder in the utterance context, namely Sri (rather than Mia). The DP representing this individual in (34) is Sri, which corefers with pro, and serves as ta(a)n's antecedent by transitivity, in the manner described above. Since, again, the  $\phi$ -features on this DP are also evaluated against the utterance context, this coreference entails  $\phi$ -matching: Sri, perspectival pro, and ta(a)n all bear 3MSG features. The 3MSG agreement features on the verb, triggered by pro thus seem to track those of the antecedent.

<sup>&</sup>lt;sup>9</sup>As mentioned earlier, I assume that there are no restrictions on the  $\phi$ -features that pro may be born with. The syntax essentially overgenerates and ill-formed structures – such as, for instance, a 3FSG pro and ta(a)n denoting a male perspective-holder – are filtered out at LF.

To complete the paradigm, let us now look at the special structures involving 1st-person verbal agreement under ta(a)n. The structure below is a simpler version of (30):

(36) Sai<sub>i</sub> [taan<sub>{i,\*j}</sub> dej-pp-een-nnŭ] so-nn-aan. Sai ANAPH[NOM]<sub>i</sub> win-FUT-1SG-COMP say-PST-3MSG-COMP "Sai<sub>i</sub> said [ $_{CP}$  that he<sub>{i,\*j}</sub> would win]"

The syntactic derivation for (36) proceeds exactly the same as before. The only difference between (36) and a sentence like (32) at the level of the syntax is that the perspectival pronoun in [Spec, PerspP] is born with 1sg features. There is no special rule that ensures, this as mentioned earlier: the syntax simply overgenerates and ill-formed structures are filtered out at the interfaces.  $DP_{ta(a)n}$  and T are thus both valued as 1sg.

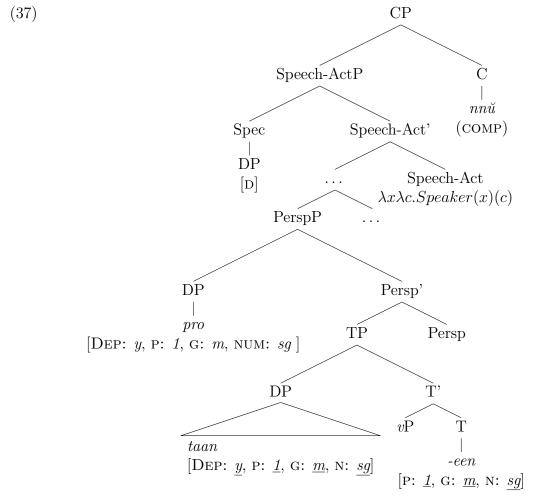
- 1. Merge(vP, T)  $\rightarrow T$
- 2.  $Merge(DP_{ta(a)n}, T') \rightarrow TP$
- 3. AGREE(T  $[\phi: \_]$ , DP<sub>ta(a)n</sub>  $[\phi: \_]$ )  $\rightarrow$  {T  $[\phi: \__i]$ , DP<sub>ta(a)n</sub>  $[\phi: \__i]$ }
- 4. Merge(Persp, TP)  $\rightarrow$  Persp'
- 5. Merge(DP<sub>pro</sub>, Persp')  $\rightarrow$  PerspP
- 6. AGREE({T  $[\phi: \_i]$ , DP<sub>ta(a)n</sub>  $[\phi: \_i]$ }, DP<sub>pro</sub>  $[\phi: 1sg]$ )  $\rightarrow$  {T  $[\phi: 1sg]$ , DP<sub>ta(a)n</sub>  $[\phi: 1sg]$ }
- 7.  $AGREE(DP_{ta(a)n} [DEP: \_], DP_{pro} [DEP: y]) \rightarrow DP_{ta(a)n} [DEP: y]$

A further difference in (36) comes in only later, at LF: as noted earlier, the evaluation context of the embedded CP in this sentence is not the utterance-context but a shifted "context" pertaining to the speech-event denoted by the matrix speech verb. Thus, 1st-person on pro doesn't denote the speaker of the utterance context, but the speaker invoked by the speech-verb, who is moreover male – namely Sai. This speaker is also a perspective-holder with respect to the embedded CP, thus qualifies at LF, to serve as the antecedent of ta(a)n.<sup>10</sup>

The nominal denoting this perspective-holder Sai is the DP Sai in the matrix clause in (36). This DP corefers with pro and ta(a)n, thus serving as ta(a)n's antecedent, as described for the other two sentences discussed here. However, the matrix CP is not evaluated against the shifted speech-context but against the utterance context. This has the significant consequence that coreference between Sai, pro, and ta(a)n does not entail  $\phi$ -matching. The  $\phi$ -features on pro and ta(a)n match, of course – and are both set to 1sg, as we've seen. But with respect to the utterance context, Sai denotes a non-participant (i.e. 3rd-person) male entity: thus, the DP Sai is set to 3Msg, and triggers 3msg agreement on its clausemate verb.

 $<sup>^{10}</sup>$ I have assumed here that pro bears a masculine gender feature, though nothing crucial rests of this choice. pro could also have been born bearing just 1sG features with the gender feature being either underspecified or absent altogether.

The tree-structure for the syntactically relevant part of the derivation – namely the embedded CP – is depicted below, post-Agree and before SpellOut:<sup>11</sup>



If the perspectival pronoun in (37) had been born with 3rd-person features instead (something that cannot be prevented), the syntactic derivation would still proceed unimpeded. The perspectival pro would successfully value both ta(a)n and the probing T head as 3rd-person in the syntax. However, such a derivation would crash at LF, since this 3rd-person feature would be evaluated against a shifted context (where Sai denotes the speaker, thus is 1st-person), and not against the utterance context. 3rd-person on pro and ta(a)n would thus ensure that they do not refer to Sai. As such, the DP Sai (which does refer to Sai) would not corefer with pro and would, by extension, also not function as the antecedent of ta(a)n. In the absence of another salient perspective-holder candidate for antecedent in the discourse, the sentence will crash.

But if there is another salient perspective-holder in the structure – as in (38) below, the problem will be obviated:

<sup>&</sup>lt;sup>11</sup>The SpeechActP, selected by the speech-verb, sets the evaluation context to be that associated with the speech-verb. For further details and discussion of the nature of SpeechActP and the representation of this context, see Sundaresan (2012).

(38) [Sai<sub>i</sub> [taan<sub>{j,\*i}</sub> dej-pp-aan-nnŭ] so-nn-aan-nnŭ] Sri<sub>j</sub> Sai ANAPH[NOM]<sub>i</sub> win-FUT-3MSG-COMP say-PST-3MSG-COMP Sri nene-čč-aan. thought-PST-3MSG "Sri<sub>j</sub> thought [ $_{CP}$  that Sai<sub>i</sub> said [ $_{CP}$  that he<sub>{j,\*i}</sub> would win]"

In (30), we assume that pro in the innermost CP is born with 3MSG features: it values ta(a)n and T with these same features in the syntax. At LF, pro and ta(a)n cannot refer to Sai – for the reasons given above. But there is another salient perspective-holder which is evaluated as 3MSG in the context associated with the speech-verb (and incidentally, also relative to the utterance context): this is the entity denoted by the matrix DP Sri. Thus pro and ta(a)n are mapped onto this entity with the result that Sri is construed as the antecedent of ta(a)n in (38).

## 5 Tamil anaphoric agreement and the AAE

The discussion above shows that Tamil does not employ any of the parametric strategies used by other languages to avoid a violation of the AAE – described in Section 2.1. The Tamil anaphor is not "protected" from triggering agreement, as illustrated for Selayarese, the verbal agreement triggered under the nominative anaphor ta(a)n is not a frozen, default form, as observed for Italian, Inuit, and Albanian; nor is it a special morphological form that obtains only in the scope of anaphors – as observed for Swahili and Chicheŵa.

But Tamil nevertheless does have a strategy to avoid an AAE violation in the structures discussed above. The agreement triggered under nominative ta(a)n is  $\phi$ -covarying. But it is ultimately triggered, not by ta(a)n, even though ta(a)n is the closest nominal to the probing T head and thus is in a position which normally would trigger  $\phi$ -agreement. Rather,  $\phi$ -agreement in such cases is triggered by some other nominal in the local domain of T. This element, I have argued, is the perspectival pro in [Spec, PerspP] in the left periphery ta(a)n's local phase. In the account developed here, the anaphor also participates in  $\phi$ -agreement; but it is crucially not a source of  $\phi$ -agreement on T: rather T and the anaphor jointly function as probes for  $\phi$ -valuation.

Our original formulation of the AAE, based on the discussion of parametric strategies in Section 2.1 was that in (21), repeated below:

(39) "Anaphors do not occur in syntactic positions construed with covarying  $\phi$ -morphology."

The Tamil data investigated here shows, rather, that we should not think in terms of dedicated syntactic positions associated with triggering  $\phi$ -agreement. Rather, as standard understandings of the operation Agree (Chomsky, 2001, et seq.) may lead us to expect, the  $\phi$ -probing head seeks to Agree with the minimally closest nominal in its search space that can value its  $\phi$ -features. While this may, for a probing T, typically be a nominal in [Spec, TP],

 $<sup>^{12}</sup>$ Of course, it is also important that this nominal bear nominative case since, in Tamil as in many other languages (Bobaljik 2008), only nominatives can serve as  $\phi$ -agreement triggers. Since case is not a central concern of this paper, I don't discuss this point any further here. But the restriction to nominatives is presupposed in my discussion of Tamil.

Tamil shows that, if this position is occupied by a nominal without (fully) valued  $\phi$ -features, as e.g. an anaphor, probing can continue on until the closest  $\phi$ -valued nominal is found. The Tamil AAE strategy is thus the result of two independent grammatical properties:

- (i) The anaphoric needs of ta(a)n independently ensure that a  $\phi$ -valued nominal will always be present above it in its local domain.
- (ii) ta(a)n does not count as a(n) (defective) intervener for  $\phi$ -agreement by a probing T with this higher nominal.

As such, our understanding of the AAE must be updated as in (40) below:

### (40) Anaphor Agreement Effect (updated):

- a. Short version: Anaphors cannot directly trigger covarying  $\phi$ -agreement which results in covarying  $\phi$ -morphology.<sup>13</sup>
- b. Long version: Anaphors cannot directly trigger covarying  $\phi$ -agreement which results in covarying  $\phi$ -morphology. If an anaphor occurs as the minimally closest target for such agreement, <sup>14</sup> then one of the following possibilities must obtain:
  - (i) Agreement ignores the anaphor and is thus able to obtain with the next closest target which does have valued  $\phi$ -features.
  - (ii) There is special (i.e. non  $\phi$ -covarying) "anaphoric" agreement.
  - (iii) There is default agreement.
  - (iv) The derivation crashes.

Note that the possibilities listed in (40b) do not form a natural class, thus cannot be reduced further. They can be seen as a disparate collection of Elsewhere scenarios, i.e. the various instantiations of ways that the specific banned operation, as described in (40a), could fail to obtain.

## 5.1 Tamil strategy in other languages

The Niger Congo language Donna So seems to manifest a phenomenon that looks a lot like the special 1st-person agreement seen in Tamil speech complements (the example below is taken and reformatted from Curnow, 2002):

(41) Oumar [inyemɛ jɛmbɔ paza bolum] miñ tagi. Oumar [ANAPH[SBJ] sack.DEF drop left.1SG] 1SG.OBJ informed "Oumar<sub>i</sub> told me [ $_{CP}$  that he<sub>{i,\*j}</sub> had left without the sack.]"

In (41),  $\phi$ -covarying agreement obtains on the clausemate verb of the anaphor, just like in Tamil. The agreement triggered on the verb under this anaphor is, furthermore, 1sg. Notably, the minimal CP containing the anaphor is a speech complement, as in the shifted

<sup>&</sup>lt;sup>13</sup>This formulation allows an aphors to *indirectly* participate in triggering covarying  $\phi$ -agreement resulting in covarying  $\phi$ -morphology. Thus, in the Tamil structures discussed here, the anaphor may still serve to transmit the  $\phi$ -features of the perspectival pronoun to its clause mate verb.

<sup>&</sup>lt;sup>14</sup>This is, of course, assuming that it also satisfies other restrictions on triggering agreement, like ones in terms of case.

Tamil cases in (30)/(36) and (31). Under the old formulation of the AAE (see again (39)), the sentence in (41) would constitute a counter-example to the AAE; but it is entirely accountable under the updated version in (40). The agreement pattern seen in (41) might be explained along the same lines as the 1st-person anaphoric agreement in Tamil: i.e. we might say that the agreement is triggered by an obligatorily shifted 1st-person pro in the left periphery of the embedded CP, which binds the anaphor in its local domain and also corefers with the antecedent Oumar. Of course, further research needs to be undertaken into the anaphoric and agreement systems in Donna S2 to see to what extent such an analysis would be viable for this language. But the surface resemblance to Tamil structures like that in (30) above is striking.

Analogous structures may also be attested in Amharic. Amharic has been discussed in the literature as a language that manifests indexical shift (Schlenker, 1999, among others). But in some of the clauses where indexical shift has been shown to obtain, the putatively shifted indexical is actually a silent *pro* (as in (42) below, from Delfitto and Fiorin, 2011, but ultimately due to Malamud (2006)):

(42) Profäsəru<sub>i</sub> [pro<sub>i</sub> bät'am bəzu səra ə-sär-allähu] alä.
professor very much work 1sg-work.imp-aux.1sg say.prf.3sg.masc
"The professor<sub>i</sub> said [<sub>CP</sub> that he<sub>i</sub> works very hard]."

Since the subject is silent, we have no obvious way of knowing that it really is a 1st-person indexical (as also pointed out in Delfitto and Fiorin, 2011, 219). That it is tacitly treated as such is actually due to the 1st-person agreement marking on its clausemate verb. But structures like Tamil (30) and now (potentially) (41), raise the possibility that it is a null anaphor instead, and that the 1st-person agreement is triggered by a shifted 1st-person prohigher up in the clause. Indeed, there seems to be independent evidence to support the idea that the pro subject is an anaphor and not a 1st-person pronoun: Delfitto and Fiorin further note that the null subject may be construed de re with respect to the matrix subject. If it were really a shifted 1st-person indexical, this would be unexpected; but a de re construal is predicted to be possible if it is a null anaphor, instead (see also Pearson, 2013, for arguments in favor of possible de re construals involving anaphors). Thus, it is possible that Amharic too adopts the Tamil strategy for avoiding a violation of the AAE.

We may speculate that, in general, two properties would have to hold, for a language to be able to adopt the AAE strategy proposed here for Tamil. First, it would need to have a (c-commanding)  $\phi$ -valued nominal in the local domain which could trigger  $\phi$ -agreement. In Tamil, the presence of this candidate was seen to be independently motivated by the perspectival nature of anaphora. Thus, we might predict that other languages which have both overt agreement marking and similar perspectival systems, would also have recourse to this option. Second, the agreement mechanism of this language and the structural and featural status of the anaphor has to be set up such that the anaphor doesn't count as an intervener (defective or otherwise) for agreement between the  $\phi$ -probing head and this other nominal. We might speculate that in languages that use either the default or anaphoric marking strategy, the anaphor does intervene for such  $\phi$ -agreement. Further research into the anaphora and agreement systems in these and other languages must, of course, be undertaken to better understand the locus of parametric variation here.

## 6 Conclusion and theoretical speculations

I have presented novel data and reconsidered old data from the Dravidian language Tamil, pertaining to the nature of verbal agreement triggered under the nominative anaphor ta(a)n. In the process, I have argued that this agreement, which looks like standard  $\phi$ -covarying agreement, is nevertheless special because the nominative element, the standard source of agreement in Tamil, is an anaphor. As per the AAE, the agreement is triggered on the verb in such cases, not by the anaphor, but by another element in the local phase, namely a perspectival pro. The anaphor is indeed involved in the agreement mechanism, but crucially not as the source of agreement. The broader crosslinguistic implication of this is that the AAE, namely the generalization that anaphors cannot trigger covaring  $\phi$ -agreement yielding covarying  $\phi$ -morphology, is valid in Tamil as well. Tamil just uses a different strategy to avoid violating the AAE than the languages discussed so far in the literature.

I have so far said nothing about the theoretical motivations behind the AAE, as described in (40). A plausible answer may simply be that anaphors don't have the (valued)  $\phi$ -features required to trigger agreement. Indeed, a popular view in the literature claims that this lack of some or all  $\phi$ -features is the defining property of an anaphor (Kratzer, 2009; Reuland, 2011; Rooryck and vanden Wyngaerd, 2011). A radical implementation of this position would be to say that anaphors are "minimal pronouns" (Kratzer, 2009), nominals that are born with a fully unvalued set of  $\phi$ -features. They would thus be more like the functional heads T/v that probe to get their  $\phi$ -features valued, than like full-fledged nominals (a position reminiscent of earlier proposals like that in Borer, 1989). A more conservative variant of this would be to say that anaphors lack a (potentially proper) subset of  $\phi$ -features. In this case, however, we may additionally have to posit that a violation of the AAE cannot be circumvented by partial valuation of  $\phi$ -features on the probe by the anaphor.

Regardless of which position we take within the  $\phi$ -deficiency account, the timing of Agree operations is crucial. I.e. the anaphor should be unable to value the  $\phi$ -features on T/v even after it has potentially inherited these  $\phi$ -features from another DP (either its antecedent or some other local entity, like the perspectival pronoun argued for here). One way to derive this would be to argue that the probing head can distinguish between inherited and inherent  $\phi$ -features and can only be valued by inherent  $\phi$ -features. Alternatively, we might say that the T head gets its  $\phi$ -features valued before the anaphor does, or at the same time as the anaphor, as under the feature-sharing mechanism assumed for Tamil in this paper.

However, this  $\phi$ -deficiency account of the AAE is independently problematic, a main concern being that it is too simple. Indeed, it is for this reason that anaphora in Tamil was syntactically encoded in terms of a DEP-feature and not in terms of  $\phi$ -features. The simple fact is that anaphors in the world's languages do not seem to be created equal. Based on restrictions observed on their potential antecedence, anaphors seem to have different  $\phi$ -featural specifications. Some seem to lack all  $\phi$ -features, thus place no  $\phi$ -featural restrictions on their antecedents: the Chinese anaphor ziji is an example (Huang and Liu, 2001). Yet others seem to bear some  $\phi$ -features but lack others: the Dravidian anaphor ta(a)n, among many others, places no restriction on the gender or number of its antecedent but restricts its choice of person (3rd-person antecedents are allowed, 1st and 2nd person are not). At the other end of the spectrum, we have anaphors that do not seem to lack any  $\phi$ -features whatsoever.

Heinat (2008), for instance, discusses examples from San Lucas Quiaviní Zapotec and Thai, among others, to show that even R-expressions may be anaphorically bound. The following Zapotec example is from Heinat (2008, p. 151):<sup>15</sup>

#### (43) San Lucas Quiaviní Zapotec:

R-ralloh Gye'eihlly $_i$  [r-yu'lààa'z Lia Paamm Gye'eihlly $_i$ ]. HAB-think Mike HAB-like F Pam Mike "Mike $_i$  thinks Pam likes Mike $_{\{i,*j\}}$ ." (literal) "Mike $_i$  thinks Pam likes him $_{\{i,*j\}}$ ." (intended)

If we wanted to maintain the  $\phi$ -deficiency account in the face of such data, we would essentially have to say that all anaphors, including those in languages like Zapotec, underlyingly lack  $\phi$ -features, even if they don't seem to do so on the surface. Alternatively, we might find that such languages in fact do not observe the AAE – this would then count as potentially significant evidence in favor of the  $\phi$ -deficiency account of the AAE.

Another source of theoretical interest has to do with the question of what factors condition the choice of parametric strategy that a language adopts in order to avoid a violation of the AAE. I have offered some brief speculative discussion of this in Section 5.1, but a great deal more empirical research obviously needs to be done to address this and other questions with a sufficient level of descriptive and explanatory coverage. This is part of my ongoing research.

## References

Anand, Pranav. 2006. De de se. Doctoral Dissertation, Massachusetts Institute of Technology.

Baker, Mark C. 2008. The syntax of agreement and concord. United Kingdom: Cambridge University Press.

Bianchi, Valentina. 2003. On finiteness as logophoric anchoring. In *Temps et point de vue/Tense and Point of View*, ed. Jacqueline Guéron and L. Tasmovski, 213–246. Nanterre: Université Paris X.

Bjorkman, Bronwyn, and Hedde Zeijlstra. 2014. Upward Agree is superior. Http://ling.auf.net/lingbuzz/002350. Göttingen/Toronto.

Bobaljik, Jonathan David. 2008. Where's phi? Agreement as a postsyntactic operation. In *Phi Theory: phi-features across modules and interfaces*, ed. Daniel Harbour, David Adger, and Susana Béjar, Oxford Studies in Theoretical Linguistics, 295–328. Oxford University Press.

Bok-Bennema, Reinike. 1991. Case and agreement in Inuit. Dordrecht: Foris.

 $<sup>^{15}</sup>$ Crucially, evidence from sloppy readings under VP ellipsis show that the R-expression does indeed function like a bound-variable and is not merely accidentally coreferent with its antecedent as in the sentence. "Everyone loves Bill. Even Bill loves Bill!"

- Borer, Hagit. 1989. Anaphoric AGR. In *The null subject parameter*, ed. Osvaldo Jaeggli and Ken Safir, 69–109. Dordrecht: Kluwer Academic Publishers.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz. Cambridge, Mass.: MIT Press.
- Curnow, Timothy Jowan. 2002. Verbal logophoricity in African languages. In *Proceedings* of the 2002 Conference of the Australian Linguistic Society.
- Deal, Amy Rose. 2010. Ergative case and the transitive subject: a view from Nez Perce. NLLT 28:78–120.
- Delfitto, Denis, and Gaetano Fiorin. 2011. Person features and pronominal anaphora. *Linguistic Inquiry* 42:193–224.
- Haegeman, Liliane. 2004. A dp-internal Anaphor Agreement Effect. *Linguistic Inquiry* 35:704–712.
- Heim, Irene, and Angelika Kratzer. 1998. Semantics in Generative Grammar. Oxford: Blackwell Publishers.
- Heinat, Fredrik. 2008. Probes, pronouns and binding in the Minimalist Program. VDM Verlag.
- Huang, James, and Luther Liu. 2001. Logophoricity, attitudes, and *ziji* at the interface. In *Long-distance reflexives*, ed. Peter Cole, Gabriella Hermon, and James Huang, 141–195. New York: Academic Press.
- Hubbard, Philip. 1985. The syntax of the Albanian verb complex. New York: Garland.
- Huffman, Franklin E. 1970. Modern spoken Cambodian. Yale University Press.
- Kaplan, David. 1989. Demonstratives: An essay on the semantics, logic, metaphysics, and epistemology of demonstratives and other indexicals. In *Themes from Kaplan*, ed. John Perry, Joseph Almog, and Howard Wettstein, 481–563. Oxford: Oxford University Press.
- Kayne, Richard. 1994. The antisymmetry of syntax. Cambridge, Mass: MIT Press.
- Koopman, Hilda, and Dominique Sportiche. 1989. Pronouns, logical variables, and logophoricity in Abe. *Linguistic Inquiry* 20:555–588.
- Kratzer, Angelika. 2009. Making a pronoun: fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40:187–237.
- Lang, Adrienne. 1973. Enga Dictionary. Canberra: Australian National University.
- Malamud, Sophia. 2006. Semantics and pragmatics of arbitrariness. Doctoral Dissertation, University of Pennsylvania, Philadelphia.

- Maling, Joan. 1984. Non-clause bounded reflexives in Modern Icelandic. *Linguistics and Philosophy* 7:211–241.
- Massey, Victoria. 1990. Experiencers, themes, and c-command in Albanian. In *MITWPL* 12: Student Conference in Linguistics, 128–143. Cambridge, MA.
- Pearson, Hazel. 2013. The sense of self: Topics in the semantics of de se expressions. Doctoral Dissertation, Harvard University, Cambridge, MA.
- Pesetsky, David, and Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture: syntactic derivation an dinterpretation*, ed. Wendy K. Wilkins Simin Karimi, Vida Samiian, 262–294. Amsterdam: John Benjamins.
- Reuland, Eric. 2011. Anaphora and language design. Cambridge, Mass.: MIT Press.
- Rizzi, Luigi. 1990. On the anaphor-agreement effect. Rivista di Linguistica 2:27–42.
- Rooryck, Johan, and Guido vanden Wyngaerd. 2011. Dissolving binding theory. Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.
- Schlenker, Philippe. 1999. Propositional attitudes and indexicality: a cross-categorial approach. Doctoral Dissertation, MIT.
- Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26:29–120. Kluwer Academic Publishers.
- Selvanathan, Nagarajan, and Chonghyuck Kim. 2008. The anaphor agreement effect in Tamil. Snippets 18.
- Speas, Margaret. 2004. Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114:255–276.
- Sundaresan, Sandhya. 2012. Context and (co)reference in the syntax and its interfaces. Doctoral Dissertation, University of Tromsø and University of Stuttgart, Tromsø.
- Taraldsen, Knut Tarald. 1978. On the NIC, vacuous application and the That-trace filter. Bloomington, Indiana, University Linguistics Club.
- Tucker, Matthew A. 2011. Even more on the anaphor agreement effect: when binding does not agree. Manuscript written at UCSC.
- Woolford, Ellen. 1999. More on the anaphor agreement effect. Linguistic Inquiry 30:257–287.
- Wurmbrand, Susanne. 2012b. The syntax of valuation in auxiliary-participle constructions. In *Proceedings of the 29th WCCFL*, ed. J. Choi et al. University of Arizona, Tucson.
- Zeijlstra, Hedde. 2012. There is only one way to agree. The Linguistic Review 29:491–539.