

## **Cleft Constructions in Tamil and Anti-Agreement**

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### *Abstract*

Anti-agreement (AA, Ouhalla 1993 and since) is usually characterized as involving phi-agreement with T and A-to-A' movement. In this paper, I discuss Tamil AA which involves a nominalizing N and A'-to-A'- movement. Based on this and other data, I then argue that an adequate AA theory needs to be able to make reference to specific phi-probing heads. I evaluate current theories of AA paying special attention to Baier (2017b, 2017c)'s morphological account of AA. I propose that this theory requires morphology to have information that the syntactic component does not have even in a feature-sharing approach to AGREE (Frampton & Gutmann 2000). As such I argue that AA is decided in the syntax and occurs when a head fails to copy any of the features of a potential goal including any phi-features that may be needed for valuation. I formalize this account in OT, following Erlewine (2016) and show how it can be extended to account for what Baier (2017c) calls partial AA.



instance of AA to be one in which a phi-agreement triggering XP on a lower head is successfully probed for A'-features by a higher head.<sup>4</sup>

In this paper, the main objective is to show that Tamil (Dravidian) exhibits AA in an atypical context. Specifically, I discuss the copular constructions in (3).

- (3) a. [ \_\_\_    Ma:la-vɛ    pa:-t̪ t̪-əṽɛ̃ ]            Ba:l̃ɛ̃  
          Mala-acc    see-PAST-3sM            Balan  
          'The one that saw Mala is Balan.'
- b. [ \_\_\_    Ma:la-vɛ    pa:-t̪ t̪-əɖɪɪ ]            Ba:l̃ɛ̃  
          Mala-acc    see-PAST-3sN            Balan  
          'The one that saw Mala is Balan.'

These are not exotic constructions to those familiar with Dravidian languages and have been discussed elsewhere (Sarma 1999, Jayaseelan 2001, Bhattacharya & Devi 2004, Selvanathan 2016 a.o.). (3a) is usually considered to be similar to an English pseudo-cleft which contains a free relative, and (3b) is considered to be equivalent to a cleft. However, one aspect of these constructions, to my knowledge, has not been addressed. This pertains to the verbal morphology we see in this constructions. At a descriptive level, the verbal morphology in the so-called 'free relative' in (3a) tracks the phi-features of the pivot but the corresponding morpheme in the cleft in (3b) must be in a default neuter form. This alternation has not been addressed. In this paper, I argue that this alternation is an AA effect. Specifically, I argue that these verbal suffixes are different spell out forms of a nominalizing N that probes for phi- and A'-features. In (3a), phi-agreement is spelled out but in (3b), phi-agreement is obviated. This pattern of phi-agreement obviation will be argued to have the same source as AA cross-linguistically.

The other objective of this paper is propose an analysis of AA. As part of this endeavor, I first argue that the right analysis of AA is one which can make reference to specific probes within a single language. This claim, first made by Baier (2017b), is supported by the Tamil facts. I then evaluate current theories of AA from a variety of sources (Ouhalla 1993, Richards 2001, Cheng 2006, Schneider-Zioga 2007, Baker 2008, Diercks 2010, and Erlewine 2016, among others) and argue that Baier (2017b)'s morphological account of AA is one such candidate. However, I argue that this theory has a serious problem: it requires the morphological component to have information about the valuation procedures that features are involved in. This is information that even the syntactic component arguably does not have even in a feature sharing model (eg. Pesetsky & Torrego 2007). I, thus, propose a syntactic alternative of AA. Unlike Baier (2017b), who proposes that features are copied onto a probe in the syntactic component and then deleted in the morphological component, I propose that these features are not copied onto the probe in the first place. I then implement the analysis in an Optimality

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<sup>4</sup> There are cases in which AA is seen even when there is no apparent A'-movement. This is seen for example with negation in Ibibio which triggers the same AA marker on T as *wh-in situ* (Baker 2008) and Lubukusu, which has been argued to exhibit AA even in raising to subject constructions (Diercks 2010). In this paper, I primarily deal with goals which are targeted by an A'-probe, following the general strategy in the literature, although I will make some remarks about these constructions in the paper.

Theoretic (OT, Prince & Smolensky 1993) framework following Erlewine (2016) but one which crucially differs in the identity of the key constraint that results in AA.

The outline of this paper is as follows. In section 2, I discuss the Tamil data in detail, where I aim to show that a nominalizing N shows phi-agreement alternation. In section 3, I argue why this alternation should be analyzed as an instance of AA. Here, I also consider alternative non-AA characterizations of the Tamil facts and rule them out. In section 4, I discuss a major approach to AA in light of the Tamil data and argue, following Baier (2017b), that AA is a property of specific phi-agreeing probes. In section 5, I discuss Baier (2017b)'s IMPOVERISHMENT account and show that it requires too much of the morphology. I propose what I call COPY-FAILURE which is fully based in the syntax. I also show how this analysis can be extended to partial AA. I, then, conclude.

## 2. Agreement and its obviation in Tamil clefts

I first describe the basic Tamil clause and its agreement patterns before moving to construction which shows the alternation between full phi-agreement and default agreement.

### 2.1 The basic Tamil clause structure

Tamil (Dravidian) is an SOV language with nominative-accusative alignment. Subject agreement is obligatory in verbs.<sup>5</sup> There is no object agreement in Tamil.

- (4) a. Ba:lẽ Ma:la-vɛ pa:-t̪t̪-ã:  
 Balan Mala-ACC see-PAST-3sM  
 'Balan saw Mala.'  
 b. Ma:la Ba:lɛ-nɛ pa:t̪t̪-a:  
 Mala Balan-ACC saw-PAST-3sF  
 'Mala saw Balan.'

(4a) shows a transitive clause with a masculine subject with the corresponding agreement. (4b) shows feminine agreement with a feminine subject. The following shows the paradigm of verb agreement morphology for the common subject types.

1 <sup>st</sup>		2 <sup>nd</sup>			3 <sup>rd</sup>
Sg	ẽ:	Sg	ɛ	Masc. sg	ã:
Pl	õ:	Pl	i:ŋgɛ	Fem. sg	a:
				Pl	a:ŋgɛ

Table 1 Paradigm of Agreement Morphology on Verbs<sup>6</sup>

<sup>5</sup> Except for dative subjects (of the psych verb class) which triggers default agreement (Asher 1981: 105).

<sup>6</sup> The nasalization of vowels in these agreement markers is due to nasal assimilation and deletion.

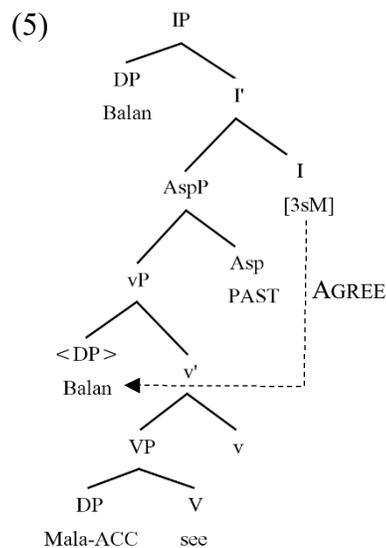
- a) Ba:lẽ Ma:la-vɛ pa:-t̪t̪-a:n-aa  
 Balan Mala-ACC see-PAST-3sM-Q  
 'Did Balan see Mala?'

3 <sup>rd</sup> , Neuter		
Sg.	Past	icci
	Present	uɖu
	Future	õ:
Pl	Past	icciŋɛ
	Present	uɖuŋɛ
	Future	õ:

Table 2 Neuter Agreement with tense information

Table 1 shows the non-neuter forms. Gender agreement is seen only with 3<sup>rd</sup> person singular subjects.<sup>7</sup> The neuter forms seen in Table 2 have singular-plural distinctions as well but are different from the non-neuter forms in that the neuter forms also encode the tense of the clause.<sup>8</sup>

I follow the general literature on the Dravidian clause in assuming that tense information is represented on an Aspectual head and that the presence of agreement is what determines whether a clause is finite (Steever 1988, Sridhar 1990, Amritavali & Jayaseelan 2005).<sup>9</sup> Thus, the structure of (4a) looks like the following.



Adding the final Q marker to (4) makes the sentence a yes-no question. In this case, notice that the agreement marker on the verb is not a nasalized long vowel but rather a long vowel with [n].

<sup>7</sup> Tamil also has honorific agreement which are essentially the 2<sup>nd</sup> person plural and 3<sup>rd</sup> person plural forms.

<sup>8</sup> These are known as cumulative affixes where more than one meaning is found on the affixal form (Moravcsik 2013). In this case, it is neuter agreement and aspect.

<sup>9</sup> One piece of evidence for this comes from the fact that in serial verb constructions, aspectual information is retained but the agreement is lost. The following is adapted from Jayaseelan (2014: 193).

- a) avẽ                      ma:ŋga:-ve              par-icci                      sa:p-t-ã:  
 PRN.3sM                  mango-ACC              pluck-PERF              eat-PAST-3sM  
 'He plucked the mango and ate it.'

The embedded verb *pari* 'pluck' still retains perfective aspect but cannot show subject agreement.

The direct object is the complement of the verb. The external argument is merged in Spec, vP. An aspectual head dominates vP and the aspectual head is dominated by an I(nflectional)P. The head, I, probes the external argument which results in 3<sup>rd</sup> person, singular, masculine agreement.<sup>10</sup> Although I show that the external argument moves to Spec, IP (perhaps because of the EPP) in (5), the presence of this movement step is not a crucial component of the analysis. I assume an AGREE based approach to agreement (Chomsky 2000, 2001). We will now see the constructions under investigation.

## 2.2 The cleft constructions

### 2.2.1 Introducing the pattern of agreement

The relevant constructions are produced below and most of the data and preliminary analysis is adapted from Selvanathan (2016).

- (6) a. [Ma:la-vε      pa:-t̪ t̪-əɖu]      Ba:lẽ̃  
Mala-acc      see-PAST-3sN      Balan  
'The one that saw Mala is Balan.'
- b. [Ma:la-vε      pa:-t̪ t̪-əvẽ̃]      Ba:lẽ̃  
Mala-acc      see-PAST-3sM      Balan  
'The one that saw Mala is Balan.'

There are a number of differences between these constructions and a canonical SOV clause. One obvious difference is the word order. Unlike an SOV clause where the verb is strictly final, in these clauses, the verb is not final. This is not a surprise when we consider that these constructions are copular clauses and semantically analogous to the indicated English translations.

- (7) [Ma:la-vε      pa:-t̪ t̪{-əɖu/-əvẽ̃}]      Ba:lẽ̃-**na:**      **iruuk-5:**  
Mala-acc      see-PAST-3sN/-3sM      Balan-AA      **be.INF-3sN**  
'The one that saw Mala is Balan.'

(7) shows the clauses in (6) but this time with overt copula morphology shown in bold-face.<sup>11</sup>

Another important difference between these constructions and canonical SOV lies in the verbal morphology. It no longer follows the paradigm in Tables 1 and 2 but is instead similar to the 3<sup>rd</sup> person pronoun paradigm shown below.

<sup>10</sup> I have used IP as a general label for the head that actually realizes agreement morphology. See Jayaseelan (2014) who argues that this I is actually a Mood head.

<sup>11</sup> The morpheme glossed as AA is not part of the copula verb but shows up only when the copula verb is overt. Apart from copular clauses, these also occur as an adverbializer. These, then, have the distribution of what den Dikken (2006) calls a RELATOR particle.

3 <sup>rd</sup>		
Sg	Masc	avẽ
Sg	Fem	avε
Pl		avəŋge
Neut		adu

Table 3 3<sup>rd</sup> person pronoun forms in Tamil

The following sentences illustrates the difference in form between pronouns and the agreement form in canonical clauses.

- (8) a. avẽ                      tu:ŋgu-n-ã:  
          PRN.3sM              sleep-PAST-3sM  
          ‘He slept.’
- b. avε                        tu:ŋgu-n-a:  
          PRN.3sF                sleep-PAST-3sF  
          ‘She slept.’
- c. avəŋge                    tu:ŋgu-n-a:ŋge  
          PRN.3pl                sleep-PAST-3pl  
          ‘They slept.’
- d. adu                        tu:ŋgu-nicci  
          PRN.3sN                sleep-PAST.3sN  
          ‘It slept.’

(8) shows the pronouns as subjects with the corresponding agreement on the verb. It is clear that the verbal morphology we see in (6) is more like pronouns than the verbal agreement in canonical clauses. In addition, the verbal morphology in the constructions in (6) appear to track the phi-features of the pivot or shows up in a default invariant form. Thus, with a masculine singular pivot *Balan*, the verbal morphology can either be the one that looks like the masculine, singular pronoun or the neuter pronoun.<sup>12</sup> Crucially, the feminine or plural pronoun forms are not allowed.

- (9) \*[Ma:la-vε              pa:-t̪t̪{-avε/ -avəŋge}]              Ba:lẽ  
       Mala-acc                see-PAST-3sF/-3pl              Balan  
       ‘The one that saw Mala is Balan.’

The following example shows what happens with a feminine pivot, *Mala*.

- (10) a. [Ba:lə-nε              pa:-t̪t̪{-ədu/ əvε}]              Ma:la  
          Balan-ACC              see-PAST-3sN/ -3sF              Mala  
          ‘The one that saw Balan is Mala.’
- b. \*[Ba:lə-nε              pa:-t̪t̪{-avẽ/ -avəŋge}]              Ma:la  
          Balan-ACC              see-PAST-3sM/ - 3pl              Mala  
          For: ‘The one that saw Balan is Mala.’

<sup>12</sup> The pivot refers to the post-verbal phrase in these copular clauses.

(10) shows that only the feminine, or the neuter, singular forms are possible on the verb. Plural post-verbal elements give rise to the same alternation.

- (11) a. [Ba:lə-nɛ pa:-t̪t̪{-əɖu/ əvɛŋgɛ}] andə pilleiŋgɛ  
 Balan-ACC see-PAST-3sN/ -3pl those children  
 'The ones that saw Balan are those children.'
- b. \*[Ba:lə-nɛ pa:-t̪t̪{-aṽɛ/ -avɛ}] andə pilleiŋgɛ  
 Balan-ACC see-PAST-3sM/ -3sF those children  
 For: 'The ones that saw Balan are those children.'

(11) shows that only the plural or neuter forms are possible.<sup>13</sup>

The generalization about the verbal morphology in these constructions is as follows: it must either track the phi-features of the pivot or be in an invariant neuter form, which I take to be a default form. I will from now use the terms 'Agreeing cleft' and 'Default agreement cleft' to refer to the respective constructions. Before we see why this alternation should be analyzed as an AA effect, I show that these verbal suffixes should be analyzed as reflexes of agreement and not incorporated/ cliticized pronouns.

### 2.2.2 Agreement morphology or cliticization/ incorporation?

Given that the verbal morphology in these clefts look quite similar to the pronoun forms, one may suspect that these constructions involve cliticization/ incorporation of a pronoun form rather than agreement. However, analyzing the cleft verbal morphology as incorporated pronouns or clitics is not correct.

First consider how these clefts could be derived from pronoun incorporation. In such an analysis, some phrase in the clause incorporates with the aspectual head as a D head.<sup>14</sup> Such a derivation is possible in an m-merger analysis (Matushansky 2006, Kramer 2014) where some DP is reduced to D and adjoined to the Aspect head upon movement to Spec, AspP. Cliticization, on the other hand, could be derived from a structure like (12).

- (12) [Ma:la-ve pa:-t̪t̪-ə aṽɛi] Ba:l̃ɛ  
 Mala-ACC see-PAST-REL PRN.3sM Balan  
 Lit: 'Somu<sub>i</sub> came. He<sub>i</sub> that saw Mala is not Balan.'

In (12), the masculine pronoun occurs separate from the verb which has the relative clause marker. Apart from this difference, in all other aspects, (12) looks the same as the agreeing cleft in (6b). Under the cliticization analysis, the agreeing cleft could be derived

<sup>13</sup> To complete the paradigm, if the pivot has neuter features, only *-adu* can occur on the verb. In this case, I assume that there is also an agreeing and a non-agreeing version which are homophonous.

<sup>14</sup> We could then say that the incorporated D will spell out with full agreement or a neuter form which by itself would be an interesting puzzle.

by truncating the pronoun and spelling out the shortened form under adjacency with the relative marker.<sup>15</sup>

While neither analysis of the verbal morphology in clefts will be shown to be particularly satisfactory, a phonological cliticization analysis is more plausible than an incorporation one. The main reason why is that an incorporated phrase does not usually determine the label of the structure it incorporates into but that is what we would need to say for Tamil.

- (13) [Ma:la-vɛ      pa:-t̪ t̪-əṽɛ̃]              Ba:l̃ɛ̃  
Mala-acc          see-PAST-3sM              Balan  
'The one that saw Mala is Balan.'

Consider (13), an agreeing cleft. We can see that the subject phrase behaves like a nominal by plugging this phrase into other contexts.

- (14) a. Somu [Ma:la-vɛ      pa:-t̪ t̪-əṽɛ̃n]-e              adi-c-ã :  
Somu Mala-acc          see-PAST-3sM-ACC beat-PAST-3sM  
'Somu beat the one that saw Mala.'
- b. [Ma:la-vɛ      pa:-t̪ t̪-əṽɛ̃]              va-nd-ã :  
Mala-ACC          see-PAST-3sM              come-PAST-3sM  
'The one that saw Mala came.'

In (14a), this phrase occurs as a direct object and have accusative case marking. In (14b), this phrase occurs as the subject of a regular transitive clause. Given that regular SOV clauses do not have this distribution, it is clear that the verbal morphology in these clefts has a nominalizing function. If the verbal morphology in an agreeing cleft is indeed an incorporated pronoun, we need the incorporated pronoun to determine the label of the whole phrase, i.e. to change the phrase from one that is verbal (up to the aspectual head) to one that is nominal. As far as I can tell, pronoun incorporation does not do this. Thus, the more plausible non-agreement analysis of the agreeing cleft is one in which there is phonological cliticization where an agreeing cleft is a cliticized variant of (12).<sup>16</sup>

However, even this analysis is unsatisfactory. I use the general line of argument from Bresnan and Mchombo (1987) to show this. Bresnan & Mchombo (1987) show that object markers in Chichewa have pronoun-like properties, namely in being able to refer to a discourse antecedent. Thus, they propose that the Chichewa object markers is a pronoun. The following data is from Bresnan and Mchombo (1987: 747).

<sup>15</sup> There is no potential uncliticized variant of the default agreement cleft. If these verbal morphology are a result of cliticization, we are then forced to say that the default agreement cleft is derived differently from the agreeing cleft.

<sup>16</sup> In the agreement analysis I am pursuing, the nominal nature of these phrases comes from the fact that the head that exhibits agreement in these constructions is a nominalizing head.

- (15) *Fisi anagula chipewa<sub>i</sub> ku San Francisco dzulo.*  
 hyena bought hat(7) in S.F. yesterday
- Madzulo anapita ku San Jose kumene*  
 evening he-went to S.J. where  
*a-na-ka-chi<sub>i</sub>-gulitsa kwa mlonda wa a meya*  
 he-PAST-go-it(7)-sell to guard of hon. mayor

'The hyena bought a hat in San Francisco yesterday. In the evening he went to San Jose, where he went to sell it to the mayor's guard.'

The first sentence in (15) provides a discourse antecedent, *chipewa* 'hat', of class 7. In the second sentence, the verb contains an object marker. Crucially, this object marker can refer to the same element of class 7 in the preceding sentence. Based on this, Bresnan and Mchombo (1987) argue that the object marker in Chichewa should be analyzed as an incorporated pronoun.

Under the assumption that pronoun clitics, too, retain their pronoun-like properties, we can now see that the verbal morphology in the Tamil clefts cannot refer to a discourse antecedent. First consider the following.

- (16) a. [Ma:la-vɛ pa:-t̪ t̪-əɖu] Ba:lẽ ille  
 Mala-acc see-PAST-3sN Balan NEG  
 'The one that saw Mala is not Balan.'
- b. [Ma:la-vɛ pa:-t̪ t̪-əvẽ] Ba:lẽ ille  
 Mala-acc see-PAST-3sM Balan NEG  
 'The one that saw Mala is not Balan.'

(16) shows the agreeing and default agreement clefts with negation. The reason why I introduce these negations will become apparent soon.

- (17) a. So:mu<sub>i</sub> va-nd-ã :.  
 Somu come-PAST-3sM  
 'Somu came.'  
 #[Ma:la-vɛ pa:-t̪ t̪-əɖu<sub>i</sub>] Ba:lẽ ille  
 Mala-acc see-PAST-3sN Balan NEG  
 'The one that saw Mala is not Balan.'
- b. So:mu<sub>i</sub> va-nd-ã :.  
 Somu come-PAST-3sM  
 'Somu came.'  
 #[Ma:la-vɛ pa:-t̪ t̪-əvẽ<sub>i</sub>] Ba:lẽ ille  
 Mala-acc see-PAST-3sM Balan NEG  
 'The one that saw Mala is not Balan.'

(17a) shows the negated sentences preceded by a sentence that introduces *Somu* a masculine, singular subject. However, neither agreement form can refer to this *Somu* even though negation of the copula clause allows this possibility.<sup>17</sup> If these verbal morphology are just cliticized pronouns, they should still be able to pick up a discourse antecedent, like we see in Chichewa.<sup>18</sup> In contrast, we can see below that the pronoun in (12), the potential uncliticized variant, can pick up a discourse antecedent.

- (18) So:mu<sub>i</sub>            va-nd-ã :.  
 Somu                come-PAST-3sM  
 ‘Somu came.’  
 [Ma:la-ve        pa:-t̩t̩-ə            avẽi]            Ba:lẽ            ille  
 Mala-ACC        see-PAST-REL        PRN.3sM        Balan            NEG  
 Lit: ‘Somu<sub>i</sub> came. He<sub>i</sub> that saw Mala is not Balan.’

Based on this contrast, I conclude that the verbal morphology in clefts are not cliticized pronouns either.

While I have focused on the agreeing cleft, one may argue that perhaps the agreeing cleft morphology is agreement whereas the default agreement cleft is something else. However, such an analysis eschews a uniform analysis for the verb morphology in these cleft constructions. I propose that a uniform analysis is preferred given that there is really little reason to treat them differently. In summary, I conclude that the verbal morphology we see in clefts are not incorporated pronouns or cliticized pronouns. If we are to give a uniform analysis for both agreeing and default agreement morphology in clefts, these are best analyzed as exponents of agreement.

### 2.2.3 The basic (preliminary) analysis of the clefts

In this section, I propose the general analysis for the agreeing and default agreement clefts reproduced below.

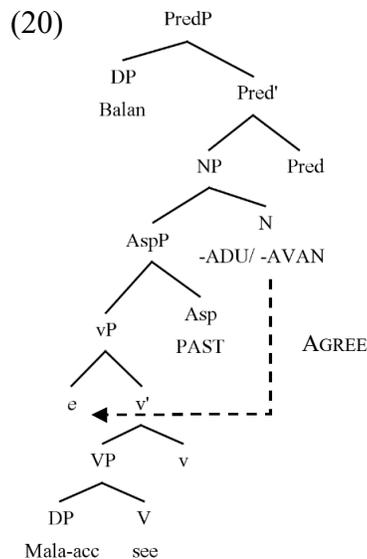
- (19) [Ma:la-ve        pa:-t̩t̩-əḍu/ - avẽi]            Ba:lẽ  
 Mala-acc        see-PAST-3sN/ -3sM            Balan  
 ‘The one that saw Mala is Balan.’

Given that these are copular clauses, I follow Selvanathan (2016), in proposing an inverted predication structure (Moro 1997, Mikkelsen 2004, den Dikken 2006) for these

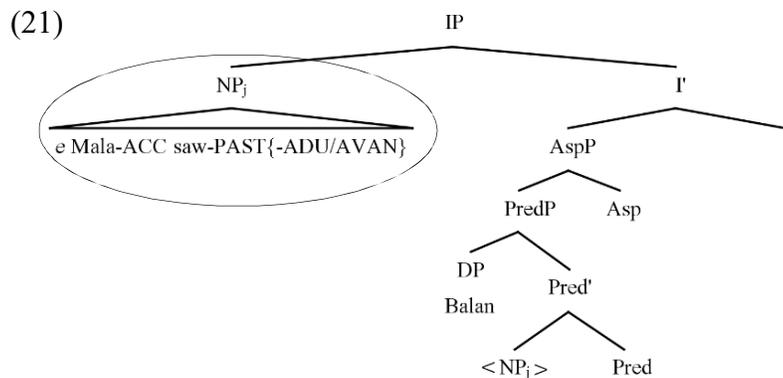
<sup>17</sup> The intended meanings in these sentences are as follows: Consider a situation where the speaker is unclear about what *Somu* looks like but suspects that who he thinks is *Somu* arrived. This individual also saw Mala. However, the speaker knows who *Balan* is. If the coreferential meaning is possible, the speaker is saying that he knows that this individual who might have been *Somu* (but definitely not *Balan*) saw Mala.

<sup>18</sup> Ted Levine (pers. comm) says that incorporation can affect discourse reference roles. For example, in an incorporated compound such as *truck-driver*, *truck* is unable to serve as an antecedent for another pronoun. However, it is also possible that what is being incorporated in *truck-driver* is only the NP portion of *truck* which explains why it cannot be referred to. However, in pronoun incorporation, it is likely the D that is incorporated. If we assume that referentiality is encoded in D (eg. Longobardi 1994), pronoun incorporation should still allow an incorporated pronoun to pick up a discourse antecedent.

clauses whereby the subject phrase is base-generated as a complement of a PredP (Bowers 1993, Baker 2004) and then moved to Spec, IP. The post-verbal phrase *Balan* in (15) is in Spec, PredP.<sup>19</sup> This is shown below. I first show just the PredP portion.



In these clefts, the verbal morphology is agreement, realized on a nominalizing head, shown as N.<sup>20</sup> In the case of the agreeing cleft, this head agrees with the gap in the clause and spells out the phi-features of gap.<sup>21</sup> We will discuss the nature of this gap in more detail shortly. Likewise, in the default agreement cleft, the head probes this gap in the same way, but phi-agreement is obviated. This obviation will be proposed to be an AA effect. Another thing to note is that the pivots of these constructions are in Spec, PredP. Finally, in order to get the right order between the nominalized phrase and pivot, I propose that the nominalized phrase moves to Spec, IP (i.e. predicate inversion).



(21) shows this inversion where the nominalized phrase (circled) moves to Spec, IP. We now have all the ingredients to see why default agreement in clefts is an instance of AA.

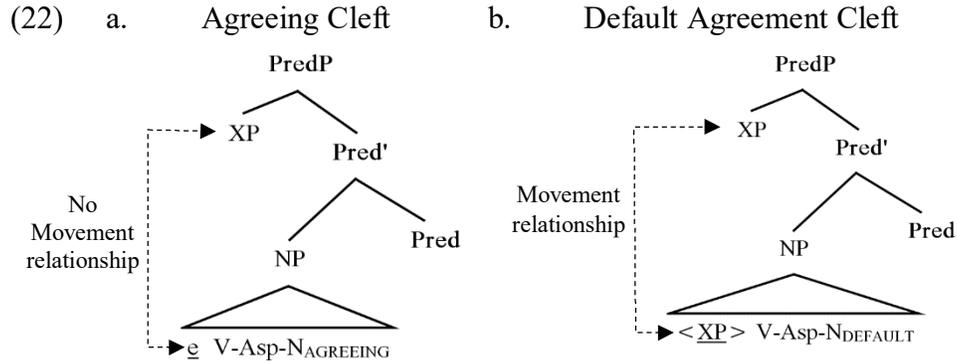
<sup>19</sup> I will slightly revise the derivation of the *-adu* cleft below which doesn't affect the claims made here.

<sup>20</sup> Selvanathan (2016) analyses this as D. The actual identity of this head is ultimately unimportant here.

<sup>21</sup> In this structure, N replaces the regular I head which explains why the normal agreement is supplanted.

### 3 The correlation between movement and default agreement

In this section, I show that the phi-agreement alternation in the Tamil clefts is correlated with movement out of the nominalized NP. In other words, although I have shown the gap in both types of clefts as *e* up to now, the nature of the gaps will be shown to be quite different. The following schemas show this.<sup>22</sup>



(22a) shows the agreeing cleft. In this structure, I propose that the gap in the nominalized clause is a null operator which moves only as high as Spec, NP. The XP that occurs in Spec, PredP is base-generated in this position. (22b) shows the default agreement cleft. Here, I propose that XP is base-generated within the NP but moves out of it to Spec, PredP. In other words, movement out of the NP is correlated with the presence of default agreement. I claim that this is an AA effect wherein default agreement is realized when the phrase targeted by N for agreement is also targeted by a higher probe for A'-features.<sup>23</sup> This is, apart from the specific identities of the projections involved, exactly like the AA configurations elsewhere. In the rest of this section, I justify the derivations in (22).

#### 3.1 Motivating the derivations

I will now provide two pieces of evidence for the derivations in (22), case connectivity and reflexive connectivity. These are modified and expanded from Selvanathan (2016).

##### 3.1.1 Case connectivity

Although all of the clefts we have seen so far have had a subject gap, these clefts can also be constructed with a direct object gap. The following shows this.

- (23) a. [Ba:lẽ \_\_\_ pa:-t̪t̪-əḍu]      Ma:la-\*(vε)  
 Balan      see-PAST-ADU      Mala-acc  
 'The one that Balan saw is Mala.'

<sup>22</sup> From now on, I only show the PredP portion of the structures without showing the inversion of the nominalized phrase to Spec, IP.

<sup>23</sup> From these structures, this higher probe looks like Pred. However, later, I will argue that this higher probe should be a Focus head which is between the matrix I and Pred.

- b. [Ba:lẽ̃ — pa:-t̪t̪-əvɛ] Ma:la-(\*vɛ)  
 Balan see-PAST-AVAL Mala-acc  
 'The one that Balan saw is Mala.'

(23) shows the cleft with a direct object in the nominalized phrase. The putative direct object instead appears post-verbally. As before, N can be in the default agreement form – *adu* or an agreeing form. As expected, the agreeing form tracks the phi features of the gap, which in this case is feminine, singular. In addition, we see another difference between the agreeing and default agreement cleft that was not apparent before. The agreement form of the N head is correlated with realization of accusative case on the pivot. When the default –*adu* form is used (as in (23a)), the pivot must have accusative case. But when the agreeing form is used (as in (23b)), accusative case must be absent. This case asymmetry is explained by the derivations in (22). In default agreement clefts, the pivot is case-marked within the NP and moved out, but in the agreeing clefts, the pivot is base-generated in a position in which it could not have received accusative case, i.e. Spec, PredP. Case connectivity is also seen with dative subjects. Consider (24).

- (24) [Ba:lən-wkkɯ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-ã:  
 Balan-DAT Mala-ACC like-3sN C Somu say-PAST-3sM  
 'Somu said that Balan likes Mala.'

(24) shows an embedded clause with a dative subject which occurs in certain psych verbs.<sup>24</sup> Dative subjects can also be gapped in the Tamil clefts as the following show.

- (25) a. [[\_\_ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-əɟɯ]  
 Mala-ACC like-3sN C Somu say-PAST-3sN  
 Ba:lən-\*(wkkɯ)  
 Balan-DAT  
 'The one that Somu said that likes Mala is Balan.'
- b. [[\_\_ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-əvẽ̃]  
 Mala-ACC like-3sN C Somu say-PAST-3sM  
 Ba:lẽ̃-\*(wkkɯ)  
 Balan-DAT  
 'The one that Somu said that likes Mala is Balan.'

(25a) shows the default agreement cleft and (25b) shows the agreeing cleft.<sup>25</sup> Note that while the pivot in the default agreement cleft must have dative case, the pivot in the agreeing cleft must be bare. This too is another instance of case connectivity difference between the agreeing and default agreement clefts which supports the derivations in (22).

<sup>24</sup> Dative subjects trigger default agreement on the verb. Note that this default agreement follows the verbal paradigm found in canonical clauses (Table 2), not the pronoun paradigm found in clefts (Table 3).

<sup>25</sup> Note that when the gap is in the embedded clauses, the nominalizing N appears only on the matrix verb.

### 3.1.2 Reflexive connectivity<sup>26</sup>

Reflexive connectivity differences between both types of clefts also support the different derivations in (22). First, note that the Tamil reflexive *taan* requires a syntactic binder (Sarma 1999, Sundaesan 2012, Selvanathan 2016).

- (26) [Ba:lən-wkkw<sub>i</sub> ṭan-nε<sub>i/j/</sub>\*<sub>k</sub> pidi-kō̃ nu] Somu<sub>j</sub> co-ṇṇ-ã̃ :  
 Balan-DAT self-ACC like-3sN C Somu say-PAST-3sM  
 ‘Somu<sub>j</sub> said that Balan<sub>i</sub> likes self<sub>i/j</sub>.’

(26) shows the reflexive form in the embedded clause can refer to either the embedded or the matrix subject. Crucially, *taan* does not allow a discourse antecedent.<sup>27</sup> The following shows this.

- (27) [Ba:lən-odε<sub>j</sub> ṭambi-kw<sub>i</sub> ṭan-nε<sub>i/</sub>\*<sub>j/</sub>\*<sub>k</sub> pidi-a:ḍu  
 Balan-GEN brother-DAT self-ACC like-NEG  
 ‘Balan<sub>j</sub>’s brother<sub>i</sub> does not like himself<sub>i/\*j/\*k</sub>.’

(27) shows a subject with an embedded possessor with *taan* as the direct object. In this case, only *Balan’s brother* can be an antecedent for the reflexive. *Balan* is not. This again indicates that reflexive *taan* requires a syntactic binder. With these in mind, consider the following cleft versions of (26) where the embedded object is gapped.

- (28) a. [[Ba:lən-wkkw<sub>i</sub> \_\_\_ pidi-kō̃ nu] Somu<sub>j</sub> co-ṇṇ- **əḍu**]  
 Balan-DAT like-3sN C Somu say-PAST-3sN  
 ṭan-nε<sub>i/j/</sub>\*<sub>k</sub>  
 self-ACC  
 ‘The one that Somu<sub>j</sub> said that Balan<sub>i</sub> likes is self<sub>i/j</sub>.’
- b. \*[[Ba:lən-wkkw<sub>i</sub> \_\_\_ pidi-kō̃ nu] Somu<sub>j</sub> co-ṇṇ- **əvẽ**]  
 Balan-DAT like-3sN C Somu say-PAST-3sM  
 self  
 tã :  
 For: ‘The one that Somu<sub>j</sub> said that Balan<sub>i</sub> likes is self<sub>i/j</sub>.’

In these clefts, the embedded object reflexive appears as the pivot. While the default agreement cleft is possible in (28a) with the same bound readings as in (26), the agreeing cleft in (28b) is not possible at all. This is independent of any interpretation of *taan*. This difference in reflexive connectivity between the agreeing and default agreement cleft also follows from the derivations in (22). If *taan* requires a syntactic binder, then in a copy theory of movement, such binders are only present in (28a), where there is a copy of *taan*

<sup>26</sup> In the literature, reflexive connectivity in copular clauses is often used as a diagnostic of a specificational copular clause (eg. Higgins 1973 and since). However, Selvanathan (2016) uses the Tamil data to show that a failure of reflexive connectivity could arise in a specificational copular clause due to other reasons.

<sup>27</sup> Although Sundaesan (2012) shows that there are certain contexts in which *taan* refers to a discourse referent, even these, according to her, are instances of syntactic binding by a null perspective holder.

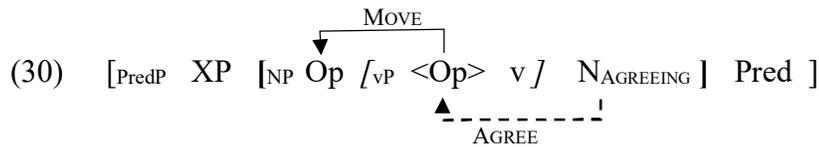
in the position of the gap. However, since there is no copy of the reflexive in the gap in (28b), it will have no syntactic binders and the sentence is ruled out. This predicts that if we were to provide a c-commanding antecedent for a reflexive pivot in an agreeing cleft, the sentence should be grammatical. This is indeed the case.

- (29) [[Ba:lẽ<sub>j</sub> \_\_\_ adi-c-əvẽ] tã<sub>i/\*j</sub> nu] Somu<sub>i</sub> co-ŋŋ-ã:  
 Balan see-PAST-3sM self C Somu say-PAST-3sM  
 'Somu<sub>i</sub> said that the one that Balan beat was self<sub>i</sub>.'

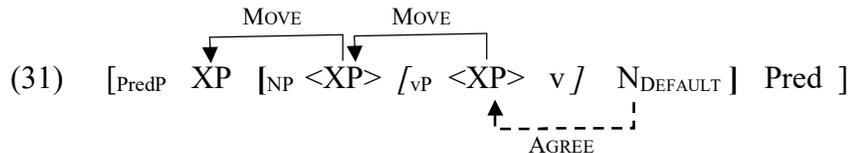
(29) shows an agreeing cleft with a reflexive pivot. This cleft is then embedded under a verb of saying with a matrix subject. This sentence is grammatical in the reading where the matrix subject is the antecedent of the reflexive pivot.

### 3.1.3 Interim Summary

In summary, we have seen that case connectivity and reflexive connectivity differences support the derivations in (22).<sup>28</sup> I show below the proposed derivations for these clefts.



(30) shows the derivation of the agreeing cleft. N agrees with the gap, assumed to be a null operator (following Selvanathan 2016). The null operator moves to Spec, NP. The pivot XP is generated in Spec, PredP. The following shows the default agreement cleft.



Here, again N targets the gap for agreement (i.e. the lowest copy of XP within vP). This XP moves to Spec, NP and then Spec, PredP. The additional movement step from Spec, NP to Spec, PredP indicates that XP is probed by the higher head. This is argued to be an instance of AA because the additional movement step from Spec, NP to Spec, PredP obviates agreement on N much like movement from Spec, TP to Spec, CP obviates phi agreement on T in Berber. Based on this, I propose that the agreeing/ default agreement alternation in Tamil clefts is an AA effect.

### 3.2 What type of movement is involved? (and a slight modification)

So far I have argued that the agreeing/ default form alternation is realized on nominalizer N and correlated with movement. Here, I address what type of movement is involved in these clefts and what type of features N and PRED probes for. I claim that N probes for a phrase that has phi-features *and* an A'-feature. This can be seen in the data we have already discussed.

<sup>28</sup> I direct the reader towards Selvanathan (2016: Chapter 5) for more evidence for the same conclusion.

- (32) a. [Ba:lẽ \_\_\_ pa:-t̪t̪-əvɛ] Ma:la-vɛ  
 Balan see-PAST-3sF Mala-acc  
 'The one that Balan saw is Mala.'
- b. [[\_\_\_ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-əvẽ] Ba:lẽ  
 Mala-ACC like-3sN C Somu say-PAST-3sM Balan  
 'The one that Somu said that likes Mala is Balan.'

(32a) and (32b) show N agreeing with a gap that is a direct object and an embedded subject respectively. The fact that N does not just agree with a gap that is structurally the highest in the AspP indicates that N is probing for phi- and A'-features. This is the case even when N is spelled out with default agreement.

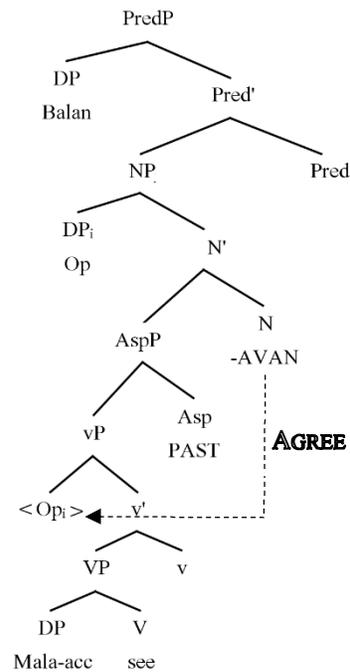
- (33) a. [Ba:lẽ \_\_\_ pa:-t̪t̪-əɖɪu] Ma:la-(\*vɛ)  
 Balan see-PAST-3sN Mala-acc  
 'The one that Balan saw is Mala.'
- b. [[\_\_\_ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-əɖɪu] Ba:lẽ  
 Mala-ACC like-3sN C Somu say-PAST-3sN Balan  
 'The one that Somu said that likes Mala is Balan.'

(33) shows the default agreement counterparts of the agreeing clefts in (32). If N just agreed with the structurally highest argument, we would not expect to see neuter agreement here at all. Thus, what we see in the Tamil clefts is that N shows full phi-agreement with a goal that already has A'-features in the agreeing cleft. AA occurs when this goal is also targeted by a higher head.

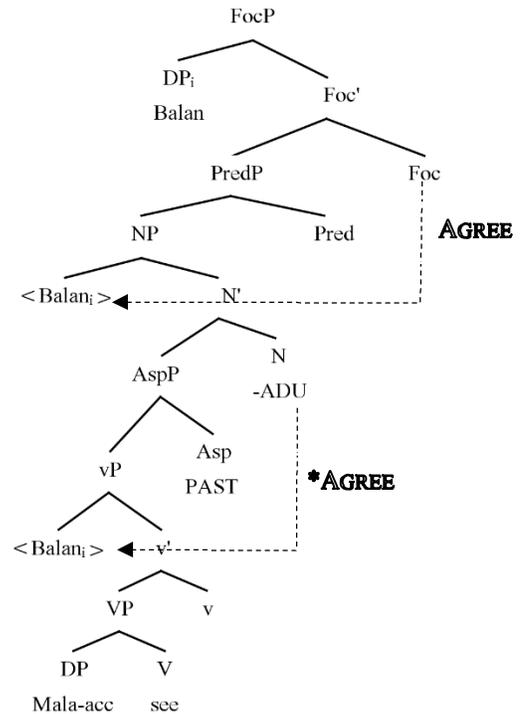
The fact that the gap in a default agreement cleft has A'-features also requires us to revise the claim that the landing site of movement is ultimately Spec, PredP. If XP is A'-moving out of NP, this leads to a contradiction under the common assumption that Spec, PredP is an argument position (eg. Bowers 1993, den Dikken 2006 etc). To resolve this, I will follow Selvanathan (2016) in proposing that the pivot position in a default agreement cleft is actually a low FocP. Such projections have been proposed for other languages (Ndayiragije 1999, Belletti 2001, 2004, van der Wal 2006 a.o). This includes Jayaseelan (2001) for the Malayalam counterpart of the default agreement cleft. With that, the proposed, final structures for the two constructions in (34) are shown below.

- (34) [Ma:la-vɛ pa:-t̪t̪{-əɖɪu/ -əvẽ}] Ba:lẽ  
 Mala-acc see-PAST-3sN/ -3sM Balan  
 'The one that saw Mala is Balan.'

(35) a. Agreeing cleft



b. Default agreement cleft



These derivations are for the clefts in (34). (35a) shows the agreeing cleft. Here, N phi-agrees with a null operator which A'-moves to Spec, NP. The pivot is base-generated in Spec, PredP. (35b) shows the default agreement cleft where agreement with the tail of the chain involving the pivot, *Balan*, fails. *Balan*, then A'-moves to Spec, NP and then A'-moves to Spec, FocP. There is an additional AGREE relation between FOC and *Balan*. The failure of agreement with N in the default agreement cleft is AA. However, the AA seen in Tamil clefts is novel in two aspects: 1) instead of a clausal phi-agreement probe, the head that exhibits AA in Tamil is a nominalizing N, and 2) even the configuration in which full phi-agreement is seen involves a goal with A'-features.

### 3.3 Alternate characterizations

I will now rule out some plausible alternate non-AA ways of explaining the agreeing/default agreement morphology in Tamil clefts.

#### 3.3.1 Cleft vs Pseudo-clefts

As mentioned in the introduction, these cleft constructions are not unfamiliar to those who work in Dravidian languages. What I have been calling a default agreement cleft is normally considered to be a cleft (Sarma 1999, Jayaseelan 2001, 2004, Bhattacharya & Devi 2004 a.o). On the other hand, what I have been calling an agreeing cleft has not received much attention. Sarma (1999: 92) who discusses primarily Tamil data, says that these are “free relatives and not clefts”. Thus, the approach in the literature appears to be to treat the two cleft constructions on par with the following English ones.

- (36) a. It is John that Mary likes. *It-cleft*  
 b. What Mary likes is John. *Pseudo-cleft*

(36a) shows an *it-cleft* whereas (36b) shows a pseudo-cleft with a free relative subject. Even if such a characterization is correct, this does not explain *why* the agreeing verbal morphology form is associated with pseudo-clefts and the default agreement is associated with clefts. In English, the cleft and the pseudo-cleft do not show any such alternation in phi-agreement and as such there is nothing to explain from an AA perspective. However, in Tamil, there is such an alternation. My objective is to provide an analysis of this alternation. After all, one could easily imagine a distribution of this morphology in exactly the opposite direction than the one present in Tamil.<sup>29</sup>

### 3.3.2 Null operator vs Unpronounced copy

Looking at (35), we can see that in an agreeing cleft, N agrees with a null operator, whereas in a default agreement cleft, N agrees (or fails to agree) with an unpronounced copy. Perhaps there is a general rule prohibiting an unpronounced copy from triggering agreement in Tamil.<sup>30</sup> However, this alternative can also be ruled out. The evidence comes from long-distance clefts.

- (37) [[Ba:lẽ Ma:la-vε pa:-t̪t̪-ã: nu] So:mu co-ηη-ã:]  
 Balan Mala-ACC see-PERF-3sM C Somu say-PERF-3sM  
 ‘Somu said that Balan saw Mala.’

(37) shows an embedded clause with a subject that triggers agreement on the embedded verb. It is possible to form both types of clefts with an embedded subject gap.

- (38) a. [[\_\_ Ma:la-vε pa:-t̪t̪-ã: nu] So:mu co-ηη-ədu] Ba:lẽ  
 Mala-ACC see-PERF-3sM C Somu say-PERF-3sN Balan  
 ‘The one that Somu said saw Mala is Balan.’  
 b. [[\_\_ Ma:la-vε pa:-t̪t̪-ã: nu] So:mu co-ηη-əvẽ] Ba:lẽ  
 Mala-ACC see-PERF-3sM C Somu say-PERF-3sM Balan  
 ‘The one that Somu said saw Mala is Balan.’

Of particular importance is (38a), the default agreement cleft. In this cleft, *Balan* is base generated in the lowest Spec, vP and moves cyclically all the way to Spec, FocP. What this cleft shows is that an unpronounced copy of *Balan* in the embedded clause is perfectly capable of triggering agreement on the embedded I. Default neuter agreement is not allowed here. If unpronounced copies are incapable of triggering agreement in Tamil,

<sup>29</sup> Michael Erlewine observes (p.c) that a language where a copy of the pivot in the nominalized phrase triggers phi-agreement on N and a null operator triggers default agreement on N is logically plausible.

<sup>30</sup> This would be similar to Baker (2008)’s account of Ibibio where he argues that phi-features can be deleted on certain copies of a movement chain. If phi-features on an unpronounced copy is deleted, then we expect to see default agreement on a verb.

we do not expect to see phi-agreement in the lower clause.<sup>31</sup> Thus, I conclude that any putative difference between null operators and unpronounced copies does not allow us to account for the difference between an agreeing cleft and a default agreement cleft.

### 3.3.3 Morphological case analysis

Bobaljik (2008) argues that Icelandic, for example, only exhibits agreement with a bare nominal and never with any nominal that has morphological case.<sup>32</sup> A similar morphological case analysis of agreement can be shown to provide a simple explanation for the case connectivity facts in Tamil clefts, reproduced below.<sup>33</sup>

- (39) a. [Ba:lẽ̃ \_\_\_ pa:-t̪t̪-əɖu] Ma:la-\*(vɛ)  
 Balan see-PAST-ADU Mala-acc  
 'The one that Balan saw is Mala.'
- b. [Ba:lẽ̃ \_\_\_ pa:-t̪t̪-əvɛ] Ma:la-\*(vɛ)  
 Balan see-PAST-AVAL Mala-acc  
 'The one that Balan saw is Mala.'
- (40) a. [[\_\_\_ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-əɖu]  
 Mala-ACC like-3sN C Somu say-PAST-3sN  
 Ba:lən-\*(uɔkku)  
 Balan-DAT  
 'The one that Somu said that likes Mala is Balan.'
- b. [[\_\_\_ Ma:la:-vɛ pidi-kõ nu] Somu co-ŋŋ-əvẽ̃]  
 Mala-ACC like-3sN C Somu say-PAST-3sM  
 Ba:lẽ̃-\*(uɔkku)  
 Balan-DAT  
 'The one that Somu said that likes Mala is Balan.'

(39) and (40) show that default agreement is spelled out when the phrase in the pivot has case morphology. Suppose N only phi-agrees with phrases that are morphologically unmarked for case. This would mean that the accusative and dative marked phrases would not be able to trigger agreement on N. On the other hand, a null operator by its very nature is morphologically unmarked for case and can trigger agreement. However, a morphological case marking analysis explains little else apart from case connectivity. In fact, such an analysis can be ruled out simply by looking at the original cleft sentences we started out with reproduced below.

<sup>31</sup> We will revisit this data later when I argue that in Tamil, N is a probe that exhibits AA but I is not.

<sup>32</sup> See Legate (2008) who argues that such data do not necessitate Bobaljik's conclusion that agreement is a morphological process. For our purposes, what matters is that, whatever the source, there are languages that appear to be sensitive to the case marking on a nominal that enters into an agreement relationship.

<sup>33</sup> Tamil could be a morphological case agreement language. In DAT-ACC and INST-ACC sentences, default agreement is spelled out, presumably because there is no unmarked nominal. In DAT-NOM, the verb shows agreement with the NOM argument. In NOM-ACC, it is the NOM argument that agrees.

- (41) [Ma:la-ve      pa:-t̪t̪{-əḍḍu/ -əvẽ}]      Ba:lẽ  
Mala-acc      see-PAST-3sN/ -3sM      Balan  
'The one that saw Mala is Balan.'

If morphological case is what determines the spell out form of N, then such an analysis predicts that a default agreement cleft with a case unmarked pivot should not be possible given that such a pivot will always trigger agreement on N. (41) with default agreement shows that this is obviously wrong. In addition, (40b) shows that a null operator that is morphologically unmarked for case still triggers neuter agreement on the embedded verb which brings into question if morphological case is a determiner of agreement at all in Tamil. Thus, despite its success in explaining case connectivity, we can safely reject the morphological case analysis of N's alternation.

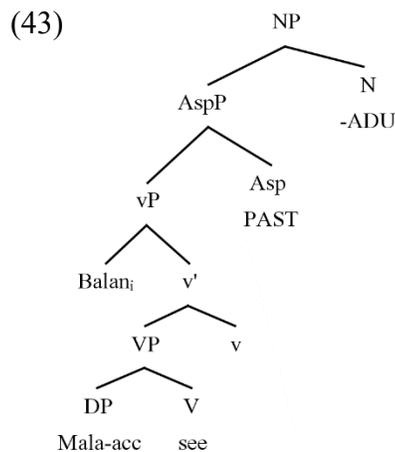
### 3.3.4 Derived from gapless nominalized clauses

Apart from gapped nominalized phrases (i.e. the subjects in agreeing and default agreement clefts), Tamil also has a gapless nominalized clause. This is shown below.

- (42) [Ba:lẽ Ma:la-ve      pa:-t̪t̪-əḍḍu]      a:ciriyə-ma:      iruk-uḍu  
Balan Mala-ACC      see-PAST-3sN      surprise-AA      be-PAST.3sN  
'The news that Balan saw Mala was surprising.'

(42) contains such a gapless nominalized clause as the subject of the clause and notably such nominalized clauses always have neuter agreement on the verb, despite the fact that there is no apparent A'-movement out of such clauses. If default agreement clefts are derived from these types of nominalized gapless propositions, then the presence of default agreement with certain clefts would not be AA after all.

Further investigation indicates that this cannot be correct. First, I will assume that such gapless nominal clauses also have the same general structure as agreeing clefts.

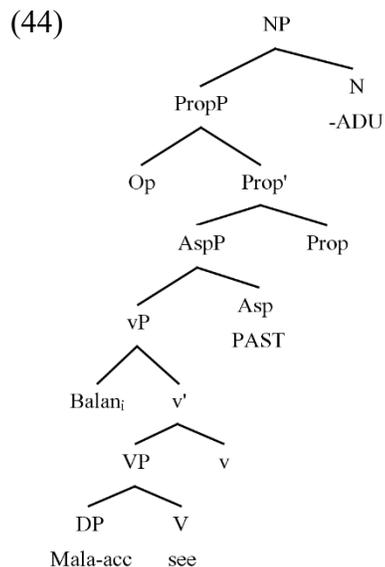


In (43), the N is the nominalizer which takes an AspP without a gap as a complement. I will assume that the N head is the same that occurs in the agreeing cleft. Recall from the

agreeing cleft that N probes for a goal that has both phi-features and A'-features. This gives rise to two possibilities for the morphological shape of N in (43). The first is that N spells out as default agreement due to a lack of a goal with A'- and phi-features anywhere in its search domain, and the second is that N spells out as actual agreement because there is a null goal with A'- and neuter phi features. I will now argue that neither option gives us an explanation for the shape of N in a default agreement cleft.

If N in (43) is a default agreement form due to a lack of a goal with phi- and A'-features, this will not explain why this form is retained with a default agreement cleft. Recall that in a default agreement cleft, the goal is probed by a higher FOC head when the goal is in Spec, NP. In order for the goal to reach this Spec, NP position, N presumably agrees with this goal first. If a default agreement cleft is derived from a gapless nominalized clause, it is not clear what prevents N from agreeing with the phi-features of the goal that is ultimately moved to Spec, FocP in a default agreement cleft.<sup>34</sup>

If N in (43) is actual agreement with a null goal, deriving the default agreement cleft from a gapless nominalized clause would still not work. One candidate for the null goal that N could agree with in (43) is a null propositional operator similar to that proposed by Kayne (2008, 2014), Arsenijević (2009), and Haegeman (2012) for noun complements.<sup>35</sup> In this analysis, a gapless nominalized clause looks like the following.



In this structure, there is a null operator that is propositional and has A'-features.<sup>36</sup> Assuming that propositions are singular and neuter, N agrees with this operator and spells

<sup>34</sup> One could say that a goal that is targeted by the higher FOC head never has the A'-features that N probes for. But this would have to be stipulated for Tamil as others have argued that intermediate A'-landings sites are feature driven (eg. McCloskey 2002, Abels 2012 etc). In addition, in a feature geometry like that in Aravind (2017), FOC entails OP features and so N should be able to agree with goals with FOC features.

<sup>35</sup> Although see Cuba (2017) for an alternate view of noun complements which eschews null operators.

<sup>36</sup> Movement of this operator to Spec, NP is not shown.



In (46), Spec, YP is the position in which phi-agreement takes place in typical contexts. A skipped node approach says that AA arises because the phrase that agrees, XP, skips this position and moves directly from a lower to a higher position. The rationale is that if the phrase is not in a position in which it triggers agreement, then phi-agreement cannot be spelled out.

Varieties of this approach thus posit different reasons as to why this skipping is obligatory in an AA context. Diercks (2010) posits that Spec, TP and Spec, CP are criterial positions (Rizzi 2006) which means that once XP has moved to Spec, TP, it cannot move to Spec, CP anymore. Schneider-Zioga (2007) claims that this skipping has to take place in Kinande because not doing so will require movement within a so-called prolific domain which is argued to be banned by Grohmann (2003). Erlewine (2016) proposes that movement from one specifier position to an immediately higher specifier position (i.e. Spec, TP to Spec, CP) violates what he calls SPEC-to-SPEC ANTI-LOCALITY (SSAL). Skipping Spec, TP by moving from Spec, vP to Spec, CP thus ensures that an XP does not violate SSAL.

While each of these theories posit a different reason for why Spec, TP has to be skipped, they all make the same underlying assumption. Agreement has to take place *in* Spec, TP. However, recent work has questioned this premise. Baier (2017a) argues that Berber subjects do not move to Spec, TP at all even in canonical clauses with phi-agreement. Henderson & Coon (2017) argues the same for Kaqchikel. According to them, the position in which Kaqchikel subjects agree is low and not Spec, TP and as such not moving to Spec, TP should not give rise to AA in *wh*-questions.<sup>37</sup> Thus, the assumption that phi-agreement only takes place in Spec, TP is problematic even before we look at Tamil.

Turning to Tamil now, if a skipped-node approach was the right one to account for the AA effect N exhibits, one would have to say that Spec, NP is where N agrees with the phrase and that in a default agreement cleft, the extracted element skips Spec, NP by moving directly from Spec, vP to its landing site Spec, FocP. First of all, such an account contradicts the assumption I have been making all this time about Tamil, namely that agreement is based on downward AGREE. Of course, this could just mean that I am wrong in my assumption but there is independent reason to think that agreement in Tamil is based on downward AGREE.

- (47) DAT-NOM clauses
- |    |                        |      |       |                    |
|----|------------------------|------|-------|--------------------|
| a. | Ba:lən-wukku           | andə | bukku | kade- <b>cicci</b> |
|    | Balan-DAT              | that | book  | get-PAST.3sN       |
|    | ‘Balan got that book.’ |      |       |                    |
| b. | Ba:lən-wukku           | andə | pille | kade-c- <b>a:</b>  |
|    | Balan-DAT              | that | girl  | get-PAST-3sF       |
|    | ‘Balan got that girl.’ |      |       |                    |

<sup>37</sup> They also provide a reanalysis of why adverb insertion seems to ameliorate AA and allow normal phi-agreement in Kaqchikel. This is one of the key facts Erlewine (2016) uses to motivate his SSAL-account.

(47) shows DAT-NOM constructions, in which it is the unmarked argument that triggers agreement on I. Sarma (1999) and Baker (2011) propose that in these constructions, the nominative argument remains within VP.<sup>38</sup> If this is correct, then the nominative argument is not in Spec, IP and downward AGREE is how this agreement relation is established. Thus, there is independent reason to think that a phrase need not be in Spec, NP for agreement to be realized with N. If this is correct, then skipped-node approaches, in general, do not quite work for AA in the Tamil clefts.

The Tamil AA facts also pose problems for each variety of skipped-node approach. In order to make a Diercks-type criterial-freezing theory work, we need to treat Spec, NP and Spec, FocP as both being criterial positions. And in addition, we need to posit that Spec, NP in a default agreement cleft has a null element which triggers neuter agreement just as Diercks does for Lubukusu. Neither assumption is justified. While there may be morphological evidence for such a null element in Spec, TP in Lubukusu, there is no such evidence in Tamil. A theory based on prolific domains such as Schneider-Zioga (2007) would also not work for Tamil AA. For this, we need to argue that Spec, FocP and Spec, NP are part of the same prolific domain. But it is not clear what justifies such a classification. Finally, in Erlewine (2016)'s SSAL approach, we need Spec, NP and Spec, FocP to be adjacent specifiers. However, looking at (35b), it is possible that there is an intervening Spec, PredP that prevents the violation of SSAL.

In conclusion, we have seen that a major approach to AA has problems explaining the Tamil facts. I turn my attention elsewhere for a more adequate account of AA.<sup>39</sup>

## 4.2 What type of theory of AA do we need?

In this section, I would like to reinforce Baier (2017b)'s proposal that an adequate account of AA needs to be able to make reference to specific probes within a language.

### 4.2.1 AA and Subjecthood

There is an assumption in the literature that there is a subject/ object asymmetry with respect to AA (Erlewine (2016, 2017), Kinjo 2017 etc). Erlewine (2016, 2017)'s SSAL account, in fact, derives this assumption. Suppose there is a language where T and v exhibit agreement with the subject and object in Spec, TP and Spec, vP respectively. In such a language, SSAL will ban movement from Spec, TP to Spec, CP given that these are adjacent specifiers. Movement from Spec, vP to Spec, CP does not violate SSAL and thus is not banned. As such, A'-movement of a subject induces AA whereas A'-

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<sup>38</sup> Baker (2011), however, disagrees with Sarma (1999)'s claim that the dative phrase is an argument. For him, it is an adjunct.

<sup>39</sup> There are non-skipped-node approaches that I have not considered here. Ouhalla (1993)'s theory of AA depends on treating traces of movement differently in different contexts. This may be not keeping within Minimalist assumptions. Baker (2008)'s account requires phi-feature deletion on certain copies. However, Tamil data like (38a) indicates that unpronounced copies at different parts of a movement chain differ with respect to AA. This suggests that Baker's theory cannot be applied to Tamil. For more discussion on these and other AA-approaches not considered here, see Baier (2016).

movement of an object does not. Erlewine (2016) argues that this is why a subject-object asymmetry in Kaqchikel agent focus constructions exists.

However, Baier (2017b) argues that the assumption of a subject-object asymmetry does not empirically pan out. In fact, there exist languages which agree with both subject and object but only A'-movement of an object induces AA. This is exactly the opposite of what we expect to see if AA was sensitive to the structural position of the A'-moving argument. Selayarese is argued to be one such language.

- (48) Finer (1997: 679)
- |    |                        |           |      |      |
|----|------------------------|-----------|------|------|
| a. | la-ʔalle-i             | doeʔ-iñjo | i    | Baso |
|    | 3-take-3               | money-the | H    | Baso |
|    | 'Baso took the money.' |           |      |      |
| b. | la-keoʔ-a              | i         | Baso |      |
|    | 3-call-1s              | H         | Baso |      |
|    | 'Baso called me.'      |           |      |      |

(48) shows transitive clauses in Selayarese (an ergative language) with subject and object agreement. Specifically, the verbal prefix is subject agreement and the verbal suffix is object agreement. I will follow Finer (1997) and Baier (2017b) in assuming that subject agreement is realized on T and object agreement is realized on v. Interestingly, A'-movement of the object but not the subject induces AA.

- (49) a. apa<sub>i</sub> la-ʔalle-(\*i) \_\_\_<sub>i</sub> i Baso  
 what 3-take H Baso  
 'What did Baso take?'
- b. inai<sub>i</sub> \*(la)-erang-i doeʔ-iñjo \_\_\_<sub>i</sub>  
 who 3-take-3 money-the  
 'Who took the money?' (Jukes 2013: 118)

(49a) shows object wh-movement and (49b) shows subject wh-movement. Notably, only object wh-movement induces AA. One may suppose that in Selayarese, the absolutive marked argument is structurally higher than the ergative marked one and still retain the SSAL but as Baier (2017b) observes from Finer (1997), object wh-movement induces WCO (Finer 1997: 695).

- (50) a. ku-isseʔ-i kuko la-janjang-i i Ali<sub>i</sub> andoʔ-na<sub>i/j</sub>  
 1s-know-3 comp 3-saw-3 H Ali mom-3  
 'I know that his<sub>i/j</sub> mom saw Ali<sub>i</sub>.'
- b. ku-isseʔ-i kuko inai<sub>i</sub> la-janjang(\*-i) andoʔ-na\*<sub>i/j</sub>  
 1s-know-3 comp who 3-saw-3 mom-3  
 'I know who<sub>i</sub> his\*<sub>i/j</sub> mom saw.'

(50a) shows that an embedded subject pronoun can refer to the object in a discourse-unmarked context. (50b) shows wh-movement of the embedded object. Apart from AA, we also observe a WCO effect. This must mean that the direct object is structurally lower

than the subject. We can thus conclude that Selayarese argues against a subject-object asymmetry with respect to AA. However, it does support the view that AA is not a language-wide property. Instead, AA appears to be the property of specific phi-probing heads within a language. Some heads have this property and others do not.

#### 4.2.2 Tamil I vs Tamil N

While I have been argued that nominalizing N exhibits AA in Tamil, I have not mentioned anything about I. However, we have already seen some data that supports the view that AA is a property of specific heads within a language.

- (51) a. [[       Ma:la-vɛ pa:-t̪t̪-ã: nu] So:mu co-ŋŋ-ədu] Ba:lẽ  
 Mala-ACC see-PERF-3sM C Somu say-PERF-3sN Balan  
 ‘The one that Somu said saw Mala is Balan.’
- b. [[       Ma:la-vɛ pa:-t̪t̪-ã: nu] So:mu co-ŋŋ-əvẽ] Ba:lẽ  
 Mala-ACC see-PERF-3sM C Somu say-PERF-3sM Balan  
 ‘The one that Somu said saw Mala is Balan.’

(51) shows an embedded subject gap cleft, both the default agreement and the agreeing variant. While N exhibits AA, of interest to us here is what happens in the embedded clause, especially in (51a). Here, I exhibits full phi-agreement even when the higher N exhibits default agreement. This is surprising given that I and N are just probing different unpronounced copies of the same movement chain terminating in the highest Spec, FocP. What this suggests is that Tamil is like Selayarese. Tamil also has more than one head (I and N) that can be spelled out for phi-features, but only one of these heads (N) exhibits AA. This is explained if AA is a property specific to individual probes.<sup>40</sup>

<sup>40</sup> Other contexts in which AA is expected on I but not seen are wh-questions and relative clauses.

- a) yevẽ Ma:la-vɛ pa:-t̪t̪{-ã/\*a/\*a:ŋge}?  
 who.M Mala-ACC see-PAST-3sM/\*3sF/\*3pl  
 ‘Who did Balan see?’

(a) shows that a wh-subject is realized with full phi-agreement which is compatible with the view that I does not exhibit AA. The following shows relative clauses.

- b) [[       Ma:la-vɛ pa:-t̪t̪-ə] payyẽ]  
 Mala-ACC see-PAST-REL boy  
 ‘The boy that saw Mala.’
- c) [Ba:lẽ        pa:-t̪t̪-ə] poŋŋu  
 Balan see-PERF-REL girl  
 ‘The girl that Balan saw’

In relative clauses, there appears to be phi-agreement obviation on I. This can be seen in the relative clause with a subject gap in (b). However, (c) shows that this phi-agreement obviation occurs even when the relative clause contains an object gap. This indicates that the relative marker replaces I (as argued by Jayaseelan 2014) and should not be taken to mean that I exhibits AA with relative clauses.

### 4.2.3 Matrix/ Embedded asymmetries

To the Selayarese and Tamil facts, I would like to add a long-known fact about AA. While most languages exhibiting AA do not have a matrix/ embedded clause asymmetry, some do. Berber, Breton, Welsh and Turkish are some such languages (Hendrick 1988, Ouhalla 1993, Baier 2016). Berber is used to illustrate the point.

- (52) Berber (Ouhalla 1993: 480)  
 Man tamghart<sub>i</sub> ay nna-n [qa t-zra \_\_\_<sub>i</sub> Mohand]?  
 which woman.Fs C said-3pl C FsS-saw Mohand  
 'Which woman did they say saw Mohand?'

While (1) in the introduction shows that local A'-movement induces AA on T in Berber, (52) shows that long-distance A'-movement does not. Berber exhibits this AA amelioration effect in long distance relativization and subject focus as well. I propose that this matrix/ embedded asymmetry can be understood in the same way Selayarese T and v and Tamil I and N can be understood. While matrix T has the property that allows it to exhibit AA, embedded T does not.<sup>41</sup>

One piece of suggestive evidence that matrix T and embedded T are different can be seen in Berber in the forms of the C. Matrix T is *ay* whereas embedded T is *qa*. If we assume that T gets its features through feature inheritance (Richards 2007, Chomsky 2008, Gallego 2014), then it is plausible that the T nodes embedded under each type C will be different as well. Another way C can affect T is through selection. In this view, *ay* and *qa* select TPs which differ with respect to, among other things, whether T exhibits AA. I will not argue in detail for either view here.<sup>42</sup>

In summary, in this section, I have looked at a major approach to AA and shown that it cannot account for the general facts of AA in Tamil. I also explored what an adequate theory of AA should look like and proposed, following Baier (2017b), that such a theory needs to be able to refer to specific phi-probing probes.

<sup>41</sup> Thanks to Nico Baier (p.c.) for alerting me to Shlonsky (2014)'s alternate analysis of the matrix/ embedded asymmetry in Berber, whereby there is no long-distance movement but rather a resumptive pronoun in the embedded clause. But as Nico points out, Shlonsky's account doesn't explain AA amelioration by negation. However, the feature inheritance account potentially does. See footnote 41.

<sup>42</sup> One piece of evidence in favour of feature inheritance is the following.

- a) man tamghart ay ur t-ssn Mohand?  
 which woman C NEG 3sF- know Mohand  
 'Which woman knows Mohand?'

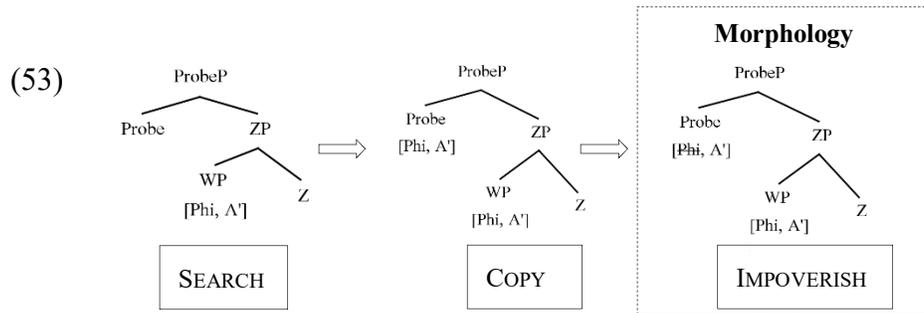
(a) shows that full phi-agreement is possible in Berber with local wh-movement of the subject when there is negation in the clause. Also note the shape of C, which is the matrix form. This suggests that negation interferes with feature inheritance from C to T which results in T never getting the property required to exhibit AA. This pattern of negation ameliorating AA is also found in Breton and Welsh (Ouhalla 1993). There is precedent for the notion of intervention in the domain of AA (Kinjo 2017) but the details of how much of Kinjo's theory dovetails with the general account proposed for (a) has to be worked out.

## 5. The Proposal

In this section, I outline Baier (2017b)'s morphological theory of AA and propose an alternative syntactic one.

### 5.1 Baier (2017b): Impoverishment

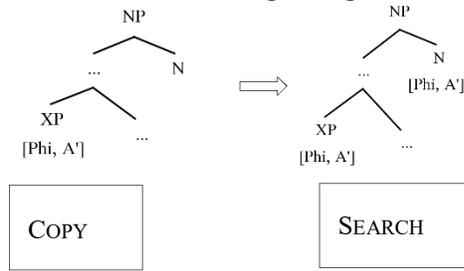
A key ingredient in Baier (2017b)'s theory is Deal (2015, 2016)'s theory of AGREE which makes a distinction between *interact* and *satisfy*. *Interact* refers to search and copy whereby some probe finds and copies the feature of a goal within its search domain. *Satisfy* occurs when these feature evaluate an uninterpretable feature on the probe. In this theory, crucially, a probe can copy features even if these features do not satisfy the probe. Baier (2017b) takes this to mean that whenever a phi-probing head finds a goal that also has A'-features, these A'-features are also copied to the head. However, when morphology accesses the feature bundle on the head, the presence of the A'-feature in the bundle leads to IMPOVERISHMENT, which results in the deletion of phi-features. This is what gives rise to AA. These steps are shown below.



In the first structure, the phi-probing head searches and finds WP. It then copies both the phi- and the A'-features. When this node with this copied feature bundle is sent to the morphological component, IMPOVERISHMENT deletes the phi-features. The vocabulary item that is then inserted into this node cannot have phi-features, as this would otherwise violate the Subset principle (Halle 1997). This results in AA. According to Baier (2017b), not all probes undergo IMPOVERISHMENT. This would then account for the patterns of AA we see in Selayarese, Tamil, Berber, Breton, Welsh and Turkish where some phi-probing heads within the language exhibit AA while others do not.

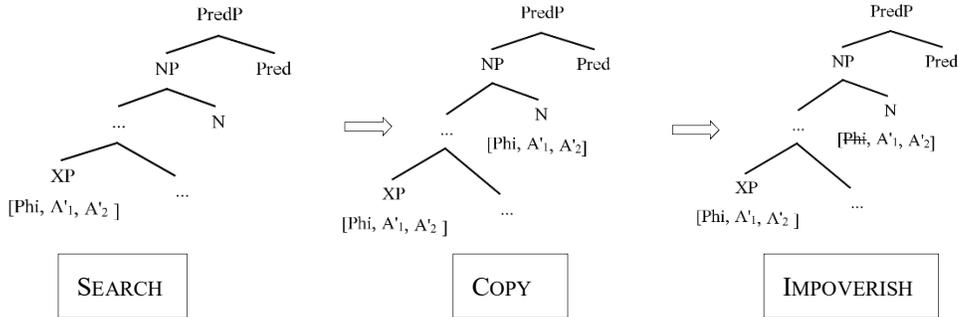
While we have been speaking loosely of an A'-feature in the bundle, note that the A'-feature that triggers IMPOVERISHMENT must be one that does not satisfy the probe. This is made clear with the agreeing cleft.

(54) Derivation of an agreeing cleft



Suppose N finds XP and copies its phi- and A'-features. In this case, IMPOVERISHMENT cannot take place because otherwise we would not derive the agreeing cleft. Recall that N requires both phi and A'-features. This indicates that IMPOVERISHMENT must only be triggered when a bundle contains an A'-feature that *does not satisfy the probe*. In the case of the agreeing cleft, the A'-feature is one that satisfies the probe and as such IMPOVERISHMENT cannot take place. The following shows the default agreement cleft.

(55) Derivation of a default agreement cleft



In this derivation, the XP has phi-features like before, but two distinct A'-features. The A'<sub>1</sub> feature is one that satisfies N and an A'<sub>2</sub> feature that satisfies the higher head FOC.<sup>43</sup> When N interacts with this XP and copies its features, notice that it will have the phi-features and the A'<sub>1</sub> feature which satisfy N. However, this feature bundle will also have A'<sub>2</sub>, an A'-feature that does not satisfy N. This triggers IMPOVERISHMENT and thus AA.

In this sub-section then, we have seen that Baier's theory can account for the AA patterns in Tamil. Given that Baier thinks of IMPOVERISHMENT as a property of specific probes, this also means that we have an account of why I does not exhibit AA in Tamil. While N undergoes IMPOVERISHMENT in Tamil, I does not.

## 5.2 A problem for IMPOVERISHMENT

Before we see why we may need a syntactic alternative to Baier's account of AA, I will briefly discuss the notion of IMPOVERISHMENT as it is used in the morphological

<sup>43</sup> For concreteness, I assume that movement to intermediate landing sites is also feature-driven, following McCloskey (2002), and Abels (2012). This is what drives movement of the pivot in a default agreement cleft to Spec, NP. However, the analysis can also be implemented under the assumption that movement to intermediate landing sites is not feature driven (eg. Boskovic 2007).

literature. Harley (2008: 258) says the following of IMPOVERISHMENT: “*Impoverishment rules are language-specific rules that manipulate terminal nodes as they come out of the syntax by deleting certain features in the environment of other features*”.<sup>44</sup> This definition appears compatible with Baier (2017b)’s account of AA. In his account, given a bundle that contains a phi-feature and an A’-feature, the phi-feature deletes. However, the agreeing cleft in Tamil shows us that it specifically has to be an A’-feature that does not satisfy the probe that triggers impoverishment. This, I propose, is the crux of the problem with Baier’s theory. For Baier’s theory to work, morphology has to know the role that each feature that is found on a feature bundle has played in the syntax. In a theory of AGREE where heads only copy features that satisfy it, this problem does not arise. However, in a Deal-type theory of AGREE where heads copy features that do not satisfy the head, this problem becomes very real. Taking the Tamil data as an example, given a feature bundle that contains phi-features and A’-features, morphology must be able to see whether the A’ feature satisfied the head or not. If it was used to satisfy the head as in the case of N in the agreeing cleft, then IMPOVERISHMENT cannot take place. However, if it was not used to satisfy the head as in the case of N in the default agreement cleft, then IMPOVERISHMENT in the form of phi-feature deletion must take place.

The offshoot of the discussion above is that morphology needs to have access to syntactic information, specifically, information pertaining to whether a feature was used to satisfy the head it is found on. In a Distributed Morphology framework (Halle & Marantz 1993), where the input to morphology is the output of syntax, it is reasonable that morphology has information about the structural position in which vocabulary items are inserted. For example, Marantz (1991) and Bobaljik (2008) who advocate for case assignment as an operation in the morphological component use structural conditions in their case assignment rules.<sup>45</sup> However, with IMPOVERISHMENT as Baier (2017b) employs it, we are not merely talking about the structural position in which a feature bundle occurs. What is at issue is whether morphology has access to the valuation history of a feature in a given feature bundle. In the standard version of AGREE outlined in Chomsky (2000, 2001), even the syntactic component does not have access to such information, let alone the morphology. This is because when an unvalued feature probe is valued by a valued feature on a goal, syntax will have no way of knowing which of these two, now valued features, was originally the unvalued one (cf. Pesetsky & Torrego 2007).

One hope for an IMPOVERISHMENT account of AA would be to adopt a feature sharing account of AGREE (Frampton & Gutmann 2000, 2006, Pesetsky & Torrego 2007, Preminger 2017 a.o).<sup>46</sup> In feature-sharing, a single feature is shared among several nodes and in Pesetsky & Torrego’s implementation, information about the location of the originally valued feature is also retained. In this theory then, syntax retains some aspects of the valuation history of features. This gives rise to the possibility that this information can then be passed on to morphology. However, I propose that once we combine feature-

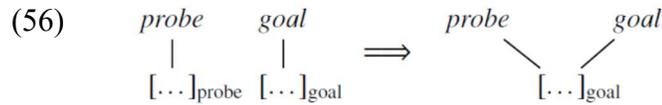
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<sup>44</sup> See Nevins (2011) for a relatively recent explication of IMPOVERISHMENT.

<sup>45</sup> Although see Legate (2008) who argues that there is no empirical or conceptual advantage in a theory where morphology can access syntactic information this way over a syntactic theory of case assignment.

<sup>46</sup> My thanks to Ted Levin for suggesting feature sharing.

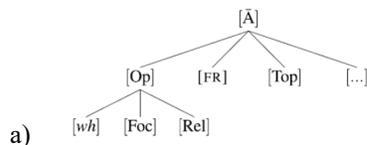
sharing and a Deal-type version of AGREE, where heads can copy features that do not satisfy them (which is crucial for Baier’s account of AA), we again face the issue of even syntax not having the relevant information needed by morphology to ensure that IMPOVERISHMENT is triggered correctly. Consider the following.



(56) shows a feature-sharing configuration (taken from Preminger 2017) where the goal’s features are shared with the probe. Let’s take [...]<sub>goal</sub> to represent the set of features that are shared by the goal. In Deal’s theory of Agree where *all* the features of the goal are shared with the probe, [...]<sub>goal</sub> can consist of features that do not satisfy the probe. Following Pesetsky & Torrego (2007), we might even mark that these features that become shared originally came from the goal. However, even now syntax will only know that some of these shared features satisfy the probe.<sup>47</sup> There is still no way for the syntax to tell which of these features that are in [...]<sub>goal</sub> actually satisfies the probe and which of these features that are in [...]<sub>goal</sub> do not. Let’s take the Tamil agreeing cleft as an example, where the phi- and A’- features of the goal are shared with N. Once this sharing occurs, the syntax has no way of knowing which of phi-, A’- or both satisfied the probe. It could be one, the other, or as it turns out in this specific example, both. What this discussion shows is that even syntax will not have a record of the type of information that morphology needs in order to know when to trigger IMPOVERISHMENT. Thus, this remains a problem for Baier’s IMPOVERISHMENT account.<sup>48</sup>

<sup>47</sup> I assume that at least one unvalued feature of the probe has to be valued by the goal in order for feature sharing to take place.

<sup>48</sup> Nico Baier (p.c.) suggests an alternative. Suppose we assume a feature hierarchy for A’-features like that proposed by Aravind (2017: 19) below.

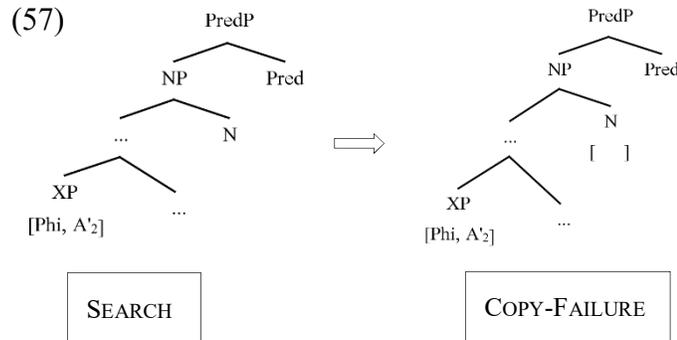


In this view, a head that probes for Op features will be satisfied even if one of [wh], [Foc], or [Rel] features is found on the goal (cf. Bejar & Rezac 2009). Such a feature geometry in concord with head specific impoverishment rules may remove the burden on morphology w.r.t the Tamil clefts if N is satisfied by Op features. Due to feature entailment, this would mean that even FOC features would satisfy the N probe. As such, morphology will not need to make a distinction between features that satisfy a head vs features that do not to derive a default agreement cleft and an agreeing cleft. IMPOVERISHMENT is triggered if the feature bundle [Phi, Foc → Op → A’] occurs on the N head as in the default agreement cleft (‘→’ indicates an entailment relation). In contrast, in an agreement cleft, the feature bundle is presumably [Phi, Op → A’], a bundle that does not trigger IMPOVERISHMENT on N. In this view then, the agreement alternation on N is not a result of the presence of an A’-feature that satisfies or does not satisfy N. But, there are cases where it is the presence of a feature on a head that does not satisfy the head that has to trigger IMPOVERISHMENT. Consider Lubukusu AA in a subject-to-subject raising context (Diercks 2010: 181).

- a) e-fwana oli Tegani a-kwa                      b) Tegani a-fwana oli \_\_\_ o-w-a-kwa  
 9-seem C 1Tegan S1-PST-fall                      1Tegan 1S-seem C C1-AA-PST-fall  
 ‘It seems as if Tegan fell.’                              ‘Tegan seems (as if/like) she fell.’

### 5.3 The syntactic alternative: COPY-FAILURE

In so far as the arguments above are correct, AA must be the result of a process that occurs at the point at which AGREE takes place. Any point later is too late. Once unvalued features are removed through valuation (or sharing), information about which features on a head satisfy it and which features do not is not retained. Thus, I propose COPY-FAILURE. Instead of having the entire feature bundle of the goal being copied to a head and then having some of these features being deleted like in Baier's theory, I propose that in certain circumstances, such features bundles are not copied by the head at all.



In (57),  $A'_2$  is an  $A'$ -feature that does not satisfy N and XP is the goal. In this configuration, I propose that N simply does not copy any of the features of the goal. Given that its features are not valued, in this case, N spells out with default agreement.<sup>49</sup> I assume that failure to agree is not fatal for the derivation, an assumption that is implicit in most skipped-node approaches to AA (cf. Preminger 2011). In addition, I propose that COPY-FAILURE is a property of individual heads. In the Tamil context, this means that N tolerates COPY-FAILURE, whereas I does not.

COPY-FAILURE occurs at the point in the syntactic component at which a head probes for a potential goal. When it finds a goal, it then has to make a decision on whether it will value its unvalued phi-features at the cost of copying  $A'$ -features that does not satisfy it.<sup>50</sup> Thus, the trigger for AA I propose is the same as Baier (2017b): the markedness of a feature bundle containing phi- and  $A'$ -features that do not satisfy a probe. However, the theory I am proposing differs with respect to which component of grammar this is resolved in and how this markedness is resolved. For Baier, this is

(a) and (b) shows that subject raising triggers an AA marker on the embedded T. In such constructions, we can assume the embedded subject has no  $A'$ -features but an A-feature that is probed by the matrix T. In this case, it is the presence of this A-feature that has to trigger IMPOVERISHMENT on the embedded T. It is not possible to claim that A-features on T heads always trigger IMPOVERISHMENT in Lubukusu because regular phi-agreement is possible in Lubukusu (eg. (a)). In my view, IMPOVERISHMENT occurs because the goal has an A-feature that does not satisfy the embedded T. See Diercks (2010: 181) for arguments that (b) should be analyzed as subject-to-subject raising and not copy-raising structures like *She seems like she is happy*.

<sup>49</sup> Languages will differ with respect to how COPY-FAILURE is realized. Apart from default agreement, languages may realize COPY-FAILURE with complete lack of agreement morphology (eg. Berber participle verb form), or with special AA morphology (eg. Ibibio special prefix) or possibly other ways.

<sup>50</sup> An assumption here, inherited from Deal (2015, 2016) and Baier (2017b), is that heads that exhibit AA cannot copy just those features from a goal that value it. This is formalized below as \*DISCRIMINATE.

resolved in morphology through feature deletion. Here, this problem is resolved in the syntax by not allowing such a feature bundle to be formed in the first place.

It should be noted that COPY-FAILURE implemented this way essentially means that Deal's theory of AGREE is not absolute. While I agree that certain heads do copy features that do not satisfy it, not all heads do so. This, I propose, is the source of parametric and language internal variation with respect to AA that we see. Erlewine (2016) shows that an Optimality Theoretic (Prince & Smolensky 1993) approach is particularly amenable to accounting for the AA facts and I follow his lead. However, of course, the crucial constraint I propose is quite different.

- (58) **\*(COPIED ≠ SATISFACTION)<sub>H</sub>**  
Assign one violation for each feature that is copied to a head H that does not satisfy H.

(58) is adapted from Deal (2015, 2016). This constraint penalizes heads that copy features that do not satisfy them. In addition, this constraint is relativized for specific heads. In Tamil, this constraint will be relativized for the two phi-probing heads, N and I. In order for such a constraint to have any force in a language, we need another constraint like the following.

- (59) **\*DISCRIMINATE**  
Assign one violation for each head that copies only a proper subset of all features present on an agreeing goal.

Given a goal that has features that satisfy a head and features that do not satisfy it, (59) places a penalty on a head that copies only the features that satisfy it.<sup>51</sup> This constraint effectively works in opposition to (58). Without this constraint, a head will always choose to copy only those features from an agreeing goal that satisfies it and (58) will never be violated. These constraints I have presented are thus one way of implementing the AGREE system of Deal (2015, 2016) in an OT framework. To these, I add the following constraint from Woolford (2003) (which Erlewine (2016) also uses).

- (60) **XREF** (Woolford 2003, Erlewine 2016)  
Assign one violation per argument whose features are not matched by an agreement morpheme.

As in Erlewine's system, (60) penalizes arguments that do not spell out agreement on phi-probing heads. The interaction of these three constraints derives the fact that Tamil N exhibits AA whereas Tamil I does not.

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<sup>51</sup> This means that a head that copies all of the features of an agreeing goal or none of the features of the agreeing goal does not violate \*DISCRIMINATE.

### 5.3.1 Tamil N and AA

First, we will see the ranking required to derive the AA facts in the clefts. Recall that an agreeing cleft exhibits full phi-agreement whereas a default agreement exhibits AA. In the agreeing cleft, the gap in the NP only has an A'-feature that satisfies N and in the default agreement cleft, the gap in the NP has an additional A'-feature that satisfies FOC as well. First, we will see what happens with an input that contains a gap with just an A'-feature that satisfies N.

(61)

Input: [N ... XP <sub>[Phi, A']</sub> ]	*DISCRIMINATE	*(COPIED ≠ SATISFACTION) <sub>N</sub>	*XREF
a. → [N <sub>[Phi, A']</sub> ... XP <sub>[Phi, A']</sub> ]			
b. [N <sub>[ ]</sub> ... XP <sub>[Phi, A']</sub> ]			*!

(61) shows an input with a probing H and an XP that has a phi-feature and an A'-feature that satisfies N. There are two plausible outputs. The one where H copies both of these features that satisfies it [(a)] or the one where neither feature is copied [(b)].<sup>52</sup> The latter option results in AA. With this input, no ranking information is gleaned because only XREF distinguishes between these two outputs. However, even without any ranking, we can see that this input will give us the agreeing cleft. The following shows what happens when the goal also has an A'-feature that satisfies a higher FOC head.

(62)

Input: [N ... XP <sub>[Phi, A'1, A'2]</sub> ]	*DISCRIMINATE	*(COPIED ≠ SATISFACTION) <sub>N</sub>	*XREF
a. [N <sub>[Phi, A'1, A'2]</sub> ... XP <sub>[Phi, A'1, A'2]</sub> ]		*!	
b. [N <sub>[Phi, A'1]</sub> ... XP <sub>[Phi, A'1, A'2]</sub> ]	*!		
c. → [N <sub>[ ]</sub> ... XP <sub>[Phi, A'1, A'2]</sub> ]			*

In (62), A'1 satisfies N and A'2 satisfies FOC. There are now three possible outputs. The first one has the head N copying all of the features of the goal, even A'2 which does not satisfy N [(a)]. This violates \*(COPIED ≠ SATISFACTION)<sub>H</sub>. The second output is one in which N copies just the features that satisfies it, i.e. Phi and A'1 [(b)]. This violates \*DISCRIMINATE. The third output shows COPY-FAILURE where none of the features of the goal are copied. This violates XREF. Neither (a) nor (b) result in AA, thus the winning output has to be (c) which is possible with the ranking: \*DISCRIMINATE, \*(COPIED ≠ SATISFIED)<sub>N</sub> >> XREF. There is no relative ranking information between the first two constraints, but crucially, these two have to be ranked over XREF. This is what leads to AA with N and how the default agreement cleft is derived. We can now see the ranking for the other phi-probing head in Tamil, I.

<sup>52</sup> Outputs where only one feature is copied are not considered as both features satisfy N.

### 5.3.2 Tamil I and AA

Note that Tamil I does not probe for any A'-features, only phi-features. Also recall that I never exhibits AA in Tamil. This is clear indication that the same ranking for N cannot be applied to I. First, we will see the simple case: the one where the goal that I is probing for has only phi-features and no A'-features.

(63)

Input: [I ... XP <sub>[Phi]</sub> ]	*DISCRIMINATE	*(COPIED ≠ SATISFACTION) <sub>I</sub>	*XREF
a. → [I <sub>[Phi]</sub> ... XP <sub>[Phi]</sub> ]			
b. [I <sub>[]</sub> ... XP <sub>[Phi]</sub> ]			*!

In this input, the goal only has features that satisfy I, i.e. phi features. Much like with the agreeing cleft, there is no ranking information for the constraints but the presence of XREF in the system will ensure that (a) wins.<sup>53</sup> This is the output with full phi agreement. We can now see what happens when the goal that I agrees with has A'-features.

(64)

Input: [I ... XP <sub>[Phi, A']</sub> ]	*DISCRIMINATE	*XREF	*(COPIED ≠ SATISFACTION) <sub>I</sub>
a. → [I <sub>[Phi, A']</sub> ... XP <sub>[Phi, A']</sub> ]			*
b. [I <sub>[Phi]</sub> ... XP <sub>[Phi, A']</sub> ]	*!		
c. [I <sub>[]</sub> ... XP <sub>[Phi, A']</sub> ]		*!	

With this input, the three plausible outputs are (a), where all the features of XP are copied to I. This violates \*(COPIED ≠ SATISFIED)<sub>I</sub>. In (b), only the phi features are copied. This violates \*DISCRIMINATE. In (c), no features are copied and this violates XREF. We know from (62) that in Tamil, \*DISCRIMINATE must be ranked above XREF. This means that in order to ensure that the output has full phi agreement on I, the only ranking that will suffice is ranking XREF over \*(COPIED ≠ SATISFIED)<sub>I</sub>. The reverse ranking between these two constraints will lead to the wrong output. We have thus derived the fact that Tamil N exhibits AA with the right type of input whereas Tamil I never exhibits AA.<sup>54</sup>

Thus, what we have seen in this OT implementation is that COPY-FAILURE results when \*(COPIED ≠ SATISFIED)<sub>H</sub> and \*DISCRIMINATE are ranked over XREF. If the arguments here are correct, this has to be the case for any head in a given language that exhibits AA.

<sup>53</sup> Although note that, from (62), we already know that \*DISCRIMINATE is ranked over \*XREF in Tamil.

<sup>54</sup> The same ranking will give us the correct output for the following input: [I ... XP<sub>[Phi, A', A'2]</sub>]. This is the input in a long-distance default cleft where the goal has two A'-features. With this input, and the ranking in (64), full phi-agreement will be spelled out.

## 5.4 An unresolved issue: partial AA

Baier (2017c) discusses situations which he calls partial AA, where only some types of goals or some types of features undergo neutralization in an AA context. Given that Baier considers partial AA to be some of the strongest evidence in favor of a morphological approach to AA, in this section, my purpose is to show how partial AA may be accounted for in the approach proposed here. I will discuss two instances of partial AA, seen in Ben Tey and Ouargli. I will rely on Baier (2016, 2017c)'s descriptions of these languages for our discussion. See sources therein for more info about these languages.

### 5.4.1 Ben Tey and partial AA

Consider the following patterns of AA in Ben Tey (Dogon, Mali). Tables are taken from Baier (2017c: 12) who uses the data from Heath (2013).

(65)	<table style="width: 100%; border-collapse: collapse; margin: auto;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 20%; text-align: center;">SG</th> <th style="width: 20%; text-align: center;">PL</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">V-<i>ỵ</i></td> <td style="text-align: center;">V-:-<i>ỵ</i><sup>9</sup></td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">V-<i>ẉ</i></td> <td style="text-align: center;">V-:-<i>ẉ</i></td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">V</td> <td style="text-align: center;">V-(<i>y</i>)<i>é</i></td> </tr> </tbody> </table>		SG	PL	1	V- <i>ỵ</i>	V-:- <i>ỵ</i> <sup>9</sup>	2	V- <i>ẉ</i>	V-:- <i>ẉ</i>	3	V	V-( <i>y</i> ) <i>é</i>	<table style="width: 100%; border-collapse: collapse; margin: auto;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 20%; text-align: center;">SG</th> <th style="width: 20%; text-align: center;">PL</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">V</td> <td style="text-align: center;">V</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">V</td> <td style="text-align: center;">V</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">V</td> <td style="text-align: center;">V-(<i>y</i>)<i>é</i></td> </tr> </tbody> </table>		SG	PL	1	V	V	2	V	V	3	V	V-( <i>y</i> ) <i>é</i>
	SG	PL																								
1	V- <i>ỵ</i>	V-:- <i>ỵ</i> <sup>9</sup>																								
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3	V	V-( <i>y</i> ) <i>é</i>																								
	<i>Ben Tey Agreement Paradigm</i>	<i>Ben Tey AA Paradigm</i>																								

(65) shows the regular and AA agreement paradigms in this language. The important thing to note about this paradigm is that only 1<sup>st</sup> and 2<sup>nd</sup> person goals trigger AA. The third person goal only has plural (*y*)*é* marking in the regular paradigm which survives even in cases of A'-movement. This is thus a case in which only certain types of goals trigger AA. Baier (2017c) proposes to analyze this with an IMPOVERISHMENT rule that is only triggered when the feature bundle on T is the following: [\_\_, PART, A'].<sup>55</sup>

These facts can also be accounted for in the OT approach made here. In fact, Erlewine (2016) has already shown how a somewhat similar (but opposite) pattern can be derived in OT for Kaqchikel (Mayan, VOS). Consider the following.

(66)	Iwír	x-∅-u-těj	ri wäy	ri a Juan
	Yesterday	PERF-3 <sub>SOBJ</sub> -3 <sub>SSUBJ</sub> -eat	the tortilla	Juan
	'Yesterday, Juan ate the tortilla.' (Erlewine 2016: 430)			

(66) shows the base Kaqchikel transitive clause. Both the subject and object agreement marker are verb prefixes. AA is realized in Kaqchikel agent focus (AF) constructions where subject agreement is suppressed and an AF marker is suffixed to the verb.

(67)	ja	ri xta	Maria x-∅-tz'et-ö	rte'	ri a Juan
	FOC	Maria	PERF-3 <sub>SOBJ</sub> -see-AF	mother	Juan

<sup>55</sup> This notation is meant to be read as phi features are deleted when they occur in the same bundle as participant and A' features. PART is the participant feature that only 1<sup>st</sup> and 2<sup>nd</sup> person goals have.

‘It was the man that heard you (sg.).’ (Erlewine 2016: 434)

(67) illustrates this. Notably, object focus does not suppress agreement or allow an AF suffix on the verb (not shown). Important for us is that first/ second person subjects are reported by Erlewine (2016) to not trigger agreement suppression or AF marking.<sup>56</sup>

(68) ja yin x-at-in-tzët rat  
FOC me PERF-2sg-1sg-see you  
‘It was you (sg.) that heard the man.’ (Erlewine 2016: 461)

(68) shows this with a focused 1<sup>st</sup> person subject. Here, there is no AF marker or suppression of agreement with the subject. Erlewine claims that 1<sup>st</sup>/ 2<sup>nd</sup> person arguments do not trigger AA and he proposes the following relativized XREF constraint.

(69) XREF-PARTICIPANT (XREFP, Erlewine 2016: 460)  
Assign one violation per participant argument which is not cross-referenced.

Recall that in the OT system proposed here, ranking \*DISCRIMINATE and \*(COPIED ≠ SATISFIED)<sub>H</sub> over XREF is required to induce AA. This would have to be the case for (67). However, to allow participants to be unaffected by AA, XREF-P has to be ranked over either \*DISCRIMINATE or \*(COPIED ≠ SATISFIED)<sub>H</sub>. One possible ranking that meets this criteria is shown below.

(70) **One possible ranking for Kaqchikel**  
\*DISCRIMINATE, XREF-P >> \*(COPIED ≠ SATISFIED)<sub>T</sub> >> XREF

The ranking in (70) ensures that 1<sup>st</sup>/ 2<sup>nd</sup> person participants will not induce AA as participant arguments are cross-referenced at the cost of having features on the probe that do not satisfy it. However, this cost is not tolerated for non-participant arguments. Thus, we derive the fact that Kaqchikel AA targets only non-participants.

However, Ben Tey AA is the reverse of Kaqchikel AA. Ben Tey AA targets only participants. This suggests that a constraint like XREFP but one for non-participants will give us the desired result. The crucial modification required to account for the Ben Tey data is then to have an XREF constraint that is relativized to non-participants.

(71) XREF-NON-PARTICIPANT (XREF-P, Erlewine 2016: 460)  
Assign one violation per non-participant argument which is not cross-referenced.

---

<sup>56</sup> The picture in Kaqchikel is more complex than this. As Preminger (2011) and Erlewine (2016) show, this amelioration of AA in Kaqchikel only happens when both the subject and object are participants. When the extracted subject is a participant and the object is 3<sup>rd</sup> person, AF marking is realized (Erlewine 2016: 462). Thus, it is clear that the Kaqchikel data is not as straightforward as the Ben Tey one. Nonetheless, I will assume Erlewine (2016)’s characterization of the facts in the discussion.

In this system, there is no generalized XREF constraint, but only versions of XREF relativized to participants [(69)] and non-participants [(71)]. In order to get the Ben Tey facts, we need \*DISCRIMINATE and \*(COPIED ≠ SATISFIED)<sub>H</sub> to outrank XREFP but have XREF-P outrank either \*DISCRIMINATE or \*(COPIED ≠ SATISFIED)<sub>H</sub>. The following is one such ranking that will derive Ben Tey AA correctly.

- (72) **One possible ranking for Ben Tey**  
 \*DISCRIMINATE, XRef-P >> \*(COPIED ≠ SATISFIED)<sub>T</sub> >> XREFP

With the ranking in (72), non-participants will always be cross-referenced at the cost of having features on the goal that do not satisfy it. But this cost is not tolerated for participants.

In summary, what we have seen is that the Ben Tey partial AA pattern can be accounted for in the syntactic approach outlined here. The OT system proposed here shows us that Ben Tey and Kaqchikel behave in generally opposite ways with respect to what types of arguments they privilege cross-referencing at the cost of other violations.<sup>57</sup>  
<sup>58</sup>

#### 5.4.2 Ouargli and partial AA

Ouargli (Berber, Algeria) is also argued to have a partial AA pattern (Baier 2017c) but this pattern is different from the one seen in Kaqchikel and Ben Tey. Consider the following paradigms taken from Baier (2017c: 11).

(73)

	SG	PL
1M	V-a	n-V-et
1F	V-a	n-V-ent
2M	t-V-ed	t-V-em
2F	t-V-ed	t-V-ent
3M	i-V	V-en
3F	t-V	V-ent

*Ouargli Agreement Paradigm*

	SG	PL
1M	V-n	V-en
1F	V-n	V-ent
2M	V-n	V-en
2F	V-n	V-ent
3M	V-n	V-en
3F	V-n	V-ent

*Ouargli AA Paradigm*

The tables show that probes that have singular features in an AA context do not make PERSON or GENDER distinctions. In contrast, probes that have PLURAL features make GENDER but not PERSON distinctions. Baier (2017c) proposes the following IMPOVERISHMENT rules to account for this pattern of AA. Essentially, he argues that two separate IMPOVERISHMENT rules, shown below, can derive Ouargli.

- (74) a. [PERSON] → ∅ [\_\_, WH]  
 b. [GENDER] → ∅ [\_\_, NUMBER:SG, WH]

<sup>57</sup> However, this means that the salience hierarchy (eg. Stiebels 2006) does not impose an implicational hierarchy for relativized XREF constraints.

<sup>58</sup> The parallelism between Ben Tey and Kaqchikel is not perfect given the considerations in footnote 56.

(74a) shows that a PERSON feature is deleted when it occurs in a bundle with WH features. However, a GENDER feature is deleted when it occurs in a bundle with singular number and WH features.

Baier's characterization of the Ouargli facts is more challenging than the Ben Tey data for the OT system proposed here to accommodate. This is because, according to Baier, the deletion of GENDER features is dependent on the presence of singular features in the same bundle. Even if we assume a split probe approach where individual phi features are probed by corresponding split probes, it is difficult to see why COPY-FAILURE of a GENDER probe would occur just in case there also is a NUMBER probe that has a singular features. I will not be able to completely solve this problem here but I will make some remarks as to how we might approach it in the analysis here.

While Baier (2017c) assumes that a probe with singular features neutralizes gender features only when there is also a wh-feature, looking at (73), we can see that participants do not make a gender distinction in most cases even in the regular agreement paradigm. In this paradigm, only 3<sup>rd</sup> person, singular makes a gender distinction. 1<sup>st</sup> and 2<sup>nd</sup> person does not. I take this fact to indicate that Ouargli is a language which in general is sparse in terms of having vocabulary items (VI) that spell out the gender distinction in the singular. The complete lack of gender agreement in the singular in the AA paradigm is thus a further reflection of this sparseness. While the regular paradigm singular agreement only has a VI distinguishing gender for 3<sup>rd</sup> person, the AA paradigm singular agreement has no VI at all that distinguishes gender. What I am proposing is that there is an abstract gender even in the AA paradigm. However, we do not see it because the language does not have the VIs to spell out this gender feature. In contrast, Baier (2017c) takes the complete lack of gender distinctions in the singular AA paradigm to indicate that even an abstract gender is not present there. Given the general scarcity of gender distinctions in the singular in the language, I believe my characterization of the Ouargli facts is just as reasonable as Baier's.

The lack of PERSON features in the AA paradigm cannot be likewise attributed to a lack of the right VIs. This is because PERSON is spelled out in the regular paradigm with both singular and plural agreement. As such, attributing the lack of PERSON features in the AA paradigm with both singular and plural agreement as due to a lack of VIs would miss a deeper generalization about the language. I propose that in Ouargli AA, PERSON features are neutralized. What Ouargli then shows is that the lack of gender and person features in an AA context for singular agreement is due to two separate facts. GENDER is lacking in AA contexts because Ouargli lacks the VIs to spell out this distinction. PERSON is lacking in AA contexts because of A'-features. Thus, it is only the latter that needs to be explained by any account of AA.

Once we understand the Ouargli facts this way, then a split probe approach accounts for the Ouargli AA facts quite straightforwardly. Recall that so far I have been using  $*(\text{COPIED} \neq \text{SATISFIED})_H$ , a constraint for a unified phi-probe. Ouargli would require such constraints for each phi feature hosted on a split probe.

- (75) a. \*(COPIED ≠ SATISFIED)<sub>NUM</sub>  
 b. \*(COPIED ≠ SATISFIED)<sub>PERS</sub>  
 c. \*(COPIED ≠ SATISFIED)<sub>GEND</sub>

Once we have such split constraints, a PERS phi probe can undergo COPY-FAILURE independently of NUMBER and GENDER phi probes. One ranking that can derive the Ouargli facts then is the following.<sup>59</sup>

- (76) **One possible ranking for Ouargli**  
 \*DISCRIMINATE, \*(COPIED ≠ SATISFIED)<sub>PERS</sub> >> XREF >>  
 \*(COPIED ≠ SATISFIED)<sub>NUMB</sub>, \*(COPIED ≠ SATISFIED)<sub>GEND</sub>

Recall that in the system proposed here, for any given head H, \*DISCRIMINATE, and \*(COPIED ≠ SATISFIED)<sub>H</sub> has to dominate XREF in order to exhibit AA. Since we only want the PERSON probe in Ouargli to exhibit AA, the ranking in (76) will derive the facts correctly. Ranking \*(COPIED ≠ SATISFIED)<sub>PERS</sub> and \*DISCRIMINATE over XREF will ensure that person features are always neutralized if the goal has an A'-feature, a feature that does not satisfy the PERS probe. At the same time, ranking XREF over the other two constraints relativized for NUMBER and GENDER will ensure that an argument will always be cross-referenced for number and gender.<sup>60</sup>

In summary, in this section, I have argued that the partial AA facts we have seen here are amenable to the approach proposed here after all. Thus, unlike Baier's contention, a syntactic approach is possible for the types of cross-linguistic variation we see w.r.t partial AA.<sup>61</sup> But it appears that an OT approach may be the best way to implement this, as Erlewine (2016) has already shown.

## 6. Conclusion

In this paper, I have two aims. The first is to illustrate a novel type of AA effect whereby the phi-agreeing head also requires an A'-feature to be satisfied. This comes in the way of a morphological fact about a pair of constructions that has been known in the literature but never addressed. What determines the phi-agreement alternation in the Tamil counterparts of the English cleft and pseudocleft constructions? I have proposed that this should be thought of as an AA effect by showing that phi-agreement on this nominalizing head is correlated with whether there is movement out of the nominalized phrase. When there is not, as in the free-relative type, there is agreement, but when there is further A'-movement out, phi-agreement is obviated. I addressed alternative non-AA ways to account for this data and rejected them on empirical grounds.

<sup>59</sup> I show only a single non-relativized XREF constraint for Ouargli as there is no reason to show relativized XREF constraints in this language.

<sup>60</sup> However with singular agreement, the gender distinction is not seen with AA because Ouargli does not have the VI to realize these gender distinctions.

<sup>61</sup> Although I will have leave to future work evaluation of other instances of partial AA.

Secondly, I propose that the Tamil cleft constructions and related facts in Tamil argue against skipped node approaches. Instead, we need an approach in which specific heads can be referred to. I evaluate Baier (2017b)'s account of AA and argue that it places too much of a burden on morphology. I propose a syntactic variant where AA is the result of the failure of a head to copy any of the features of a goal if the goal also has A'-features that do not satisfy the head. I then show how two constraints based on Deal (2015, 2016)'s version of AGREE in interaction with Woolford (2003)'s XREF can derive when COPY-FAILURE occurs. I also discussed partial AA facts and showed that the syntactic account proposed here and implemented in OT can be extended to account for such partial AA facts by relativizing the relevant constraints to specific types of goals and/ or probes.

The main implication of the analysis here is that AA is not a result of a global property that distinguishes languages from one another but rather, it is often a language-internal property pertaining to specific heads. The analysis here also provides further support for Deal (2015, 2016)'s version of AGREE where at least some heads are such that they copy features wholesale from goals, even those that do not satisfy the probe. This paper also shows that an OT approach provides the tools to account for the types of vast cross-linguistic variation we see in natural language phenomenon. Understanding AA effects play an important role in understanding how agreement, a major source of syntactic theorizing, works. The hope is that the Tamil facts and analysis provided here contributes towards our understanding of not just AA but also agreement in general.

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