

Revisiting the anaphor agreement effect: a new pattern from Tamil

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Abstract

This paper presents new data pertaining to the Anaphor Agreement Effect (originally noted in Rizzi 1990, showing that anaphors in many languages seem to be unable to trigger “normal”, i.e. ϕ -covarying agreement) from a hitherto underresearched non-Indo-European language, namely Tamil of the Dravidian family. 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 into 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

The “Anaphor Agreement Effect (AAE)”, originally due to Rizzi (1990), is a descriptive generalization that underscores the oft-noted (Taraldsen 1978, Borer 1989, and subsequent) uneasy relationship between a pro-form and ϕ -agreement. Put simply, it states that an anaphor may not trigger regular ϕ -covarying agreement. There are many logical strategies that a language might pursue to avoid a violation of the AAE. The anaphor may simply never occur in an agreement-triggering position, for instance. Alternatively, an anaphor may occur in such a position but the agreement triggered in its scope may be non ϕ -covarying in one of many ways: for instance, it may be default agreement, or a special agreement form that occurs only in the scope of an anaphor. All of these logical possibilities are empirically attested, as I will show.

* Thanks to Gillian Ramchand and Tom McFadden for discussing the ideas in this paper with me on various occasions, and also to the audiences at the Pronouns Tübingen workshop in Tübingen, at the Agreement workshop in Recife, Brazil and in Olomouc, Czech Republic, where versions of this paper were presented, for feedback and fruitful discussion. Any substantive errors are due to me alone.

However, there is another logical possibility that has hitherto not been reported on in the (admittedly rather sparse) literature on the topic: the anaphor might occur in the standard position associated with triggering (normal, ϕ -covarying) agreement, but this agreement could, in this case, be triggered by a different element in the local phase. It is the goal of this paper to introduce and motivate the presence of this strategy in the Dravidian language, Tamil. In addition to expanding on the parametrized strategies for avoiding an AAE violation, this also emphasizes the robustness of the AAE as a potentially universal grammatical generalization.

2. A brief history of the AAE and its empirical motivations

The original formulation of the AAE was motivated by minimal pairs like (1) and (2) in Italian:

- (1) A loro import-a solo di se-stessi.
to them matters-3SG only of them-selves
'They_i only matter to themselves_i.'
- (2) * A loro interest-ano solo se-stessi.
to them interest-3PL only them-selves.NOM
'They_i only interest themselves_i.' (intended)

In (1), neither the subject nor the object is nominative: the verb thus surfaces with default 3SG agreement. In (2), the nominative object would normally trigger ϕ -covarying agreement on the verb: however, (2) is ungrammatical. Notably, the nominative object in this sentence is the anaphor *se-stessi*. Furthermore, sentences like (2) become marginally acceptable if the agreement on the verb is replaced with default (non-)agreement:

- (3) ? A loro interest-a solo se-stessi.
to them interest-3SG only them-selves.NOM
'They_i only interest themselves_i.'

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_i only matter to yourselves_i.'

- (5) * A voi interest-are solo voi-stessi.
 to you interest-3PL 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 do 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 concludes, therefore, that “there is a fundamental incompatibility between the property of being an anaphor and the property of being construed with agreement” (Rizzi 1990: 28).

2.1. Empirically-attested ways to obey the AAE

Although much work still needs to be done on the subject, the robustness of the AAE as a descriptive generalization has since been tested and confirmed (Woolford 1999, Haegeman 2004, Deal 2010, Tucker 2011, among others) across a wide variety of languages with subject as well as object agreement and mixed agreement systems. What emerges is an interesting typology of parametrized strategies that, as mentioned earlier, instantiate the various logical ways to obey the maxim that an anaphor may not trigger normal ϕ -covarying verbal agreement.

2.1.1. Logical option 1: No ϕ -covarying agreement

One way to obey the AAE would be to ensure that ϕ -covarying agreement doesn’t obtain, rendering the question of whether the anaphor occurs in agreement-triggering position or not irrelevant. But there are many logical ways to be non- ϕ -covarying: the agreement may involve a frozen default marking or it may be a special “anaphoric agreement” form – i.e. one that is not part of the regular ϕ -paradigm but is triggered only in the scope of an anaphor in agreement-position. Alternatively, the agreement may simply not obtain: e.g. by manipulating the finiteness properties of the clause, or of the argument-structural properties of the predicate in question. All of these possibilities are empirically attested.

Predicate-detransitivizing is one way to prevent agreement from obtaining in the first place. Inuit is a language that employs this strategy. In this language,

the verb is (portmanteau-)marked for both subject and object agreement (6). But when the direct object is an anaphor, object marking on the verb is no longer licit (7) (examples taken from Tucker 2011: 14, formatting mine), just as predicted by the AAE:

- (6) Angutip arnaq taku-vaa.
 man.ERG woman.ABS see.IND.3SG.SUBJ-3SG.OBJ
 ‘The man sees the woman.’
- (7) * Hansiup_i immi_{i,*j} asap-puq.
 Hansi.ERG himself.ABS wash.IND.3SG.SUBJ-3SG.OBJ
 ‘Hansi_i washed himself_{i,*j}.’ (intended)

But (7) can be redeemed by suppressing (the overt forms) both the object and the agreement triggered by this object, yielding a “detransitivized” predicate that agrees with the (non-anaphoric) subject alone, thereby avoiding a violation of the AAE. This is illustrated in (8):¹

- (8) Asap-puq.
 wash.IND-3SG
 ‘He_i washed himself_{i,*j}.’

We have already seen an instance of the default agreement strategy in the Italian examples in (2) and (5). Such a strategy is also attested in Inuit and Albanian. In Inuit (9), the anaphoric object is marked with oblique case, and the verb surfaces with default agreement:

- (9) Angut_i immi-nut_{i,*j} taku-vuq
 man himself-DAT see.IND-3SG
 ‘The man_i sees himself_{i,*j}.’

In Albanian, a language with a nominative-accusative case system, the anaphor occurs in the nominative. But the agreement triggered in the scope of this anaphor is nevertheless invariant ((10) is reformatted from Massey 1990: 135). Evidence for the invariance of the agreement comes from scrambled minimal variant in (11), taken from Woolford (1999) – the agreement marking on the verb remains invariant at 3SG, even when the nominative object is in the first-person:

¹The pronominal subject is presumably *pro*-dropped.

- (10) Drites i_i dhimset vetja $_{\{i,*j\}}$.
 Drita.DAT=3SG.DAT pity.3SG.PAST.NACT ANAPH.NOM
 ‘Drita $_i$ pities herself $_{\{i,*j\}}$.’
- (11) Vetja $_{\{i,*j\}}$ me $_i$ dhimset.
 ANAPH.NOM=1SG.DAT pity.3SG.PRS.NACT
 ‘I $_i$ pity myself $_{\{i,*j\}}$.’

Finally, the anaphoric agreement strategy is attested in Swahili, an object agreement language (Woolford 1999) – the contrasting agreement markers are highlighted in boldface:

- (12) Ahmed a-na-**ji**/*m-**penda** mwenyewe.
 Ahmed 3SBJ-PRS-REFL/*3OBJ-love himself
 ‘Ahmed $_i$ loves himself $_i$.’ (emphatic)
- (13) 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 (12) does not ϕ -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 Chichewa, adapted below (formatting mine):

- (14) Ndi-na-**i**/***dzi**-khal-its-a *pro[-anaph]* y-a-i-kali.
 1S-PAST-4O-BECOME-CAUS-FV (them) CL4-ASSOC-CL4-fierce
 ‘I made them (e.g. lions) fierce.’
- (15) Ndi-na-**dzi**/***i**-khal-its-a *pro[+anaph]* w-a-m-kali.
 1S-PAST-REFL-BECOME-CAUS-FV (myself) CL1-ASSOC-CL1-fierce
 ‘I made myself fierce.’

In (14), the causativized ‘become’ verb shows overt agreement both with the subject and the non-coreferent *pro* object. In the minimally varying (15), the verb again agrees with the subject, but the usual object agreement marking is replaced by a special reflexive form, namely the infix *-dzi-*.

2.1.2. Logical option 2: anaphor not in agreement-triggering position

A different logical way to obey the AAE would, of course, be to ensure that the anaphor doesn’t occur in the argument position responsible for triggering

verbal agreement. Simply put, this means that, in a language with subject agreement, the anaphor should be prevented from occurring as the subject and, in a language with object agreement, from occurring as object.

Here again, there are different ways to bring about this negative state of affairs. The anaphor could simply never show up in (or inside) the agreement-triggering position. This is a very common state of affairs attested in many languages. In English, as in many other languages with nominative-accusative case systems, ϕ -covarying agreement on the verb is triggered by a nominative DP. As might be expected given the AAE, such languages simply lack nominative anaphors, leading to the idea (Maling 1984, among others), that the lack of nominative anaphora is the result of an unexplained paradigmatic gap. However, the presence of nominative anaphors in many languages shows that the problem is not the nominative marking per se, but the agreement-triggering capability often associated with it.

A different strategy is to “protect” the anaphor from triggering agreement by embedding it inside another DP in agreement- position. Since the structural conditions required for the anaphor to trigger agreement on the verb don’t exist, the verb surfaces with default agreement instead. The mechanisms of this are likely closely related to those involved in the default agreement strategy described above, given prior analyses of oblique case-marking on a DP as being essentially equivalent to structurally embedding that DP (see Řezáč 2008: in particular, for a detailed analysis along these lines). Hindi seems to be such a language (Tucker 2011):

- (16) * Atif-ko_i [_{DP} apne aap_i] pasand hai.
 Atif-DAT ANAPH.MASC.PL like be.3MSG
 ‘Atif_i likes himself_i.’ (intended)
- (17) Atif-ko_i [_{DP} apne_{i,*j}] ri[ʈedaar] pasand hãĩ.
 Atif-DAT ANAPH.GEN.MASC.PL relatives[NOM] like be.3MPL
 ‘Atif_i likes his_{i,*j} (male) relatives.’

In both the sentences above, the anaphoric possessor *apne* is embedded inside a larger DP. Rajesh Bhatt (p.c.) mentions that *apne aap* in (16) is a complex reflexive of sorts, with *aap* also being a kind of reflexive element. However, what is key to the grammaticality patterns is that the verbal agreement in (17) seems to be due to the anaphor directly, whereas in (16), it reflects the features of the possessee object as a whole. In other words, despite appearing to be embedded inside another DP in both cases, it is “protected” from triggering

agreement only in (16), and not in (17), yielding grammaticality in the former and ungrammaticality in the latter. This suggests, once again, that as long as the anaphor is structurally prevented from itself triggering agreement on the verb, the AAE will not be violated and the resulting structure may be licit.

Similar protected anaphora behavior has been discussed for Selayerese (a Malayo-Polynesian language, Tucker 2011), Modern Greek (Woolford 1999) and DP-internal possessors in West Flemish (Haegeman 2004).

2.2. Languages without overt agreement

It is valid to ask how languages that lack agreement-marking altogether fare with respect to the AAE. If we assume either that the AAE is a condition on the morphological representation of agreement rather than on agreement itself, or that languages without agreement-marking also lack agreement underlyingly, we predict that such languages should freely allow anaphors in all argument positions. In other words, any restriction on the distribution of anaphors in such languages should be independent of the AAE.

This prediction appears to be confirmed. 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:

- (18) Mít [teǒŋ-pii neǒq]_i kit thaa kluən_{i,*j} ciə kounsəh.
 friend both person think that self be student
 ‘[The two friends]_i resonated that they(self)_{i,*j} 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):

- (19) Baa-mé tánge pi-ly-á-mo.
 he-ERG self hit-PRES-3SG.SUBJ-AUGMENT
 ‘He_i is hitting himself_{i,*j}.’

Of course, this is just the tip of the iceberg. Further investigation must be undertaken on a wider sampling of languages without overt agreement to

test their behavior with respect to the AAE. If it can be shown that some of the languages that lack overt agreement nevertheless do obey the AAE (note, incidentally, that this will not necessarily be a straightforward task), this would be important potential evidence that the AAE operates at the level of abstract underlying agreement, rather than at that of surface agreement-marking.

Based on the knowledge garnered on the topic thus far, however, we may, for now, formulate the AAE as follows (taken from Tucker 2011: p. 30, ex. 40):

- (20) “Anaphors do not occur in syntactic positions construed with covarying ϕ -morphology.”

3. Enter Dravidian

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 a subject-agreement Dravidian language like Tamil, a nominative marked anaphor may occur in (embedded) subject position. Kayne’s claim has been contested in Woolford (1999) on the grounds that the agreement triggered under the nominative anaphor is either invariant default agreement marking a gerundival clause (21) or is a clearly mismatched (thus also not co-varying) 1SG agreement, as in (22):²

- (21) [Seetha var-r-ad-aagæ] Murugeesan so-nn-aarü.
ANAPH.NOM.SG come-PRES-3NSG-NMLZ Murugeesan say-PST-3MSG
‘Murugeesan spoke [of Seetha’s coming].’
- (22) Murukeesan_i [_{CP} taan_{i,*j} var-r-een-nnü]
Murugesan.NOM ANAPH.NOM come.PRS-1SG-COMP
so-nn-aarü.
say-PST-3MSG
‘Murugesan_i 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 (21) and (22) don’t exhaust the possibilities for agreement under *ta(a)n* in Tamil. For a core group of speakers, sentences like that in (23) are licit as well – the verbal agreement under *ta(a)n* is 3MSG,

²Crucially, 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.

makes it harder to dismiss the idea that the agreement is triggered directly by *ta(a)n*, in violation of the AAE:

- (23) Murukeesan_i [taan_{i,*j} varu-gir-aar-ünnü] so-nn-aarü.
 Murugesan.NOM ANAPH.NOM come-PRES-3MSG-COMP say-PST-3MSG
 ‘Murugesan_i said [that he_{i,*j} would come].’

Below, I take a closer look at the Dravidian sentences with a view toward determining whether they really are problematic for the AAE. On the basis of this investigation, conducted on the Dravidian language Tamil, I will conclude that such structures do not, in fact, constitute counter-examples to the AAE, but obey it. However, Tamil employs a new logical possibility to avoid its violation. Specifically, the agreement triggered in the scope of the (nominative) anaphor is ϕ -covarying, but is not triggered directly by the anaphor itself. Rather, it is triggered by a different element 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.

4. “Anaphoric agreement” in Tamil

Tamil uniformly manifests subject agreement on the verb:

- (24) [Nii paris-æ tookkapoo- gir-aaj-ünnü] Raman
 you[NOM] prize-ACC lose.go- PRS-2SG-COMP Raman
 namb-in-aan.
 believe-PST-3MSG
 ‘Raman_j believed [_{CP} that you would lose the prize].’

The Tamil anaphor *ta(a)n* may occur in both object and (agreement-triggering) subject position. When *ta(a)n* is the object, the AAE is trivially satisfied, since an object position is not an agreement-triggering position in Tamil. When it is a subject, *ta(a)n* may occur as a (null-)marked nominative or as a “quirky” dative. In the latter instance, the verb surfaces with default agreement, which is 3NSG:

- (25) Raman_i [_{CP} tan-akkü_{i,*j} romba pasi-tt-ad-ü-nnũ]
 Raman ANAPH-DAT very much hunger-PST-3NSG-COMP
 namb-in-aan.
 believe-PST-3MSG
 ‘Raman_i believed [_{CP} he_{i,*j} was very hungry].’

The structure in (25) thus also satisfies the AAE since the agreement triggered in the scope of the anaphor is not ϕ -varying. The real issue is thus the nature of agreement triggered under the nominative anaphor. This agreement, as it turns out, is very revealing and is the focus of the rest of this discussion.

We have, of course, already seen an example of this – in (23), the agreement on the clausemate embedded verb of *ta(a)n* is 3MSG. What we will see now is that this agreement is not frozen, but ϕ -covarying. What is intriguing, however, is that this agreement seems to covary, not with *ta(a)n* itself, but with the antecedent of *ta(a)n*:

- (26) Mia_i [_{CP} Sri_j [_{CP} taan_{i,*j} too-pp-aa[-ünnũ]
 Mia.NOM Sri.NOM ANAPH.SG.NOM lose-FUT-3FSG-COMP
 nene-tt-aan-nũ] paar-tt-aa].
 think-PST-3MSG-COMP see-PST-3FSG
 ‘Mia_i saw [_{CP} that Sri_j thought [_{CP} that she_i/*he_j would lose]].’
- (27) Mia_i [_{CP} Sri_j [_{CP} taan_{j,*i} too-pp-aan-ünnũ]
 Mia.NOM Sri.NOM ANAPH.SG.NOM lose-FUT-3MSG-COMP
 nene-tt-aan-nũ] paar-tt-aa].
 think-PST-3MSG-COMP see-PST-3FSG
 ‘Mia_i saw [_{CP} that Sri_j thought [_{CP} that he_j/*she_i would lose]].’
- (28) Koḷændæ_i naḷandadæ-patti joosi-čč-adũ.
 child[SG.NOM] happening-ACC-about reflect-PST-3NSG.
 Taan_i een kaṣṭappat[_t-iru-kk-adũ]
 ANAPH[NOM] why suffer-PRF-PRS-3NSG
 ‘[The child]_i reflected about what had happened. Why had it_{i,*j} 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 ϕ -features of this antecedent: if *Seetha* were replaced by 3MSG *Raman*, the agreement-marking would be 3MSG *-aan* instead. This yields the following descriptive generalization:

- (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 them are unviable.

The first option, given that Tamil is elsewhere a uniformly subject-agreement language (see again (24)), would be to propose that the source of agreement under *ta(a)n* is *ta(a)n* itself. In this case, structures like (26)-(28) would 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). 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 ϕ -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*”. If we additionally take structures like (22) into account, where the verbal agreement triggered under *ta(a)n* is actually 1SG, we would be forced to posit a fourth variant of *ta(a)n* – one which is a 1st-person indexical. Finally, under such an approach, the fact that the features on the verb track those of *ta(a)n*’s antecedent would either have to be treated as coincidence or explained separately.

The second analytical option would be to claim that the agreement on the verb under *ta(a)n* is triggered by the anaphor’s antecedent – e.g. via long-distance agreement (potentially via *ta(a)n*) or some other sort of feature-percolation mechanism. But there are (at least) two independent reasons to reject this option. The first piece of counter-evidence comes from structures like (22) (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 agreement triggered under it is 1SG:

- (30) [_{CP} Sai_i [_{CP} taan_{i,*j} ɕej-pp-een-nnũ] so-nn-aan-nnũ]
 Sai ANAPH[NOM]_i win-FUT-1SG-COMP say-PST-3MSG-COMP
 Sri_j nene-čč-aan.
 Sri thought-PST-3MSG
 ‘Sri_j thought [_{CP} that Sai_i said [_{CP} that he_{i,*j} would win].’

The agreement pattern in these sentences seems superficially dissimilar to those seen in (26)-(28), where the verbal agreement simply matches the ϕ -features of the antecedent of *ta(a)n*. But if we look closer, we see that the sentences in (30) and (22) also obey the antecedent tracking generalization described in (29). 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 plural, the agreement on the verb under *ta(a)n* is 1PL not 1SG:

- (31) Pasaŋ-ga_i [_{CP} taaiŋ-ga_{i,*j} ɕej-pp-oom/*aanga[-ũnnũ]
 boy-PL.NOM [ANAPH-PL.NOM_i win-FUT-1PL/*3MPL-COMP]
 so-nn-aaŋ-ga_i.
 say-PST-3M-PL
 ‘The boys said [_{CP} that they_{i,*j} would win].’

All this shows that the agreement is sensitive to the identity of the anaphor’s antecedent even in cases where its ϕ -features don’t match those of the antecedent. Sundaesan (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 ϕ -matching in structures like (30) and (31) is not because the agreement doesn’t track the antecedent – but because the evaluation context against which ϕ -features are evaluated is different in the embedded and matrix clauses in these sentences.

Regardless of how the agreement patterns here are to be derived, however, it is clear that we can no longer easily maintain the idea that the agreement features are copied directly from the antecedent (via long-distance feature-transmission or some other similar mechanism). Further evidence against this view comes from structures involving logophoric dependencies, like that in (28): it is

difficult to see how feature-transmission from the antecedent would work inter-sententially.

To sum up, the discussion above shows that the verbal agreement that obtains under *ta(a)n* in the Tamil structures above is triggered neither by *ta(a)n* nor by its antecedent. The source of agreement on the clausemate verb of *ta(a)n* in these structures must thus be something else.

4.2. A viable option: a mediating *pro*

Given the two logical options we have just eliminated, and assuming that agreement is instantiated as a narrow-syntactic Agree operation³ between a Probe and a Goal in the Minimalist sense, the relevant state of affairs may be summarized as follows:

Assumption: ϕ -feature agreement is locally implemented in the Narrow Syntax. I.e. verbal agreement (realized on the T head) is triggered by an element that is (phase-)local to T.

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

Observation II: ϕ -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 ϕ -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 ϕ -agreement on T. This element must, of course, have valued ϕ -features at the point at which it checks those on T: we might thus envision it as a kind of (null) pronoun or *pro*. The antecedent-tracking effect of agreement would follow naturally from the assumption that this *pro* and the antecedent must corefer. If the ϕ -features of the antecedent and of *pro* are computed against the same evaluation context (the default scenario), coreference would entail

³That said, for the purposes of the current discussion, it wouldn't make a great deal of difference if ϕ -Agree were to be construed as a post-syntactic phenomenon, in the sense of Bobaljik (2008). What is relevant here is that Agree be subject to phase-locality.

ϕ -matching. By extension, the verbal agreement triggered by *pro* would also match the ϕ -features of the antecedent, yielding the antecedent-tracking effect observed in (26)-(28). But in cases where these evaluation contexts differ – as in the examples in (22), (30), and (31) – the ϕ -features would not match, even under coreference, precisely because the contexts against which ϕ -values are computed differ. Rather, the *pro* in such cases would be a shifted 1st-person indexical denoting the same entity as the antecedent; it would thus trigger 1st-person agreement on the T head.

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 (Sundaesan 2012) in line with prior work (Koopman and Sportiche 1989) is that this silent pronoun plays a central role in mediating long-distance anaphoric dependencies in languages with perspectival anaphoric systems 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 minimal predication containing the anaphor. As such, I propose that this null pronoun is also associated with a perspectival feature which allows it to pick out a perspective-holder at LF, which serves as the antecedent. In other words, this perspectival pronoun mediates the relationship between the anaphor and its antecedent at LF; triggering agreement on the T head under *ta(a)n* is incidental. Following analogous data and discussion in Sells (1987), Koopman and Sportiche (1989), Bianchi (2003), Speas (2004), Baker (2008), among others, on logophoric operators in the clausal left-periphery in other languages (motivated, among others, by the observation that many CPs containing logophors are marked with special complementizers) – I propose that this perspectival pronoun is the specifier of a perspectival phrase (PerspP) in the left periphery of the local clause containing the anaphor. In ongoing work (Sundaesan and Pearson 2014), I take an even stronger position, arguing that this perspectival pronoun occurs in several predications (*v*Ps involving change-of-state and psych verbs, temporal and spatial PPs and CPs, as well as the so-called “taste predicates” (Stephenson 2010: among others)) and manipulates the syntactico-semantics of

spatial, temporal and mental perspectival relations (including, but not limited to, anaphora) in these.⁴

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 ϕ -matching and the second involving 1st-person agreement – may be formally derived. Consider again the ϕ -matching sentence in (26), repeated below:

- (32) Mia_{*i*} [CP Sri_{*j*} [CP taan_{*i*,**j*} too-pp-aa[-ünnü]
 Mia.NOM Sri.NOM ANAPH.SG.NOM lose-FUT-3FSG-COMP
 nene-tt-aan-nü] paar-tt-aa].
 think-PST-3MSG-COMP see-PST-3FSG
 ‘Mia_{*i*} saw [CP that Sri_{*j*} thought [CP that she_{*i*}/*he_{*j*} would lose]].’

In the current model, the antecedent is associated with the anaphor, and the *pro* operator that binds it, only at LF, and the Agree operations in the syntax (or post-syntax) are assumed to function under phase-locality. This means that, as far as the syntax is concerned, the only relevant piece of structure is the local phase (CP) containing the anaphor and *pro*. The derivation is fairly straightforward. Given the current model, the various players in the Agree relationship are born with the following features:⁵

<i>pro</i> in [Spec, PerspP]	Anaphor (<i>ta(a)n</i>)	T
[DEP: <i>x</i> , ϕ : 3fsg]	[DEP: $_$, ϕ : $_$]	[ϕ : $_$]

The derivation proceeds bottom-up as follows:⁶

1. MERGE(ν P, T) \rightarrow T’
2. MERGE(DP_{*ta(a)n*}, T’) \rightarrow TP
3. AGREE(T [ϕ : $_$], DP_{*ta(a)n*} [ϕ : $_$]) \rightarrow {T [ϕ : $_i$], DP_{*ta(a)n*} [ϕ : $_i$]}

⁴Incidentally, the independent motivation for the presence of a perspectival pronominal operator in the left-periphery of certain maximal projections is another argument against the idea that the verbal agreement triggered under the anaphor *ta(a)n* is directly due to *ta(a)n* itself.

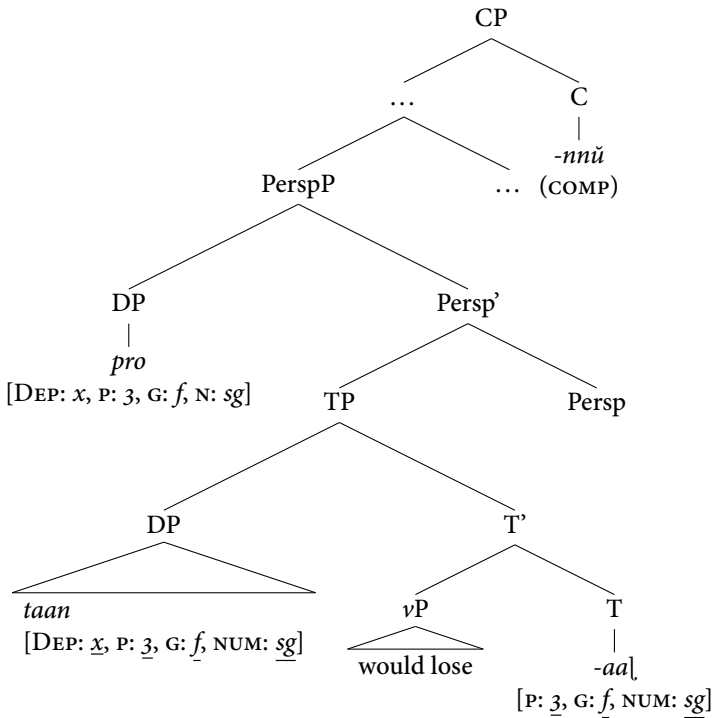
⁵In addition to the features listed below, I assume that both *ta(a)n* and the perspectival pronoun are endowed with a categorial D feature and case features. These are not included here for reasons of perspicuity.

⁶Intermediate bar-levels of projection are assumed for expository purposes only.

4. MERGE(Persp, TP) → Persp'
5. MERGE(DP_{pro}, Persp') → PerspP
6. AGREE({T [ϕ : $_i$], DP_{ta(a)n} [ϕ : $_i$]}, DP_{pro} [ϕ : 3fsg]) →
 {T [ϕ : 3fsg], DP_{ta(a)n} [ϕ : 3fsg]}
7. AGREE(DP_{ta(a)n} [DEP: $_$], DP_{pro} [DEP: x]) → DP_{ta(a)n} [DEP: x]

Step 3 involves an Agree relation between two sets of unvalued ϕ -features, on T and the anaphoric subject DP, respectively. Following Pesetsky and Torrego (2007), I assume that this yields feature sharing for ϕ -features on T and DP such that these essentially function as a joint probe to get these features valued. I indicate this notationally by the coindexation of the values that ϕ -Agree will result in. The tree structure for this CP after Agree and before Spell-Out, thus looks like this:⁷

(33)



⁷In the trees shown here, inherited/valued features are notationally distinguished from inherent ones by means of underlining on the former. This is only a visual mnemonic for purposes of explication and should not be treated as a higher-order feature.

At LF, the matching DEP-values on $DP_{ta(a)n}$ and DP_{pro} trigger binding of the former by the latter (the latter being construed as the binder since it asymmetrically c-commands the former): the two DPs now refer to the same entity. The assignment function then maps these elements to a salient perspective-holder in the evaluation context; the antecedent DP denoting this perspective-holder must also bear 3FSG features. Thus, in (33), $DP_{ta(a)n}$ and DP_{pro} are both assigned to refer to the female entity Mia, and not to the male one Sri. Thus, the antecedent *Mia*, $DP_{ta(a)n}$, DP_{pro} as well as the ϕ -features on T are all set to 3FSG – explaining the antecedent ϕ -matching effect observed earlier.

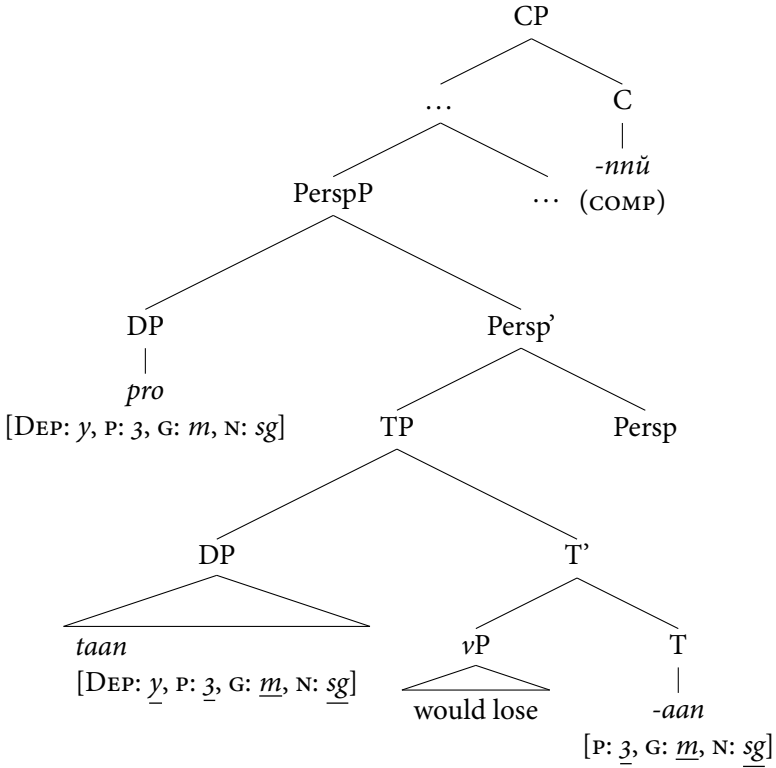
The derivation of the minimally varying sentence in (27), repeated below, is very similar, yielding the following structure post-Agree and pre-SpellOut:

- (34) Mia_i [_{CP} Sri_j [_{CP} $taan_{\{j,*i\}}$ too-pp-aan-ünnü]
 Mia.NOM Sri.NOM ANAPH.SG.NOM lose-FUT-3MSG-COMP
 nene-tt-aan-nü] paar-tt-aa].
 think-PST-3MSG-COMP see-PST-3FSG
 ‘ Mia_i saw [_{CP} that Sri_j thought [_{CP} that he_j/*she_i would lose]].’

The only difference between this and the structure in (33) has to do with the ϕ -feature values on *pro*.⁸ As illustrated below, the perspectival pronoun in (27) is born with 3MSG ϕ -values: it thus values the features on T and *ta(a)n* as 3MSG (yielding 3MSG rather than 3FSG agreement under *ta(a)n*). At LF, *ta(a)n* and *pro* are both mapped onto a male (rather than female) perspective-holder, represented by the 3MSG DP *Sri*. Both the differences in agreement and antecedent-values between (32) and (34), and the similarity with respect to antecedent-tracking effect of agreement in both, are thus straightforwardly captured:

⁸It is assumed that there are no restrictions on the ϕ -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.

(35)



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_i [_{CP} taan_{i,*j} ɕej-pp-**een**-nnũ] so-nn-aan.
 Sai ANAPH[NOM]_i win-FUT-1SG-COMP say-PST-3MSG-COMP
 ‘Sai_i said [_{CP} that he_{i,*j} would win].’

The syntactic derivation for (36) proceeds as follows:

1. MERGE(*vP*, T) → T'
2. MERGE(DP_{ta(a)n}, T') → TP
3. AGREE(T [ϕ : _], DP_{ta(a)n} [ϕ : _]) → {T [ϕ : _{-i}], DP_{ta(a)n} [ϕ : _{-i}]}
4. MERGE(Persp, TP) → Persp'
5. MERGE(DP_{pro}, Persp') → PerspP

6. AGREE($\{T [\phi: _i], DP_{ta(a)n} [\phi: _i]\}, DP_{pro} [\phi: 1sg]) \rightarrow$
 $\{T [\phi: 1sg], DP_{ta(a)n} [\phi: 1sg]\}$
7. AGREE($DP_{ta(a)n} [DEP: _], DP_{pro} [DEP: y]) \rightarrow DP_{ta(a)n} [DEP: y]$

An important difference between (36) and a sentence like (32) 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.

A further difference in (36) is that the evaluation context of the embedded CP is not the utterance-context but the “context” pertaining to the speech-event denoted by the matrix speech verb; this is an available option since the speech-verb selects a CP with a SpeechActP in the left-periphery (see Sundaresan 2012 for discussion). Thus, 1st-person on *pro* doesn’t denote the speaker of the utterance context, but the speaker invoked by the speech-verb – 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*. Notice, incidentally, that the root CP is evaluated against the utterance-context: thus the matrix subject denoting the male agent of the speech-verb, triggers 3MSG agreement on the matrix verb. The tree-structure for the syntactically relevant part of the derivation – namely the embedded CP – is depicted below, post-Agree and before SpellOut:⁹

⁹The 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) [_{CP} Sai_i [_{CP} taan_{j,*i} ɕej-pp-aan-nnũ]
 Sai ANAPH[NOM]_i win-FUT-3MSG-COMP
 so-nn-aan-nnũ] Sri_j nene-čč-aan.
 say-PST-3MSG-COMP Sri thought-PST-3MSG
 ‘Sri_j thought [_{CP} that Sai_i said [_{CP} that he_{j,*i} 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. 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 subject *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 Hindi; the verbal agreement triggered under the nominative subject 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 Chichewa.

But Tamil nevertheless does have a strategy to avoid an AAE violation in the structures discussed above. The agreement triggered under nominative subject *ta(a)n* is ϕ -covarying. But it is ultimately triggered, not by *ta(a)n* (even though the latter is in the standard agreement-triggering position for this language, namely the structural subject position) but by some other element in the local domain of T. This element, I have argued, is the perspectival *pro* is the specifier of a Perspectival Phrase in the left periphery of the clause containing *ta(a)n*. In the account developed here, the anaphor also participates in ϕ -agreement; but it crucially is not a *source* of ϕ -agreement on T: rather T and the anaphor jointly function as probes for ϕ -valuation. The Tamil strategy for avoiding an AAE violation is thus to ensure that the agreement is triggered by some other element in the local domain of the probing head.

Our original formulation of the AAE, based on the discussion of parametric strategies in Section 2.1 was that in (20), repeated below:

- (39) “Anaphors do not occur in syntactic positions construed with covarying ϕ -morphology.”

The Tamil data investigated here suggests that this must be modified as in (40) below:

- (40) **Anaphor Agreement Effect (updated):** Anaphors typically do not occur in syntactic positions construed with covarying ϕ -morphology. If an anaphor *does* occur in this position, there must be some other element in the local domain that can instead serve as the source of agreement, both for the verb and the anaphor.

5.1. How rare is the Tamil strategy?

A valid question to ask, at this juncture, is how unique this strategy is crosslinguistically and, relatedly, what about Tamil allows it to “get away” with it.

The answer is that it may not actually be such a rare strategy as it seems. For instance, the Niger Congo language Donna Sɔ 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 [_{CP} inyemɛ jɛmbɔ paza bolum] miñ tagi.
 Oumar [ANAPH[SBJ] sack.DEF drop left.1SG] 1SG.OBJ informed
 ‘Oumar_i told me [_{CP} that he_{i,*j} had left without the sack].’

In (41), we have an anaphoric subject – seemingly occurring in ϕ -covarying subject position. The agreement triggered on the verb under this anaphor is 1SG. Notably, the minimal CP containing the anaphor is a speech complement. 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 also corefers with the antecedent *Oumar*. Of course, further research needs to be undertaken into the anaphoric and agreement systems in Donna Sɔ to see to what extent such an analysis would be viable for this language. But the striking resemblance to Tamil structures like (30) above is suggestive.

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_i [_{CP} *pro*_i bät'am bəzu səra ə-sär-allähu]
 professor *pro* very much work 1SG-work.IMP-AUX.1SG
 alä.
 say.PRF.3SG.MASC
 'The professor_i said [_{CP} that he_i works very hard].'

But, of course, 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 the 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 *pro* higher up in the clause. Indeed, there seems to be independent evidence to support the latter option: 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.

Further research into the agreement and anaphora patterns of these and other languages must be done before anything more definitive can be said. What we can perhaps already say is 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 another potential (non-anaphoric) candidate in the local domain which could trigger agreement instead of the anaphor. In Tamil, the presence of this candidate was seen to be 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 has to be set up such that, when the DP argument in agreement-triggering position

is itself unable to trigger agreement, local probing continues on until the next available candidate is found rather than surfacing as an invariant default form or crashing (the latter of which, of course, Preminger 2014 independently argues against). It is unclear at this juncture what independent grammatical factors regulate this choice.

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 anaphor *ta(a)n*, when the latter appears with nominative case in agreement-triggering subject position. In the process, I have argued that this agreement, which looks like standard ϕ -covarying agreement, is nevertheless special and is special because the subject, the standard source of agreement in Tamil, is an anaphor. Specifically, the agreement is triggered 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: rather, it is in this sense just like the T head in its clause, probing to get its ϕ -features valued. The broader crosslinguistic implication of this is that the AAE, namely the generalization that anaphors cannot trigger ϕ -covarying agreement, 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.

We have so far said nothing about the theoretical motivations behind the AAE. I.e. *why* can an anaphor not trigger agreement? Why do languages do to such extents to avoid a situation where an anaphor would be in a position to do so? A plausible answer may simply be that anaphors don't have the (valued) ϕ -features required to trigger agreement. Indeed, a popular view in the literature claims that this lack of some or more ϕ -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), *pro*-forms that are born with a fully unvalued set of ϕ -features. They would thus be more like the functional heads T/ ν that probe to get their ϕ -features valued, than like full-fledged nominals (a position reminiscent of earlier proposals like that in Borer 1989). A more conservative view would be to say that anaphors lack

a (potentially proper) subset of ϕ -features. In this case, however, we would additionally have to posit that the Agree mechanism between the anaphor and a probing head does not accommodate partial valuation of ϕ -features on the probe.

Regardless of which position we take, a ϕ -deficiency account of the AAE presupposes that the Agree mechanism for ϕ -features can distinguish between inherent valued features and inherited valued ϕ -features on a DP. I.e. the anaphor should be unable to value the ϕ -features on T/v even after it has potentially inherited these ϕ -features from another DP (either its antecedent or some other local entity, like the *pro* element motivated here). This means that either the probing head can distinguish between inherited and inherent feature, or the T head gets its features valued at the same time as (this is the assumption of the current proposal for Tamil, for instance) or before the anaphoric DP inherits its own ϕ -features.

However, an account of the AAE in terms of ϕ -deficiency alone is independently problematic, a main concern being that it is too simple. The simple fact is that anaphors in the world's languages do not seem to be created equal. Based on the ϕ -featural restrictions on potential antecedence, anaphors seem to have different ϕ -featural specifications. Some anaphors seem to lack all ϕ -features, thus can take antecedents with any combination of ϕ -features: the Chinese anaphor *ziji* is an example (Huang and Liu 2001). Yet others seem to already have some ϕ -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 ϕ -features whatsoever. Heinat (2008), for instance, discusses examples from San Lucas Quiavini 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):¹⁰

(43) **San Lucas Quiavini Zapotec:**

R-ralloh Gyè'ihlly_i [_{CP} r-yu'làà'z Lia Paamm Gyè'ihlly_i].
 HAB-think Mike HAB-like F Pam Mike
 'Mike thinks [_{CP} Pam likes Mike_{i,*j}].' (literal)

¹⁰Crucially, 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!"

If we wanted to maintain the ϕ -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 ϕ -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 also count as a potential argument in favor of the ϕ -deficiency account. Clearly, further research needs to be done.

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.e. why does one language (e.g. Icelandic, English, or German) prevent anaphors in agreement-triggering positions altogether whereas another language allows it under certain conditions? Of those that allow it, why does one accommodate an AAE violation via a default agreement strategy whereas another does so via a protection strategy, while yet another uses a special anaphoric form? How does the choice of subject vs. object agreement interact, if at all, with the AAE strategy chosen? For instance, the special anaphoric agreement (discussed here for Swahili and Chichewa) has been observed with object-agreement but not with subject-agreement languages. If this is indeed a restriction, what conditions it? These are also intriguing questions which cannot be answered given our current state of knowledge and merit further research.

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