Antilocality and Antiagreement[1]

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1 Introduction

In many languages, the normal pattern of ϕ-agreement with an argument in a specific position (usually a subject) is disrupted when that argument is involved in an $\bar{\text{A}}$-dependency. Since Ouhalla 1993, this phenomenon has been known as the *antiagreement effect* (henceforth *antiagreement*). Antiagreement is found in a wide variety of languages, but there is little consensus about the theoretical principles that underlie it.[2] One prominent line of thought holds that antiagreement arises because of antilocality constraints on $\bar{\text{A}}$-movement (Cheng 2006; Erlewine 2016; Schneider-Zioga 2007). The core intuition behind these accounts is that certain agreeing arguments are too local to Spec,CP to move there; this forces these arguments to extract from alternative positions, bleeding agreement.

In this squib, I examine the relationship between antilocality and antiagreement, focusing on the version of antilocality developed by Erlewine (2016). Erlewine proposes a constraint that rules out $\bar{\text{A}}$-movement from a specifier to the next highest specifier in the structure (the Spec-to-Spec Antilocality constraint; see (2)). I show that this constraint cannot derive antiagreement in Berber, which has become a canonical instance of the effect since Ouhalla's original article. This calls into question whether Spec-to-Spec Antilocality can be extended to a general account of antiagreement. I also show that these observations apply to other antilocality based approaches to antiagreement in the literature (Cheng 2006; Schneider-Zioga 2007). This highlights a general property of theories of antilocality; namely, these theories are *fragile*, in that they are very sensitive to minor differences in

clause structure, both within a single language and crosslinguistically.

The remainder of this squib is structured as follows. In section 2, I introduce Erlewine's (2016) analysis of agent focus in the Mayan language Kaqchikel and his Spec-to-Spec Antilocality constraint. In section 3, I discuss antiagreement in Berber and necessary elements of Berber clause structure. In section 4, I show why Erlewine's analysis of antiagreement cannot be extended to Berber. In section 5, I discuss implications of these observations.

2 Erlewine's (2016) Spec-to-Spec Antilocality

Erlewine (2016) examines the distribution of the so called agent focus (AF) form in the Mayan language Kaqchikel, shown in (1).[3]

(1) *Kaqchikel agent focus*

a. Iwïr x-Ø-**u**-tëj ri wäy ri a Juan.
yesterday COM-3SG.ABS-3SG.ERG-eat the tortilla Juan
'Yesterday Juan ate the tortilla.

b. Achike x-Ø-tj-**ö** ri wäy?
who COM-3SG.ABS-eat-**AF** the tortilla
'Who ate the tortilla?'

(Erlewine 2016:430)

Example (1a) is a canonical transitive clause in Kaqchikel. The verb agrees with both arguments in an ergative-absolutive pattern. In (1b), the transitive subject has undergone Ā-movement to Spec,CP. There is no ergative agreement; instead, the verb takes an AF suffix. Ergative agreement is ungrammatical in such contexts. AF is limited to extraction of transitive subjects; Ā-movement of other arguments does not trigger the AF form.

Erlewine pursues the idea that AF arises because of a constraint on Ā-movement that differentially affects transitive subjects and others arguments. He proposes the following constraint:

(2) *Spec-to-Spec Antilocality (SSAL)*

Ā-movement of a phrase from the Specifier of XP must cross a maximal projection other than XP.

(Erlewine 2016:431)

This constraint rules out movement of the type in (3), but allows movement of the type in (4).

(3) *Movement crosses only XP, violates (2)*

$[_{YP}\ \alpha\ Y\ [_{XP}\ t_{\alpha}\ X \ldots\ ]]$

(4) *Movement crosses XP and YP, does not violate (2)*

$[_{ZP}\ \alpha\ Z\ [_{YP}\ Y\ [_{XP}\ t_{\alpha}\ X \ldots\ ]]]$

Erlewine argues that the ϕ-probe responsible for ergative agreement in Kaqchikel is located on T and that it has the EPP property. Thus, ergative agreement requires movement of the external argument to Spec,TP.[4] Agreeing transitive subjects are therefore too local to Spec,CP to undergo Ā-movement, as shown in (5).

(5) *Spec,TP-to-Spec,CP movement blocked*

$[_{CP}$ subject C $[_{TP}$ ___ T $[_{vP}$ ___ v $[_{vP}$ V object]]]]

x

Instead, transitive subjects must extract from their base position in Spec,vP; they skip Spec,TP altogether, moving directly to Spec,CP, as in (6).

(6) *Transitive subject skips Spec,TP*

$[_{CP}$ subject C $[_{TP}$ T $[_{vP}$ ___ v $[_{vP}$ V object]]]]

Because ergative agreement is parasitic on the EPP, there can be no ergative agreement. The AF form is a morphological repair in this context.[5] Crucial evidence for this account

comes from the fact that material intervening between the extracted transitive subject and the verb obviates the need for AF.[6]

(7) *Material between Spec,TP and Spec,CP obviates AF*

Achike	**kanqtzil**	x-Ø-**u**-tëj	ri	wäy?
who	actually	COM-3SG.ABS-3SG.ERG-eat	the	tortilla

'Who actually ate the tortilla?'

(Erlewine 2016:439)

Under the assumption that preverbal adverbs are hosted by a dedicated phrasal projection (Cinque 1999), extraction in (7) crosses sufficient structure and therefore does not violate (2).[7]

(8) *Spec,TP-to-Spec,CP movement licit with intervening Specifier*

$[_{CP}$ subject C $[_{FP}$ adverb F $[_{TP}$ ___ T $[_{vP}$ ___ v $[_{vP}$ V object]]]]]

Erlewine classifies the Kaqchikel AF construction as a case of antiagreement and argues that SSAL can be extended to a more general account of antiagreement crosslinguistically. He shows that his analysis can account for the distribution of antiagreement in the Tupian language Karitiâna (Storto 1999) and the northern Italian dialects Trentino and Fiorentino. Brandi and Cordin (1989) show that in these dialects, postverbal subjects require default agreement. Ā-movement of the subject requires the same paradigm as postverbal subjects, even though the subject precedes the verb. Consider the Fiorentino data in (9).

(9) *Preverbal vs. postverbal agreement in Fiorentino*

a.

La	regazze	**l'**	**hanno**	telefonato
the	girls	**3PL**	have.**3PL**	telephoned

'The girls have phoned.'

(Campos 1997:93)

b. Quante ragazze **gli** **ha** parlato con te
how.many girls **3SG** have.**3SG** spoken with you
'How many girls have spoken to you?

(Brandi and Cordin 1989:124)

Erlewine argues that this is also attributable to SSAL. A fully agreeing preverbal subject would be too close to Spec,CP to undergo Ā-movement. Instead, extraction takes place from a low, postverbal position. As in Kaqchikel, movement skips Spec,TP entirely, bleeding the normal agreement that one sees when the subject lands there.

Erlewine's account is based on the assumption that languages exhibiting antiagreement effects share the crucial structural property in (10).

(10) Given the structure $[_{\text{YP}}\ \alpha\ \text{Y}\ [_{\text{XP}}\ \beta\ \text{X}\ [\ \ldots\ ]]]$,

a. ϕ-features on X can only agree with a DP at β.

b. Ā-movement targets α.

This makes a strong prediction: if an argument is able to control agreement on X without being located at β in (10), then that argument should be able to undergo Ā-movement without the loss of agreement. Extraction from a position below β should be uninhibited by antilocality, and therefore, agreement should not be affected. In the next section, I show that subject agreement in Berber is not parasitic on movement to such a position.

3 The Berber Data

3.1 Berber antiagreement

Since Ouhalla's (1993) original article on antiagreement, Berber has been cited as a canonical example of the phenomenon. Consider the Tarifit Berber data in (11).

(11) *Antiagreement in* wh-*questions*

a. **t-zra** tamghart mohand
3SG.F-see woman Mohand
'The woman saw Mohand?'

b. man tamghart$_i$ ay **yzrin** / ***t**-zra $\_i$ mohand
which woman C see.PART / 3SG.F-see Mohand
'Which woman saw Mohand?'

(Ouhalla 1993:479)

Example (11a) is a declarative clause containing a postverbal subject, the ordinary position of subjects in Berber. The verb agrees with the subject for person, gender, and number. In (11b), the subject has undergone Ā-movement to Spec,CP. In this context, normal subject-verb agreement is impossible; instead, the verb is in a form called the "participle" in the Berber literature. The participle is invariant with regard to the ϕ-features of the subject; it does not reflect the ϕ-features of the subject in any way.

This effect is also found in subject relative clauses and subject focus constructions, given in (12a) and (12b), respectively.

(12) *Antiagreement in relative clauses and subject focus constructions*

a. tamghart$-i$ [nni **yzrin** / ***t**-zra $\_i$ Mohand]
woman C see.PART / 3SG.F-see mohand
'the woman who saw Mohand'

b. tamghart-a$-i$ ay **yzrin** / ***t**-zra $\_i$ mohand
woman-DEM C see.PART / 3SG.F-see Mohand
'It's this woman that saw Mohand.'

(Ouhalla 1993:479)

Object Ā-movement does not trigger antiagreement. In (13), only full agreement is possible.

(13) *Object* wh-*question has full agreement*

ma$_i$ ag iswa ʕli $\_i$
what C drink.3SG.M Ali
'What did Ali drink?'

(Ouali 2011:99)

Thus, like AF in Kaqchikel, antiagreement in Berber is characteristic of certain Ā-moved arguments, in this case subjects.[8] Ā-movement of other arguments (and Ā-movement of adjuncts) does not trigger antiagreement.[9]

3.2 The Position of Agreement and of Subjects in Berber

In order to examine Erlewine's account of antiagreement in relation to Berber, it is necessary to establish (a) where the ϕ-probe responsible for agreement is located in the clausal spine and (b) where agreeing subjects are located in the clause. In this section, I present evidence that agreement features are located below TP and that subjects value these features from their base position inside vP.

There is a general consensus in the Berber literature that VSO word order is derived by verb movement to a presubject position (Omari 2001; Ouali 2011; Ouhalla 1988, 2005). However, there is disagreement on exactly how far the verb raises. In his work on Tamazight Berber, Ouali (2011) argues for the following clause structure in (14):

(14) *Berber Clause Structure*

[$_{CP}$ C [$_{TP}$ T [$_{AspP}$ Asp [$_{vP}$ subject v [$_{vP}$ V object]]]]]

(Adapted from Ouali 2011:74)

Ouali argues that the verb can raise to either Asp or T, but that it always moves at least to Asp, as Tamazight verbs are always inflected for aspect. Whether or not the verb raises to T is determined by the nature of that head. Tamazight (like other Berber languages) has

a set of uninflected tense particles. When there is an overt tense particle, the verb remains in Asp, as in (15). When there is no overt tense particle, the verb raises to T, as in (16).

(15) *Verb raised to Asp*

a. **dað** agəx *pro* agrum
FUT buy.1SG PRO.1SG bread
'I will buy bread.'

(Ouali 2011:50)

b. [$_{CP}$ C [$_{TP}$ T [$_{AspP}$ V+v+Asp [$_{vP}$ subject t_V [$_{vP}$ t_V object]]]]]

(16) *Verb raised to T*

a. **Ø**+yuri *pro* θabrat
PST+write.3SG.M PRO.3SG.M letter
'He wrote the letter'

(Ouali 2011:51)

b. [$_{CP}$ C [$_{TP}$ V+v+Asp+T [$_{AspP}$ t_{Asp} [$_{vP}$ subject t_V [$_{vP}$ t_V object]]]]]

Evidence for this analysis comes from the position of the verb in relation to object clitics. When there is an overt particle in T, the verb follows object clitics, as in (17a). When there is no overt particle, the verb precedes the clitics, as in (17b).

(17) *Variation in clitic placement*

a. da**=as=t** wʃəx *pro*
FUT=3SG.M.DAT=3SG.ACC give.AOR.1SG PRO.1SG
'I will give it to him.' T > Clitics > V

b. Ø+wʃix**=as=t** *pro*
PST+give.PERF.1SG=3SG.M.DAT=3SG.ACC PRO.1SG
'I gave it to him.' V > Clitics

(Ouali 2011:106)

This variation is explained under the assumption that clitics are located between TP and AspP.

Note that the verb bears subject agreement in each of (15)–(17) regardless of whether it raises to Asp or to T. I take this as evidence that the ϕ-probe responsible for subject-verb agreement is located in a head *below* T, the position commonly assumed to host the subject ϕ-probe. This explains why the verb still bears agreement when it has only moved to Asp. In what follows, I will assume that the ϕ-probe is located on Asp in Berber.

It is also generally assumed that the subject triggers agreement from its thematic position in Berber; subjects need not raise to trigger agreement. Evidence for this comes from the placement of manner adverbs, which can occur between V and S. This is shown in (18), where the manner adverb *deghya* 'quickly' comes between the verb and the postverbal subject.

(18) *Manner adverbs intervene between V and S*

i-sha	**deghya**	umshish	asrm	nni
3*sg*-ate	quickly	cat	fish	that

'The cat quickly ate that fish.'

(Jamal Ouhalla, pers.comm.)

Assuming that such adverbs merge above vP, then example (18) provides evidence that the verb has moved out of vP while the subject remains low inside vP.

It is also possible that there is a separate, dedicated head in the region of AspP that hosts ϕ-features (call it Agr), perhaps between Asp and v. Michael Yoshitaka Erlewine (pers.comm.) points out that in this scenario, the SSAL account could be extended to Berber given two further assumptions: (a) Agr agrees in a Specifier-Head configuration and (b) AspP is a phase edge. This alternative makes the strong prediction that manner adverbs like *deghya* in (18) should ameliorate antiagreement, under the assumption that

such adverbs are hosted in the specifier of a functional projection. In fact, this prediction is *not* borne out.

(19) *Low adverbs do not ameliorate antiagreement*

u ig ishan deghya asrm nni?
who C ate.PART quickly fish that

'Who ate that fish quickly?

(Jamal Ouhalla, pers.comm.)

Subject extraction in (19) requires antiagreement even though a manner adverb is present. This is exactly the opposite of what we expect under a SSAL account of antiagreement tied to the lower phase-edge.[10]

We are left with a picture of Berber clause structure where agreement occurs in a low region of the clause. There are ϕ-features on Asp that probe and find the subject in Spec,vP. This is schematized in (20).

(20) *ϕ-probe on Asp*

$[_{CP}$ C $[_{TP}$ T $[_{AspP}$ V+v+Asp$_{[\phi]}$ $[_{vP}$ subject t_V $[_{vP}$ t_V object]]]]]

In the next section, I show why these data are problematic for Erlewine's (2016) account of antiagreement.

4 Antilocality Does Not Work for Berber

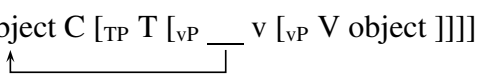
Recall that under Erlewine's (2016) SSAL analysis, movement of a subject from Spec,TP is blocked in languages like Kaqchikel and Fiorentino. Instead, they extract from lower in the structure.

(21) *Spec,TP-to-Spec,CP movement blocked*

$[_{CP}$ subject C $[_{TP}$ ___ T $[_{vP}$ ___ v $[_{vP}$ V object]]]]

x

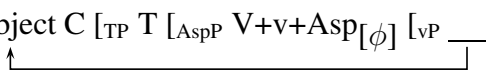
(22) *Subject skips Spec,TP*



The derivation in (22) bleeds agreement with the subject on the assumption that agreement is dependent on EPP movement to Spec,TP. It is forced by Erlewine's SSAL constraint, which blocks Ā-movement from one specifier to the next higher specifier (see (2)).

We concluded in the previous section that subjects in Berber stay low, inside vP. Agreement features probe the subject in situ and are also located in a low position in the clause. Given these conclusions, there should be no problem in extracting subjects from their base position in Spec,vP to Spec,CP. Ā-movement of the subject crosses at least TP and AspP.

(23) *Ā-movement crosses AspP and TP*



The Ā-movement path taken by the subject in (23) does not violate SSAL, and therefore antiagreement in Berber does not receive an explanation under Erlewine's theory.[11] Specifically, the Berber data provide an argument against antilocality approaches to antiagreement in which ϕ-agreement is dependent on A-movement into a specifier directly below the projection targeted by Ā-movement.[12]

5 Implications

The narrow implication of this discussion is that Erlewine's (2016) analysis of antiagreement in Kaqchikel, northern Italian dialects and Karitiâna in terms SSAL cannot be easily extended to cover the distribution of antiagreement in Berber, which has been taken as a canonical instance of the effect since Ouhalla's (1993) original article. While this is a very specific conclusion, I believe it is important, as Erlewine suggests that SSAL can offer a general account of antiagreement crosslinguistically.

Moreover, the Berber data present a more general problem for *any* antilocality theory of antiagreement. These accounts are based on the intuition that Ā-movement cannot proceed from a position normally targeted for agreement, because that position is 'too close' to the landing site of Ā-movement. Antilocality forces movement from an alternative position, thereby bleeding agreement. However, in Berber, subjects agree from their base generated position; there is no alternative non-agreement-triggering position. Thus, the basic logic of the antilocality account cannot be applied to Berber.

As a more concrete example, consider how these data bear on Grohmann's (2003) theory of antilocality, which has been used to derive antiagreement in Bantu by Cheng (2006) and Schneider-Zioga (2007). Under Grohmann's theory, clauses are standardly separated into three domains: the theta domain ($\Theta\Delta$; vP/VP and its articulation), the agreement domain ($\Phi\Delta$; TP and its articulation), and the discourse domain ($\Omega\Delta$; CP and its articulation). Movement within the same domain is banned, that is, such movement is "too short." Assuming that the subject does not raise above Spec,vP to agree in Berber, a domain based antilocality account faces a challenge similar to the one facing the Spec-to-Spec movement approach. Ā-movement from Spec,vP to Spec,CP should never be too short (in this case within the same domain). This is because such movement will always involve cross-domain movement from the theta domain into the discourse domain, as shown in (24).

(24) *Ā-movement crosses from* $\Theta\Delta$ *into* $\Omega\Delta$

$[_{CP=\Omega\Delta}$ subject C $[_{TP=\Phi\Delta}$ T $[_{AspP}$ V+v+Asp$_{[\phi]}$ $[_{vP}$ ___ t_V $[_{vP=\Theta\Delta}$ t_V object]]]]]

More generally, these observations highlight a general property of theories of antilocality: namely, such accounts are *fragile*, in that they are very sensitive to minor differences in clause structure, both within a single language and crosslinguistically. For SSAL, this fragility arises from the very specific configuration required to incur a violation that would lead to antiagreement (see (10)). The same basic problem extends to domain based antilo-

cality. While domains may be more robust in terms of the range of clause structures they can apply to, the configuration needed to violate the constraint remains quite sensitive to variation.

The structural differences between Berber on the one hand and Kaqchikel and the northern Italian dialects on the other cast doubt on whether there is a single shared structural property that sets languages that exhibit antiagreement apart from those that do not. Any potentially general theory of antiagreement must contend with these differences. Therefore, a broader implication of this squib is that antiagreement may not be a unified phenomenon, as the literature has implicitly treated it until now. Instead, we may be dealing with a set of discrete, separate effects that conspire to create the illusion of a single, unified phenomenon.

Notes

[1]I would like to thank Peter Jenks, Amy Rose Deal, Line Mikkelsen, David Pesetsky, Norvin Richards, Shigeru Miyagawa, Jamal Ouhalla, Michelle Yuan, Kenyon Branan, Michael Yoshitaka Erlewine, and an anonymous LI reviewer for their comments and suggestions, which have helped me improve this squib significantly.

[2]In the Minimalist literature, the theoretical machinery invoked to explain antiagreement includes Criterial Freezing (Diercks 2010; Shlonsky 2014); feature strength (Boeckx 2003; Henderson 2013; Richards 1997); verb raising (Phillips 1997; Richards 2004); feature inheritance (Ouali 2011); and the relative timing of probes (Georgi 2014). See Baker 2008 for a discussion of some of these approaches.

[3]The abbreviations that I use in this squib are as follows: 1 = 1st person, 2 = 2nd person, 3 = 3rd person, ABS = absolutive, ACC = accusative, AF = agent focus, AOR = aorist, COM = completive, DAT = dative, DEM = demonstrative, ERG = ergative, F = feminine, FUT = future, M = masculine, PART = participle, PERF = perfective, PL = plural, PRO = pronoun, PST = past, SG = singular.

[4]Erlewine assumes that TP has a right-specifier, explaining the VOS word order in (1a).

[5]Other arguments do not raise to trigger agreement and are therefore never in an anti-local configuration

with Spec,CP.

[6]Another piece of evidence of this type comes from clauses with multiple Ā-movement. See Erlewine 2016 for details.

[7]See Henderson and Coon 2015 for an alternative explanation for the lack of AF with high adverbs.

[8]Berber differs from Kaqchikel in that both transitive and intransitive subjects trigger antiagreement.

[9]Two caveats are in order. First, subjects that undergo long distance Ā-extraction do not trigger antiagreement in Berber. In this way, Berber differs from Kaqchikel, where long-distance Ā-moved subjects do trigger antiagreement. Second, clausal negation blocks antiagreement. I will not discuss either of these asymmetries here, but see Ouhalla 1993 and Ouali 2008, 2011 for discussion and data.

[10]Jamal Ouhalla (pers.comm.) points out that adverbs like *deghya* are flexible in their placement: they can intervene between the subject and the object and they can occur sentence-finally. This somewhat weakens the argument that such adverbs delimit the edge of vP, and therefore in turn weakens the expectation that these adverbs would alleviate antiagreement. I take the fact in (19) as an initial argument against a low SSAL account. A deeper investigation of the interaction of low adverbs is warranted.

[11]A reviewer points out that this argument crucially hinges on the assumption that Ā-movement does not land between CP and vP in Spec,TP or Spec,AspP. I have found no overt evidence for such a landing site, and it is unclear why such a landing site would disrupt agreement on a lower head (though see discussion of an alternative SSAL account tied to the lower phase-edge). Furthermore, absence of such a landing site conforms to the widely held idea that only CP and vP are phases.

[12]Kinjo (to appear) develops an account of Berber antiagreement in which antilocality is part of the mechanism behind the effect without assuming obligatory movement to Spec,TP, thus circumventing this problem. Kinjo proposes that T can agree with a subject that stays in situ, but if the subject moves to Spec,TP, the subject can itself "probe down to T and agree (in a Spec-Head configuration). If the subject moves to Spec,CP, it agrees with a ϕ-dependent C but cannot agree with T. While a thorough response to Kinjo's analysis is beyond the scope of this squib, I believe it faces similar problems to the ones I have outlined here. Specifically, Kinjo's account still relies on the possibility of ϕ-agreement with T in a Specifier-Head configuration. Crucially, in antiagreement contexts, this possibility is blocked because of SSAL. If ϕ-agreement is on Asp in Berber, and my other arguments go through, SSAL will still not rule out Specifier-Head agreement with Asp for the same reason it does not under Erlewine's (2016) analysis.

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